



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Manual on MFI balance sheet statistics

February 2024



# Contents

<b>1</b>	<b>Aim of this Manual</b>	<b>4</b>
<b>2</b>	<b>Reporting population</b>	<b>6</b>
2.1	Monetary financial institutions	6
2.2	Non-MFI credit institutions	9
2.3	Post office giro institutions and central government monetary liabilities	10
2.4	Residence and institutional units	11
2.5	Consolidation and reporting as a group for statistical purposes	12
2.6	List of MFIs for statistical purposes	12
2.7	Actual reporting population and derogations	15
<b>3</b>	<b>Statistical reporting requirements</b>	<b>19</b>
3.1	Instruments	19
3.2	Maturity	20
3.3	Currency	21
3.4	Residency	22
3.5	Sector of counterparty	22
3.6	Reference date for balance sheet data	25
3.7	Balance sheet outstanding amounts and adjustments	25
3.8	Accounting principles in statistical reporting	27
<b>4</b>	<b>Statistical treatment of selected instrument categories</b>	<b>32</b>
4.1	Valuation principles under the ESA 2010 versus ECB statistical regulations and guidelines	32
4.2	Cash and currency in circulation	34
4.3	Loans	37
4.4	Deposits	69
	<b>Box 1</b> Repurchase agreements, securities lending and similar operations	73

4.5	Debt securities held and debt securities issued	81
4.6	Equity (assets)	88
4.7	Investment fund shares/units	94
4.8	Capital and reserves	95
<b>Box 2</b>	<b>Bridging table between IAS/IFRS/GAAP and MFI balance sheet statistics</b>	<b>98</b>
4.9	Non-financial assets	100
4.10	Remaining assets and remaining liabilities	101
4.11	Eurosystem reserve assets	110
<b>5</b>	<b>Transactions and adjustments</b>	<b>112</b>
5.1	Conceptual overview	112
5.2	Revaluation adjustments: direct reporting of transactions in securities by MFIs and the derivation of revaluation adjustments	114
5.3	Revaluation adjustments: indirect reporting of transactions through reporting price revaluation adjustments on securities	126
5.4	Revaluation adjustments for loan write-offs/write-downs	130
5.5	Reclassification adjustments for changes in the composition of the reporting sector	133
5.6	Reclassification adjustments for changes in the structure of the MFI sector	136
5.7	Other reclassification adjustments	156
5.8	Exchange rate adjustments	161
<b>6</b>	<b>Procedures for reporting data to the ECB</b>	<b>163</b>
6.1	Timeliness of reporting and dissemination	163
6.2	Grossing-up of MFI balance sheet items	163
6.3	Rounding policy and data transmission	165
6.4	Revisions policy	166
<b>7</b>	<b>Compilation of euro area statistics</b>	<b>168</b>
7.1	Derivation of the euro area aggregated and consolidated balance sheet	168

7.2	Financial transactions	183
7.3	Index of notional stocks and growth rates	189
7.4	Adjusted loans	193
7.5	Seasonal and calendar adjustment of MFI balance sheet statistics	196
7.6	Compilation of balance sheet statistics for MMFs and deposit-taking corporations except central banks	201
7.7	Estimated loans to non-financial corporations by economic activity	205
7.8	MFI balance sheet statistics for non-euro area countries	206
<b>8</b>	<b>Linkages between MFI balance sheet statistics and other domains</b>	<b>208</b>
8.1	MFI balance sheet statistics for the purposes of minimum reserves	208
8.2	MFI balance sheet statistics as an input to financial accounts	214
8.3	Monetary presentation of the euro area balance of payments	217
8.4	MFI balance sheet statistics and security-by-security reporting	220
8.5	Other projects relating to the reporting of MFIs	223
8.6	Main differences between MFI balance sheet statistics and other frameworks	225
<b>9</b>	<b>Confidentiality of statistical information and arrangements for exchanging data</b>	<b>229</b>
9.1	Confidentiality regime	229
9.2	Exchange of data	231
<b>10</b>	<b>Compliance regime</b>	<b>232</b>

# 1 Aim of this Manual

Statistics on the balance sheets of monetary financial institutions (MFIs) were first published by the ECB in December 1998. These statistics cover euro area credit institutions, other financial institutions carrying out “bank-like” business and money market funds. They form the main input for compilation of euro area monetary aggregates. They also enable policymakers to analyse banks’ lending activities, in particular lending to households and non-financial corporations. By providing information on the “reserve base” of credit institutions, they likewise play an important role in supporting the operation of the Eurosystem’s minimum reserve requirements.

The main legal acts underlying the collection of these statistics have been updated since the previous version of this Manual was published in January 2019. Regulation ECB/2021/2<sup>1</sup> sets out the ECB’s latest statistical requirements for credit institutions and the MFI sector as a whole, and Guideline ECB/2021/11<sup>2</sup> governs the transmission of these statistics from national central banks (NCBs) to the ECB. These legal acts introduced new reporting requirements to enhance analysis of monetary and credit developments, as well as making modifications to some of the existing requirements, definitions and reporting derogations to support better integration with other statistical datasets.

This Manual reflects the changes implemented in the two new legal acts without adding to those requirements. It has no binding legal status, simply supplementing the information contained in those acts and providing guidance on the preferred approaches agreed among central bank statisticians where those acts or international statistical standards remain open or are not sufficiently precise.

This area of statistics is broad and rather complex. Data can only be aggregated if definitions, concepts, valuations and other accounting practices are sufficiently comparable across countries. This Manual, therefore, has a number of aims. In particular, it provides statisticians in central banks with a comprehensive reference source on the requirements for MFI balance sheet statistics under ECB legislation. It also contains various supplementary explanations and recommendations to assist with implementation of the requirements and thereby further improve comparability of the statistics. This Manual may be used by statisticians in government statistical offices and European and international organisations in their own statistical work, and it may also be of assistance to MFIs in compiling their own statistical reports, helping them to understand how their work is used and why the requirements take the form they do. Users of the data, in central banks and elsewhere, may likewise benefit from knowing more about the conceptual basis of the data they analyse and

---

<sup>1</sup> [Regulation \(EU\) 2021/379 of the European Central Bank of 22 January 2021 on the balance sheet items of credit institutions and of the monetary financial institutions sector \(recast\) \(ECB/2021/2\)](#) (OJ L 73, 3.3.2021, p. 16).

<sup>2</sup> [Guideline \(EU\) 2021/830 of the European Central Bank of 26 March 2021 on balance sheet item statistics and interest rate statistics of monetary financial institutions \(ECB/2021/11\)](#) (OJ L 208, 11.6.2021, p. 1).

use, and what is done to the raw information to make it usable for policy purposes. This Manual is intended for a wide audience seeking to inform interested but non-specialist readers of the technical issues in a way that they can understand, while also satisfying the needs of specialists in this area.

This Manual consists of ten chapters. Chapter 2 provides an overview of the reporting population for these statistics. Chapter 3 focuses on the ECB's reporting requirements at various frequencies, including the accounting and valuation principles. Chapter 4 focuses on the individual instrument categories and provides guidance on the treatment of specific products and cases. Chapter 5 includes a detailed discussion of how transaction data are derived. Chapter 6 covers procedures and technical issues relating to the provision of data to the ECB.

Chapters 7 to 10 focus, to a large extent, on the statistical compilation that the ECB carries out on the basis of the data sent to it by the NCBs. The euro area MFI balance sheet statistical dataset, which the ECB publishes on a monthly basis, is not the result of a simple aggregation of national statistics; Chapter 7 discusses these aspects in detail, setting out how the monetary aggregates and their counterparts for the euro area are derived and focusing among other things on the relationship between national contributions and euro area aggregates. The chapter also includes a description of the seasonal adjustment procedures adopted by the ECB, alongside adjustments made for operations such as cash pooling and loan sales and securitisations. Chapter 8 then turns to the links between MFI balance sheet data and other domains, such as how MFI balance sheet statistics are used in conjunction with the ECB's Regulation on minimum reserve requirements ("MRR Regulation").<sup>3</sup> Several other statistical uses are presented, notably input into quarterly financial accounts and the euro area balance of payments. There is also a brief discussion of links to other frameworks, such as security-by-security reporting, analytical credit (AnaCredit) datasets and supervisory reporting, such as financial reporting (FINREP). Chapter 9 reviews the principles underlying the preservation of confidentiality in exchanging and publishing data, while Chapter 10 concludes by describing the compliance regime applicable in the (exceptional) event that MFIs fail to comply with the reporting requirements for MFI balance sheet statistics.

---

<sup>3</sup> [Regulation \(EU\) 2021/378 of the European Central Bank of 22 January 2021 on the application of minimum reserve requirements \(recast\) \(ECB/2021/1\)](#) (OJ L 73, 3.3.2021, p. 1).

## 2 Reporting population

Article 5 of the Statute of the European System of Central Banks (ESCB)<sup>4</sup> requires the ECB to collect the statistical information necessary to carry out its functions. The framework for the ECB's statistical work is set out in Regulation (EC) No 2533/98<sup>5</sup>. To carry out the functions of the Eurosystem the ECB may adopt legal instruments that have a direct effect on certain legal and natural persons established in the euro area, subject to the constraints imposed under Union law.

For the purposes of MFI balance sheet statistics, these legal instruments are Regulation ECB/2021/2, which sets out the ECB's statistical requirements for MFIs, and Guideline ECB/2021/11, which is binding on members of the Eurosystem, including the ECB itself.

The scope of Regulation ECB/2021/2 extends not only to MFIs but also to non-MFI credit institutions (the latter having been added in response to regulatory changes). The compilation of monetary aggregates also requires statistical information on certain non-MFIs, i.e. post office giro institutions (POGIs) and monetary liabilities of central government. Further information on these reporting agents is provided in this section.

### 2.1 Monetary financial institutions

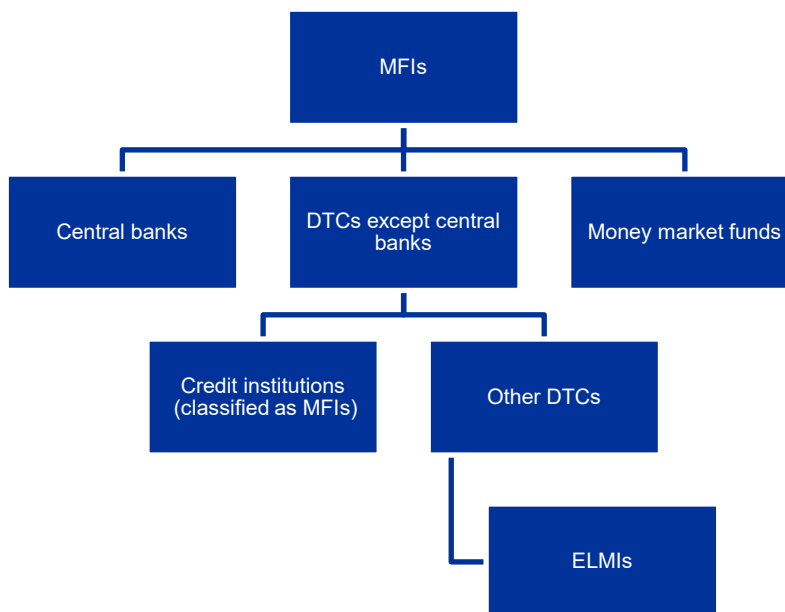
Monetary financial institutions (MFIs) are defined for statistical purposes in Article 2 of Regulation ECB/2021/2 with the aim of providing the ECB with a framework for a comprehensive statistical picture of monetary developments in the euro area. To this end, the MFI sector is divided into central banks and "other MFIs" (also referred to as "MFIs excluding the Eurosystem"), the latter being comprised of deposit-taking corporations except central banks and money market funds.

---

<sup>4</sup> [Protocol \(No 4\) on the statute of the European System of Central Banks and of the European Central Bank](#) (OJ C 326, 26.10.2012, p. 230).

<sup>5</sup> [Council Regulation \(EC\) No 2533/98 of 23 November 1998 concerning the collection of statistical information by the European Central Bank](#) (OJ L 318, 27.11.1998, p 8).

**Figure 1**  
Components of the MFI sector



Note: DTC stands for deposit-taking corporation. ELMI stands for electronic money institution.

### 2.1.1 Central banks

In the euro area, this sector consists of the ECB and the NCBs of the euro area countries – known collectively as the “Eurosystem”.

As defined in the European System of National and Regional Accounts (ESA 2010)<sup>6</sup> (2.72-74), this subsector (S.121) consists of all financial corporations and quasi-corporations whose principal function is to issue currency, to maintain the internal and external value of the currency and to hold all or part of the international reserves of the country.

### 2.1.2 Deposit-taking corporations except central banks

Deposit-taking corporations except central banks, referred to here simply as **deposit-taking corporations**, include credit institutions authorised in accordance with Union law (unless they are non-MFI credit institutions, as explained in Section 2.2), as well as other financial intermediaries that take deposits, or close substitutes for deposits, from the public (see Section 2.1.2.2).

<sup>6</sup> Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (OJ L 174, 26.6.2013, p.1).



### 2.1.2.1 Credit institutions classified as MFIs

**Credit institutions** whose business is to take deposits or other repayable funds from the public and to grant credits for their own account, as defined in Article 4(1)(1)(a) of the Capital Requirements Regulation (CRR)<sup>7</sup>, are classified as deposit-taking corporations and hence MFIs. Other repayable funds may include proceeds from the sale of debt securities to the public. Institutions that are excluded from the scope of the Capital Requirements Directive (CRD IV)<sup>8</sup> may still be subject to the Eurosystem statistical reporting and minimum reserves legal frameworks if they fulfil the definition of MFI given in Regulation ECB/2021/2.

Branches of credit institutions resident in euro area countries also fall within the scope of Regulation ECB/2021/2. The definition of “branch” refers to the definition in the CRR: “a place of business which forms a legally dependent part of an institution and which carries out directly all or some of the transactions inherent in the business of institutions”. A branch of an authorised credit institution resident elsewhere in the EU has the same classification as its head office.

### 2.1.2.2 Deposit-taking corporations other than credit institutions

**Deposit-taking corporations other than credit institutions** include financial institutions that are principally engaged in financial intermediation and whose business is (i) to receive deposits, and/or close substitutes for deposits, from entities other than MFIs; and (ii) for their own account, at least in economic terms, to grant credits and/or make investments in securities.

Substitutability for deposits is determined by the liquidity of the liability instrument concerned, combining the characteristics of transferability, convertibility, certainty and marketability, and, where appropriate, its term of issue (initial or original maturity). These characteristics are further explained in Part 1 of Annex I to Regulation ECB/2021/2.

Certain **electronic money institutions (ELMIs)** are also deposit-taking corporations. ELMIs are defined in Article 2(1) of European Parliament and Council Directive 2009/110/EC.<sup>9</sup> Broadly, they are entities authorised to issue electronic money, that is to say electronically or magnetically stored monetary value, as represented by a claim on the issuer, and that may be used to make payments to a variety of other entities.

---

<sup>7</sup> [Regulation \(EU\) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation \(EU\) No 648/2012](#) (OJ L 176, 27.6.2013, p. 1).

<sup>8</sup> [Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC](#) (OJ L 176, 27.6.2013, p. 338).

<sup>9</sup> [Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC](#) (OJ L 267, 10.10.2009, p. 7).

After Directive 2009/110/EC removed ELMIs from the scope of the Union law definition of “credit institutions”, the definition of MFIs was amended in 2011 to retain relevant ELMIs within the reporting population. Under Article 2(3)(c) of Regulation ECB/2021/2, ELMIs are classified as falling within the MFI sector if they are principally engaged in financial intermediation in the form of issuing electronic money. Under Directive 2009/110/EC, monetary value stored on specific prepaid instruments does not represent electronic money if the instruments are designed to address precise needs and can be used only in a limited way. This is because they allow the electronic money holder to purchase goods or services only on the premises of the electronic money issuer or through a limited network of service providers under a direct commercial agreement with a professional issuer, or the instruments can be used only to acquire a limited range of goods or services.

A deposit-taking corporation other than credit institutions may establish non-resident units in other EU countries. Any such a unit qualifying as a “branch” under the ESA 2010 (18.12) is classified as an MFI if it meets the criteria set for “deposit-taking corporations except central banks” in Article 2(3)(b) or (c) of Regulation ECB/2021/2.

### 2.1.3 Money market funds

Money market funds (MMFs) are defined in Article 2 of Regulation ECB/2021/2 as collective investment undertakings (CIUs)<sup>10</sup> that have been authorised pursuant to Article 4 of Regulation (EU) 2017/1131 (“MMF Regulation”)<sup>11</sup> and that issue shares or units that are close substitutes for deposits. With regard to the latter criterion, Part 1 of Annex I to Regulation ECB/2021/2 clarifies that close substitutes for deposits does not include shares/units issued by authorised CIUs that operate solely as employee savings schemes under which investors may only redeem their investment under restrictive redemption terms not linked to market developments. There are therefore some CIUs that are authorised as MMFs for regulatory purposes but are excluded from the statistical classification of MMFs. Such CIUs, which are relatively very few in number, are instead classified as non-MMF investment funds.

## 2.2 Non-MFI credit institutions

The definition of “credit institution” in Article 4(1)(1) of the CRR was amended with effect from June 2021 to include systemically important investment firms (SIFs). Such firms deal on their own account, underwrite financial instruments or place financial instruments on a firm commitment basis and they meet certain thresholds in terms of size at the individual or group level. Investment firms meeting these criteria must be authorised credit institutions.

---

<sup>10</sup> CIUs are undertakings, the sole object of which is the collective investment of capital raised from the public and the units of which are, at the request of the holders, repurchased or redeemed directly or indirectly out of the undertaking's assets.

<sup>11</sup> [Regulation \(EU\) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds](#) (OJ L 169, 30.6.2017, p. 8).

Given that an investment firm authorised as a credit institution may not necessarily engage in taking deposits or other repayable funds from the public and granting credits for its own account, Regulation ECB/2021/2 introduced the concept of a “non-MFI credit institution” – i.e. a credit institution not falling within the MFI sector. Non-MFI credit institutions are instead classified as security and derivative dealers under “other financial intermediaries, except insurance corporations and pension funds” (ESA 2010, S.125).

Regulation ECB/2021/2 includes non-MFI credit institutions within its scope to ensure the continued availability of statistical information on all credit institutions. Statistical information on non-MFI credit institutions is also needed to support analysis of the monetary developments and interaction between the MFI sector and other financial intermediaries (including, potentially, within large banking groups comprising both MFIs and non-MFI credit institutions). Reporting by non-MFI credit institutions is also essential for determining their reserve bases in order to calculate their minimum reserves requirements (see Section 8.1). The concepts and reporting requirements applicable to MFIs explained in this Manual are therefore also applicable to non-MFI credit institutions.<sup>12</sup>

As is the case with branches of credit institutions classified in the MFI sector, a resident branch of an authorised non-MFI credit institution that is resident elsewhere in the EU is also classified as a non-MFI credit institution.

## 2.3 Post office giro institutions and central government monetary liabilities

Certain short-term deposit liabilities of central government (national savings accounts and Treasury accounts) and of post office giro institutions (POGIs) have characteristics similar to short-term bank deposits. This means that it is necessary to include such liabilities in the monetary aggregates.

NCBs collect statistical information on POGIs in accordance with Regulation ECB/2013/39.<sup>13</sup> This Regulation covers POGIs which are classified as non-financial corporations because their main activities relate to postal services (S.11). However, few such institutions report under that Regulation given that their banking services are typically provided through separate credit institutions (which themselves are covered by the MFI reporting requirements under Regulation ECB/2021/2). The statistical requirements for POGIs cover their monetary liabilities vis-à-vis euro area resident non-MFIs, i.e. close substitutes for monetary financial institutions’ deposit liabilities, and their holdings of cash and securities issued by euro area MFIs.

---

<sup>12</sup> Some balance sheet items are not required from non-MFI credit institutions, including MMF shares/units issued (which are not relevant), and items required to calculate the headline “adjusted loans” figures (i.e. notional cash pool positions and requirements relating to loan sales and securitisations – see Section 7.4).

<sup>13</sup> [Regulation \(EU\) No 1074/2013 of the European Central Bank of 18 October 2013 on statistical reporting requirements for post office giro institutions that receive deposits from non-monetary financial institution euro area residents \(recast\) \(ECB/2013/39\) \(OJ L 297, 7.11.2013, p. 94\).](#)

Where relevant, NCBs collect information on the issuance and holdings of monetary instruments by central government agencies, i.e. for the same items as those required for POGIs.

NCBs transmit monthly data relating to POGIs and central government combined, in accordance with Annex VI to Guideline ECB/2021/11. However, nothing needs to be reported by NCBs where no POGIs exist and where there are no central government positions or these positions are insignificant.

## 2.4 Residence and institutional units

Regulation ECB/2021/2 refers to the concept of residence as defined in Article 1 of Regulation (EC) No 2533/98 and adopted in the ESA 2010. “Resident” and “residing” means having a centre of economic interest in the economic territory of a country”. Regulation (EC) No 2533/98 also indicates that, for the purpose of compiling euro area statistics, “cross-border positions” and “cross-border transactions” means positions and transactions in the assets and/or liabilities of residents of the euro area, seen as one economic territory, vis-à-vis residents of other EU Member States and/or residents of non-EU countries.

In explaining residence further, the ESA 2010 defines “resident units” of a country as “those which are resident” and have their “centre of predominant economic interest in the economic territory of that country” (2.04) and further states that “centre of predominant economic interest indicates that a location exists within the economic territory of a country where a unit engages in economic activities and transactions on a significant scale” (2.07). The notion of “centre of predominant economic interest” also includes special-purpose entities that are registered or incorporated in a country, even if they have little or no presence there. The ESA 2010 (2.07) states in this regard that “in the absence of any physical dimension to an enterprise, (...) residence is determined according to the economic territory under whose laws the enterprise is incorporated or registered”.

Resident credit institutions include resident branches<sup>14</sup> that have their head office abroad, but exclude foreign branches of resident institutions. Similarly, MMFs resident in the euro area but managed from outside the euro area are part of the reporting population, while the statistics do not cover MMFs established in offshore locations outside the euro area even if their management companies are resident in the euro area.

Institutional units are defined in the ESA 2010 as “economic entities that are capable of owning goods and assets, of incurring liabilities and of engaging in economic activities and transactions with other units in their own right” (1.57). All institutional units are grouped into institutional sectors (see Section 3.5), with no unit being in more than one sector.

---

<sup>14</sup> Article 4(1)(17) of the CRR defines a “branch” as a place of business which forms a legally dependent part of an institution and which carries out directly all or some of the transactions inherent in the business of institutions.

## 2.5 Consolidation and reporting as a group for statistical purposes

Part 1 of Annex II to Regulation ECB/2021/2 requires reporting agents to consolidate the business of all their offices (registered or head office and branches) located within the same national territory. This means that a head office and branches resident in the same Member State are to be treated as a single institutional unit for the purposes of reporting. By contrast, no consolidation of branches and head offices across national boundaries is permitted under the Regulation. A reporting agent must report its positions with branches abroad (whether in another participating Member State or outside the euro area) or with a head office abroad (if the reporting agent is itself a branch) as positions with non-residents.

Furthermore, Article 6(1) of the Regulation permits a parent MFI to report on behalf of itself and of its resident MFI subsidiaries on a consolidated basis. That reporting must distinguish between the business of credit institutions and that of other MFI subsidiaries so that the minimum reserves requirements of the credit institutions can be established. No consolidation across sectoral boundaries is permitted under the Regulation. As a result, in its statistical reporting an MFI may not consolidate its own business with the business of subsidiaries that are not MFIs. As is the case with non-resident branches referred to above, the reporting agent may not consolidate the business of non-resident subsidiaries, or of a non-resident parent (if the reporting agent is itself a subsidiary), in its reporting.

Group reporting on an aggregated, rather than a consolidated, basis is also possible under certain circumstances. In order to ease the reporting burden, Article 6(2) of the Regulation permits group reporting on an aggregated basis where minimum reserves are held on behalf of a group by an intermediary – see Section 8.1.6. An NCB may allow an intermediary to report MFI balance sheet data, other than items related to the reserve base, in aggregate for the group. However, the data relating to minimum reserves must be reported so that the data for each member of the group can be identified, unless the intermediary is granted permission to report the reserve base on an aggregated basis in accordance with Article 11(5) of the MRR Regulation.

## 2.6 List of MFIs for statistical purposes

Under Regulation (EC) No 2533/98, and in line with the ESA 2010 (2.67), the population of MFIs is defined by the ECB, given that this population plays an essential role in the transmission of monetary policy decisions. Accordingly, the ECB establishes a list of MFIs for statistical purposes pursuant to Article 4 of Regulation ECB/2021/2. While this Regulation is only applicable to euro area countries, the list of MFIs for statistical purposes comprises all institutions resident in all EU Member States.

The list of MFIs for statistical purposes, which is updated on the [ECB's website](#) daily, complements the list of credit institutions subject to minimum reserve requirements

that is published on the [ECB's website](#) each month. There is an overlap in these lists with respect to the euro area credit institutions (classified as MFIs) – see Section 8.1.

### 2.6.1 Maintaining the list of MFIs

MFIs in the list are identified by a RIAD<sup>15</sup> code, which is unique to each institution. Each NCB in the EU is responsible for allocating a unique RIAD code to each MFI resident in its territory. The RIAD code comprises the two-digit ISO code of the MFI's country of residence followed by a series of alphanumerical characters (no maximum length has been specified, but there must be at least three digits after the two-digit ISO code). The RIAD code convention has been agreed by the ECB and the NCBs. The assignment and management of RIAD codes is legally binding and is laid down in Article 5 of Guideline ECB/2018/16<sup>16</sup>.

Reference data are reported by NCBs in the RIAD database for each MFI included in the list in accordance with Guideline ECB/2018/16. NCBs must immediately update this information when there are changes to the attributes of existing MFIs (e.g. name, address, etc.) in accordance with Article 6 of that Guideline.

While the Guideline only applies to NCBs in the euro area, Recommendation ECB/2018/36<sup>17</sup> calls on non-euro area NCBs to apply the provisions of the Guideline in transmitting their national lists of MFIs to the ECB.

### 2.6.2 Changes in the MFI population

A change in the MFI population occurs when an institution joins or leaves the MFI sector (i.e. as the result of a merger or takeover, the division of an existing MFI, the establishment of a new MFI, a change in status from non-MFI to MFI or from MFI to non-MFI, or the liquidation of an MFI).

When a new MFI is created, NCBs must immediately register the entity, together with all mandatory details. Similarly, when an institution leaves the MFI sector, it must be deleted immediately from the list of MFIs.

Where a euro area credit institution is authorised under Union law, the credit institution, including all branches resident elsewhere in the euro area, comes under the scope of Regulation ECB/2021/2 once their licence has been granted. If the credit institution is authorised to engage in taking deposits or other repayable funds from the public and granting credits for its own account (Article 4(1)(1)(a) of the CRR), it is classified as an MFI. By contrast, if it is only authorised to carry out the business referred to in Article 4(1)(1)(b), it is a non-MFI credit institution, as

---

<sup>15</sup> RIAD is the Register of Institutions and Affiliates Data. The RIAD ID code is a unique identifier for each entity recorded in the database.

<sup>16</sup> [Guideline \(EU\) 2018/876 of the European Central Bank of 1 June 2018 on the Register of Institutions and Affiliates Data \(ECB/2018/16\)](#) (OJ L 154, 18.6.2018, p. 3).

<sup>17</sup> [Recommendation of the European Central Bank of 7 December 2018 on the Register of Institutions and Affiliates Data \(ECB/2018/36\)](#) (OJ C 21, 17.1.2019, p. 1).

described in Section 2.2. If a non-MFI credit institution is subsequently authorised to take deposits, it must be reclassified and included in the MFI sector and added to the list of MFIs.

Former credit institutions that no longer meet the definition of a credit institution under Union law and do not otherwise meet the definition of an MFI are declassified as MFIs. This means that credit institutions (including, where applicable, their branches resident abroad) leave the MFI sector and are removed from the list of MFIs once their licence has been withdrawn. If a credit institution loses its licence because it is discontinuing its banking business but is otherwise continuing as a going concern, it must be reclassified based on its principal activity.

An institution that loses its banking licence in anticipation of entering liquidation may nevertheless continue to exist for a period of time (for example, during a resolution process). On losing its banking licence, the institution must be immediately reclassified from the MFI sector to the financial auxiliaries sector (ESA 2010, S.126), until it ceases to exist. An exception to this is where that former credit institution is a public institution that has been reclassified under general government and therefore does not remain classified in the financial sector.

NCBs must classify CIUs as MFIs if they are authorised pursuant to the MMF Regulation and meet the definition in Article 2 of Regulation ECB/2021/2 in all other respects. NCBs must remove CIUs from the list of MFIs immediately if they no longer meet that definition. For reporting purposes, if a CIU ceases to be classified as an MMF but continues to conduct business, it is included in the list of investment funds as a non-MMF investment fund pursuant to Regulation ECB/2013/38<sup>18</sup>. Similarly, a CIU that is reclassified as an MMF must be removed from the list of non-MMF investment funds.

Once a credit institution or an MMF has been included in the updated list of MFIs, it is immediately subject to reporting requirements and must start reporting statistical information in accordance with the Regulation ECB/2021/2 without undue delay.<sup>19</sup>

The MFI definition may be met by financial institutions that are neither authorised as credit institutions nor as MMFs according to Union law (see Section 2.1.2). To identify such deposit-taking corporations, NCBs check regularly whether financial institutions that are not on the list of MFIs nevertheless meet the statistical criteria for inclusion (these are usually institutions classified under the ESA 2010 sector “other financial intermediaries”, S.125). They also verify regularly that such deposit-taking corporations on the list of MFIs continue to meet the definition of an MFI. Given that the procedures can be complex, the ECB recognises that such a comprehensive check might occur only once a year. Financial institutions should be added to the list of MFIs as soon as they have been identified as meeting the definition of an MFI and removed as soon as they are identified as no longer meeting that definition. These changes to the list must be made in accordance with the procedures for updating the

---

<sup>18</sup> [Regulation \(EU\) No 1073/2013 of the European Central Bank of 18 October 2013 concerning statistics on the assets and liabilities of investment funds \(recast\) \(ECB/2013/38\) \(OJ L 297, 7.11.2013, p. 73\).](#)

<sup>19</sup> The relevant NCB may determine the actual scope and details of the statistical reporting requirements imposed on joining/leaving the MFI sector on a case-by-case basis in agreement with the ECB.

list outlined above. When a deposit-taking corporation is included in the list, it must start reporting in accordance with Regulation ECB/2021/2 without undue delay.

### 2.6.3 Public release of the list of MFIs

Updates of the list of MFIs, together with details of the individual institutions, are released daily on the ECB's website.<sup>20</sup> The list can be downloaded or user-defined searches performed. Explanatory notes available on the website provide further information and definitions.

## 2.7 Actual reporting population and derogations

Under Regulation ECB/2021/2, the reporting population consists of the MFIs and non-MFI credit institutions resident in the territory of the participating Member States. Annex IV to Regulation ECB/2021/2 specifies the minimum standards that reporting agents must fulfil to meet the ECB's reporting requirements.

As noted above, the MFI population includes MMFs that issue shares/units rather than take deposits. For the purposes of monetary statistics, it is important to identify and exclude any such shares/units held by non-residents of the euro area. This is because the ECB's measures of money stock are confined to holdings of monetary instruments held by residents of the euro area.<sup>21</sup> Where MMFs themselves cannot identify the holders of their shares/units, the ECB and NCBs may request such information from other financial intermediaries except insurance corporations and pension funds (OFIs) (S.125) that engage, for example, in custodial activities involving MMF shares/units. Such OFIs may therefore be included in the actual reporting population under Article 3 of Regulation ECB/2021/2.

The Regulation distinguishes between reporting agents subject to the full reporting requirements and "small" reporting agents to which derogations are applicable. Given that the size of reporting agents, by total assets, falls along a distribution, small reporting agents are considered to be in the tail of that distribution. Hence MFIs and non-MFI credit institutions that are granted derogations on the basis of their small size are referred to as "tail institutions", as defined in Article 2 of Regulation ECB/2021/2.

The remainder of this section provides more details on derogations from the reporting requirements that may be granted by NCBs.

---

<sup>20</sup> See the [Statistics section](#) of the ECB's website.

<sup>21</sup> With the exception of euro banknotes and coins, where the total amount in circulation is included in money stock.



## 2.7.1 Derogations granted to small MFIs

NCBs may grant derogations from the reporting requirements to small MFIs under Article 9(1) of Regulation ECB/2021/2, provided that the combined contribution of all small MFIs to which derogations are granted does not exceed 5% of the total assets of the national MFI balance sheet. As a minimum, NCBs must collect:

- the outstanding amount of total assets on at least an annual basis so that the size of the reporting tail can be monitored (and in order to gross up to represent the entire population, see Section 6.2); and
- the statistical information referred to in Annex III of Regulation ECB/2021/2 necessary to calculate the reserve base of credit institutions for minimum reserves purposes (see Section 8.1).

Where derogations are applied to small MFIs that are MMFs under Article 9(1) of Regulation ECB/2021/2, an additional threshold may apply, as follows:

- where the national MMF balance sheet accounts for more than 15% of the total euro area MMF balance sheet, the combined contribution of all MMFs that are granted a derogation may not exceed 10% of the total assets of the national MMF balance sheet;
- where the national MMF balance sheet accounts for between 1% and 15% of the total euro area MMF balance sheet, the combined contribution of all MMFs that are granted a derogation may not exceed 30% of the total assets of the national MMF balance sheet;
- where the national MMF balance sheet accounts for less than 1% of the total euro area MMF balance sheet, no additional threshold applies with respect to coverage of the national MMF balance sheet.

Under Article 9(2) of Regulation ECB/2021/2, NCBs may also grant derogations from a limited set of reporting requirements to small MFIs that are credit institutions, provided that the combined contribution of those institutions, in terms of total assets, does not exceed 10% of the national MFI balance sheet nor 1% of the euro area MFI balance sheet. As indicated in Part 6 of Annex I to ECB/2021/2, credit institutions qualifying for derogation may be exempted from the following requirements:

- monthly reporting with respect to the breakdown by currency, the separate identification of positions with central counterparties, syndicated loans, debt securities of up to two years' maturity and with a nominal capital guarantee below 100%, and holdings of real estate;
- quarterly reporting with respect to the sector breakdown of business with counterparties outside the euro area as included in Part 3, Section 3 of Annex I to ECB/2021/2, the breakdown by country as included in Part 3, Section 7 of Annex I to ECB/2021/2 and the breakdown by currency as included in Part 3, Section 9 of Annex I to ECB/2021/2.

In addition, these credit institutions may be required by NCBs to fulfil the reporting requirements related to balance sheet outstanding amounts, revaluation adjustments, as well as securitisations and other loan transfers, all of which are normally monthly requirements, by reporting data on a quarterly basis.

NCBs can grant or withdraw derogations with effect from the start of each year, after checking that the conditions for inclusion in the 5% and 10% tails are met.

Small MFIs may choose not to make use of any derogation and instead fulfil the full reporting requirements.

## 2.7.2 Derogations granted to MMFs

Under Article 9(4) of Regulation ECB/2021/2, NCBs may grant derogations to MMFs from the reporting requirements set out in the Regulation, provided that they instead report balance sheet data in accordance with Article 5 of Regulation ECB/2013/38 and that the data are provided in accordance with the timeliness requirements set out in Regulation ECB/2021/2.

In addition, NCBs may grant derogations to MMFs from the specific reporting requirements of Regulation ECB/2021/2, as listed in Article 9(4)(b). For some of these requirements, NCBs must ensure that the contribution of an item on which a derogation is granted to MMFs does not exceed 5% of the total for that item in the national MFI balance sheet. On the other hand, some of the requirements from which NCBs may grant derogations may relate to business activities that are, in any case, not relevant for MMFs – for example, the requirements relating to holdings of real estate and securitisations and other loan transfers.

Finally, in accordance with Article 9(4)(c) of Regulation ECB/2021/2, the NCB may, under certain conditions, grant derogations from the reporting of MMF shares/units issued broken down by residency of the holder, e.g. where the MMF shares/units are issued for the first time or where the data are available from other sources.

## 2.7.3 Derogations granted to non-MFI credit institutions

Under Article 9(5) of Regulation ECB/2021/2, NCBs may grant derogations to small non-MFI credit institutions, i.e. where the outstanding amount of the total assets of the reporting agent is less than or equal to €350 million. As explained in Section 2.2, an investment firm is required to become authorised as a credit institution where the criteria specified in Article 4(1)(1) of the CRR are met, i.e. the total eligible assets, either at the individual or group level, are equal to or exceed €30 billion. The criteria may therefore be met at the level of a group, while the balance sheet of the individual reporting agent may be below the threshold of €350 million specified in Regulation ECB/2021/2. Furthermore, a non-MFI credit institution may have a small branch resident in the euro area that falls below that threshold.

In contrast to the requirements for MMFs and for the MFI sector as a whole, it is not necessary for NCBs to gross up data reported to the ECB in order to represent the entire non-MFI credit institution population. Hence the thresholds only apply to reporting agents individually and there are no thresholds for national coverage of such institutions.

Where a non-MFI credit institution is granted a derogation as a tail institution under Article 9(5) of Regulation ECB/2021/2, as a minimum, NCBs must collect:

- the outstanding amount of total assets on at least an annual basis so that the size of the reporting agent can be monitored; and
- the statistical information referred to in Annex III of Regulation ECB/2021/2 necessary to calculate the reserve base of credit institutions for minimum reserves purposes (see Section 8.1).

In addition, non-MFI credit institutions that are not tail institutions, i.e. they are not granted derogations as small reporting agents, may be granted derogations by NCBs from the reporting requirements listed in Article 9(5)(b) of Regulation ECB/2021/2.

Non-MFI credit institutions may choose not to make use of any derogation and instead fulfil the full reporting requirements.

## 3 Statistical reporting requirements

MFI balance sheet statistics collected under Regulation ECB/2021/2 are the main source for the euro area monetary aggregates and counterparts and are also used to derive the Eurosystem's minimum reserve requirements for credit institutions. In order to compile monetary aggregates, the MFI data are supplemented with statistics on the monetary liabilities of POGIs collected under Regulation ECB/2013/39 and of central government.

The underlying definitions for the statistical reporting requirements – i.e. the classification of instruments, economic sectors, valuation, etc. – are set out in international statistical standards (the ESA 2010). The ESA 2010 is the European counterpart to the global System of National Accounts (SNA) (the latest version of which is the SNA 2008). It is broadly consistent with the definitions and classifications used therein, apart from certain differences in presentation and a higher degree of precision for some of the ESA 2010 concepts used for specific EU purposes. In addition, A number of adaptations, additions and divergences are introduced under Regulation ECB/2021/2 as compared with the ESA 2010 in order to meet the specific needs for monetary analysis in the euro area (and in some cases to accommodate the practicalities of collecting data from reporting agents).

The following sections provide an overview of the statistical reporting requirements contained in Regulation ECB/2021/2.

### 3.1 Instruments

The table below summarises the assets and liabilities instruments, including the main “of which” positions and original maturity breakdowns, reported on a monthly basis in accordance with Table 1 in Annex I to Regulation ECB/2021/2. Additional quarterly requirements are set out in Tables 2 to 4 in Annex I to the Regulation. Detailed information on each of the instrument categories and associated valuation principles is provided in Chapter 4.

Guideline ECB/2021/11 requires the reporting of certain items that are specific to central bank balance sheets, such as currency in circulation, gold and gold receivables, as well as receivables from the International Monetary Fund (IMF).

Under the Regulation, some instruments are broken down by maturity (as summarised in the following table), currency, and residency and sector of counterparties. These are explained in the following sections.

**Table 1**

Main breakdowns of MFI balance sheets required on a monthly basis

Assets	Liabilities
<b>Cash</b>	<b>Currency in circulation</b>
<b>Loans</b>	<b>Deposits</b>
up to 1 year	<b>Overnight</b>
over 1 year and up to 5 years	o/w transferable deposits
over 1 year and up to 2 years (euro only)	o/w notional cash pool positions
over 2 years and up to 5 years (euro only)	<b>With agreed maturity</b>
over 5 years	up to 1 year
<b>o/w intragroup positions</b>	over 1 year and up to 2 years
<b>o/w syndicated loans</b>	over 2 years
<b>o/w reverse repos</b>	<b>Redeemable at notice</b>
<b>o/w notional cash pool positions</b>	up to 3 months
<b>o/w revolving loans and overdrafts (euro only)</b>	over 3 months
<b>o/w convenience credit card credit (euro only)</b>	<b>Repos</b>
<b>o/w extended credit card credit (euro only)</b>	<b>o/w intragroup positions</b>
<b>Debt securities held</b>	<b>o/w syndicated loans</b>
up to 1 year	<b>MMFs shares/units</b>
over 1 year and up to 2 years	<b>Debt securities issued</b>
over 2 years	up to 1 year
<b>Equity</b>	over 1 year and up to 2 years
listed shares (quarterly)	over 2 years
unlisted shares (quarterly)	<b>o/w up to 2 years with a nominal capital guarantee below 100%</b>
other equity (quarterly)	<b>Capital and reserves</b>
<b>Investment fund shares/units</b>	<b>Remaining liabilities</b>
<b>MMF shares/units</b>	
<b>Non-MMF investment fund shares/units</b>	
<b>Non-financial assets</b>	
<b>Remaining assets</b>	

Note: o/w stands for of which.

## 3.2 Maturity

Most of the requirements relating to maturity refer to the original maturity of an instrument, which is the period from the issue date until the final contractually scheduled payment date, or the date before which it cannot be redeemed (e.g. debt securities), or it can be redeemed only subject to a penalty (such as certain types of deposit). For example, a bond issued for ten years that has only one year left to run is recorded under the maturity category “over two years”. The category “up to two years” includes bonds issued for exactly two years. Some instruments have a notice period corresponding to the time between the date on which the holder gives notice of an intention to redeem the instrument and the date on which the holder may do so without incurring a penalty. Financial instruments are classified according to the period of notice only when there is no agreed maturity. Original maturity (rather than residual) cut-offs are requested for statistical purposes as they may provide a substitute for an instrument breakdown where financial instruments are not fully comparable across markets. Original maturities are also assumed to be more indicative of the underlying motivation of the debtor or investor, which is the main focus of MFI balance sheet statistics.

The maturity bands (or notice periods) requested for monthly statistical breakdowns are one and two years' maturity at issue for deposits with an agreed maturity, and three months' notice and (on a voluntary reporting basis) two years' notice for deposits redeemable at notice. Non-transferable sight deposits (sight savings deposits) are included in the "up to three months" band. Repurchase agreements (usually very short-term instruments, commonly agreed for less than three months) are not broken down by maturity. The maturity breakdown for debt securities issued by MFIs (including money market paper) is at one and two years. There is no maturity breakdown for shares/units issued by MMFs, given that the concept is not relevant to them. A maturity breakdown by original maturity is required at one and five years for loans, and at one and two years for securities other than shares (debt securities).

Quarterly maturity requirements permit monitoring of the maturity structure of MFIs' overall credit financing (loans and securities) vis-à-vis the money-holding sector. Loans to general government other than central government are broken down into one and five years' original maturity, while holdings of securities issued by these agencies are split at one year's original maturity, both items being cross-related to a subsector breakdown of general government other than central government. Holdings by MFIs of debt securities issued by insurance corporations, pension funds, other financial corporations and non-financial corporations are broken down by original maturity at one year.

A breakdown of **remaining (or residual) maturity**, i.e. the period between the reference date and the final contractually scheduled payment, is required under Regulation ECB/2021/2 for euro-denominated loans to non-financial corporations and to households. Remaining maturities are collected in conjunction with information on original maturity and the period over which the interest rate may be reset (i.e. in the following 12 or 24 months), as provided for in the current loan contract. These breakdowns are reported for the purposes of MFI interest rate statistics collected under Regulation ECB/2013/34<sup>22</sup> ("MIR Regulation"). Bad loans that are still outstanding beyond the final contractually scheduled payment date provided for in the current loan contract (i.e. they have not been repaid or written off) are excluded from the remaining maturity breakdowns.

### 3.3 Currency

For all relevant monthly balance sheet items, amounts denominated in euro and in non-euro currencies must be reported separately.

Quarterly information identifying the main foreign currencies individually is used on a monthly basis to remove the effect of exchange rate changes when deriving transaction data from changes in the outstanding amounts (see Section 5.8 and Section 7.2.2). Key balance sheet items are broken down quarterly into major

---

<sup>22</sup> [Regulation \(EU\) No 1072/2013 of the European Central Bank of 24 September 2013 concerning statistics on interest rates applied by monetary financial institutions \(recast\) \(ECB/2013/34\) \(OJ L 297, 7.11.2013, p. 51\).](#)

international currencies (US dollar (USD), British pound (GBP), Japanese yen (JPY) and Swiss franc (CHF)), a total for currencies of non-euro area EU Member States and a total for remaining currencies combined. In addition, loans denominated in EU currencies other than euro are broken down by individual currencies.

In accordance with the ESA 2010 (6.64), assets and liabilities denominated in foreign currencies must be converted into euro at the market exchange rates prevailing on the reference date, i.e. on the last day of the month or quarter.

If balance sheet data relate to a working day earlier than the last date for which an exchange rate is available for the respective month or quarter (e.g. due to a national or regional holiday), the exchange rate prevailing on that earlier working day may be used. However, it is always preferable to use the last available exchange rate for the reference month or quarter.<sup>23</sup>

The ECB publishes reference exchange rates for many foreign currencies on its website every working day.<sup>24</sup> These should be used for the purposes of conversion, where available. For exchange rates that are not available on the ECB's website, reporting agents should use market data that are publicly or commercially available for the purposes of conversion.

## 3.4 Residency

Positions are required vis-à-vis domestic residents, residents of other euro area countries and non-residents of the euro area. The distinction between positions vis-à-vis domestic residents and residents of other euro area countries is critical to the compilation of euro area aggregates and is necessary because MFI balance sheet data are used for certain national statistical purposes.

For deposit liabilities, loans and holdings of securities (comprising debt securities held, investment fund shares/units and equity), reporting agents must provide a quarterly breakdown by country of counterparty (the country in which the issuer is resident in the case of securities holdings) for all EU Member States and the United Kingdom (as a former EU Member State).

## 3.5 Sector of counterparty

Reporting agents are required, for most balance sheet items, to classify the sector of counterparties that are domestic residents, residents of other euro area countries and, to a limited degree, non-residents of the euro area. The relevant sector definitions provided in Part 3 of Annex II to Regulation ECB/2021/2 closely follow the definitions given in the ESA 2010. However, the Regulation requires somewhat more

---

<sup>23</sup> When estimating the exchange rate adjustment (see Section 7.2.2), the ECB uses its last reference exchange rates of the month or quarter.

<sup>24</sup> See the [euro foreign exchange reference rates](#) on the ECB's website.

sector detail for certain items, while other sectors must be reported on an aggregate basis, depending on needs for analytical purposes.

Reporting agents can identify counterparties that are MFIs from the list of MFIs for statistical purposes published by the ECB (see Section 2.6). A distinction is typically necessary between the ECB and NCBs (S.121), deposit-taking corporations except central banks (S.122) and money market funds (S.123). Where the reporting agent is a credit institution subject to minimum reserve requirements, a distinction is also necessary for other credit institutions subject to minimum reserve requirements<sup>25</sup> given that this is relevant for the calculation of minimum reserve requirements (see Section 8.1).

Excluding MFIs themselves, institutional units are classified as follows in the ESA 2010:

- Non-financial corporations (S.11 – entities engaged in the production of goods and non-financial services for the market).
- Financial corporations excluding MFIs (S.12, excluding MFIs), comprising non-MMF investment funds (S.124), OFIs (S.125), financial auxiliaries (S.126), captive financial institutions and money lenders (S.127), insurance corporations (S.128) and pension funds (S.129). For the purposes of reporting to the ECB, the following sectors may be grouped together: OFIs, financial auxiliaries, captive financial institutions and money lenders (S.125 + S.126 + S.127). Regulation ECB/2021/2 also requires further sub-divisions to separately identify financial vehicle corporations and certain positions vis-à-vis central counterparties, both falling within S.125.
- General government (S.13 – entities which are principally engaged in the production of non-market goods and services intended for individual and collective consumption, and/or in the redistribution of national income and wealth), comprising central government (S.1311), state government (S.1312), local government (S.1313) and social security funds (S.1314). For the purposes of monetary analysis, the requirements in Regulation ECB/2021/2 distinguish liabilities to central government from liabilities to other general government (S.1312 + S.1313 + S.1314), given that the former is not part of the “money-holding sector”. (A more complete breakdown of general government is collected on a quarterly basis.)
- Households (S.14), comprising individuals and many unincorporated businesses; for the purposes of reporting to the ECB, households are grouped together with non-profit institutions serving households (S.15), consisting of non-profit institutions that are separate legal entities, that serve households and that are private non-market producers. Regulation ECB/2021/2 also includes

---

<sup>25</sup> The [list of institutions subject to the Eurosystem's minimum reserve requirements](#) is published on the ECB's website.



certain requirements for the identification of sole proprietors/unincorporated partnerships falling within S.14+S.15.<sup>26</sup>

- The ESA 2010 also includes the “rest of the world” sector (S.2), comprising all non-resident entities. In contrast, Regulation ECB/2021/2 typically requires a limited sector breakdown for positions with counterparties outside the euro area. This breakdown is limited, distinguishing only between positions with MFIs and non-MFIs in the monthly requirements, and non-MFIs being further split between general government and other counterparties on a quarterly basis. For counterparties resident in EU Member States outside the euro area, a more complete sector breakdown (similar to that for euro area residents) is required on a quarterly basis. The sector classification of the SNA 2008 applies where the ESA 2010 is not in force. As the term “MFI” is specific to EU Member States, for the purposes of classifying non-EU residents, the term “MFI” is to be interpreted as meaning the SNA 2008 sectors “central bank”, “deposit-taking corporations except the central bank” and “money market funds”.

### 3.5.1 EU institutions and other bodies and international organisations

For both national and euro area statistics, most EU institutions and other bodies and international organisations are classified as non-resident general government entities under the “rest of the world” sector, regardless of their physical location.<sup>27</sup> Financial transactions or positions between EU institutions and other bodies in the euro area are thus treated in both national statistics and euro area aggregates as transactions or positions with the rest of the world. However, some exceptions exist for institutions with banking-type operations:

- The ECB is classified as a central bank in the MFI sector of the euro area but not a resident in any individual Member State; it therefore constitutes an economic territory on its own.<sup>28</sup>
- The European Investment Bank (EIB) is classified as an OFI under the ESA 2010 and is treated as constituting an economic territory on its own outside the euro area but within the EU, i.e. under the “rest of the world” sector. However, the EIB has been granted the status of eligible counterparty in the Eurosystem’s refinancing operations and for operational purposes is therefore treated as a credit institution resident in the euro area. It has thus been included in the list of MFIs published by the ECB and is subject to reserve base statistics reporting. Credit institutions in the euro area may deduct any liabilities to the EIB from their reserve base for the purposes of the Eurosystem’s minimum

---

<sup>26</sup> Sole proprietors/unincorporated partnerships that are not recognised as independent legal entities and that are market producers are classified under the household sector (S.14), unless they are quasi-corporations (ESA 2010, 2.141).

<sup>27</sup> The list of all EU institutions and of other international organisations, including also the sector classification, can be found in the booklet on “[The exchange of balance of payments and international investment position statistics – BPM6 –](#)” published on the ECB’s website.

<sup>28</sup> Note that for reference periods up to and including December 2021 (i.e. prior to the implementation of Regulation ECB/2021/2), the ECB was instead classified as an MFI resident in Germany for the purposes of geographic allocation within the reporting scheme for MFI balance sheet statistics.

reserve requirement (the use of MFI balance sheet data for calculating the reserve base is discussed in Section 8.1). In the balance sheet returns submitted by MFIs to NCBs under Regulation ECB/2021/2, NCBs may choose between requiring MFIs (i) to continue treating the EIB as a non-MFI resident in the rest of the world, or (ii) to treat the EIB as a credit institution resident in the euro area. In the data which the NCBs transmit to the ECB, the EIB must however, be treated as a non-MFI resident in the rest of the world.

- The European Stability Mechanism (ESM) is treated statistically as euro area central government, but not resident in any individual euro area country; it therefore constitutes an economic territory on its own.
- The European Financial Stability Fund (EFSF) is classified similarly to the ESM and constitutes an economic territory on its own.<sup>29</sup>
- The Single Resolution Fund (SRF) is considered to be part of the Single Resolution Board (SRB) and not a separate institutional unit. The SRB is classified as an institutional unit resident in the EU but not in the euro area. It is classified in the same way as most other EU institutions, i.e. as a general government entity (part of central government) within the “rest of the world” sector.

## 3.6 Reference date for balance sheet data

End-of-month and end-of-quarter balance sheet data should refer to the last calendar day. If this is not possible, data relating to the last working day should be used, in accordance with national market or accounting rules.

Where the last working day is used, if regional holidays fall at the end of the month or quarter, countries may adopt the last working day in their respective region(s) or the last common working day in their respective country as the reference date. Where the last working day is used, but the last calendar day falls on a weekend or a public holiday, countries should preferably attribute any business on that and any preceding non-working day(s) to that reference month or quarter. The business may, however, be attributed to the first working day of the next month or quarter.

## 3.7 Balance sheet outstanding amounts and adjustments

It is not sufficient for statistical requirements to cover balance sheet levels only – for analytical purposes it is necessary to investigate economic developments over time. Therefore, in addition to outstanding amounts, MFI balance sheet statistics also cover requirements that enable an analysis to be made of transactions and growth rates.

---

<sup>29</sup> Note that for reference periods up to and including July 2020, the ESM was instead classified as an OFI resident in the euro area (but not resident in any individual euro area Member State), and the EFSF was classified as an OFI resident in Luxembourg (where it is physically located).

The ESA 2010 defines a **transaction** as “an economic flow that is an interaction between institutional units by mutual agreement or an action within an institutional unit that it is useful to treat as a transaction, often because the unit is acting in two different capacities” (1.66). It goes on to define financial transactions as those “which describe the net acquisition of financial assets or the net incurrence of liabilities for each type of financial instrument. Such transactions occur both as counterparts of non-financial transactions, and as transactions involving only financial instruments” (1.66(c)). It is clear that taking or repaying a deposit, granting a loan or receiving repayment, and buying or selling a security (or relinquishing it on redemption) are all transactions, since they represent interactions between units by agreement.

Changes in the prices of securities, write-offs and write-downs of loans are not transactions, but they nevertheless have an impact on outstanding amounts. Regulation ECB/2021/2 specifies that information on such valuation changes is to be reported as **revaluation adjustments**.<sup>30</sup> Except for deposits, these adjustments are transmitted to the ECB by NCBs for almost all outstanding amounts collected on a monthly basis, in addition to certain quarterly requirements. Of these, Regulation ECB/2021/2 specifies which revaluation adjustments must be collected by NCBs from reporting agents, at least as a minimum requirement.

Outstanding amounts may be affected by changes in the reporting population, in the sector classification of counterparties and methodological changes. Such effects are captured by **reclassification adjustments**.<sup>31</sup> These may also be used to correct statistical reporting errors and to prevent revisions from causing a break in the series between the first corrected and last uncorrected observation, given that any such break would distort the growth rate of the item concerned. Reclassification adjustments are not required from reporting agents under Regulation ECB/2021/2, but instead are reported by NCBs to the ECB under Guideline ECB/2021/11. For this, NCBs may rely on data directly reported by the reporting population, supervisory information, plausibility checks, ad hoc enquiries (e.g. related to outliers), national statistical requirements, information on joiners and leavers of the reporting population and any other source available to them. Reclassification adjustments are reported for almost all of the outstanding amounts collected on a monthly basis under Regulation ECB/2021/2, as well as for some of the outstanding amounts collected on a quarterly basis.

The valuation of assets and liabilities denominated in currencies other than euro will be affected by exchange rate fluctuations, i.e. another non-transactional effect on the outstanding amounts reported in euro. This effect is taken into account through **exchange rate adjustments**; these adjustments are not required, however, under either Regulation ECB/2021/2 or Guideline ECB/2021/11. Instead, the ECB itself corrects aggregated MFI balance sheets for the effect of exchange rate changes.<sup>32</sup>

---

<sup>30</sup> The ESA 2010 records loans write-offs that do not reflect a debt cancellation with an explicit or implicit bilateral agreement under “**other changes in volume of assets account**” (ESA 2010, 20.141). The effect of price and other valuation changes is recorded in the “**revaluation account**”.

<sup>31</sup> The ESA 2010 records such effects under “other changes in volume of assets account”.

<sup>32</sup> Unless the NCBs provide more precise information on exchange rate adjustments.

All these adjustments are subject to the same double-entry accounting system as outstanding amounts and transactions: adjustments therefore always have a counterpart, which will often be “capital and reserves” or “remaining liabilities”, depending on the operation or the national accounting rules.

Chapter 5 and Section 7.2 explain in more detail how these adjustments are made and transactions derived (or, as in some Member States, how transactions are reported directly and valuation effects derived as a residual). Section 7.3 provides information on how growth rates are calculated in MFI balance sheet statistics on the basis of transactions (and not simply as period-on-period changes in outstanding amounts).

## 3.8 Accounting principles in statistical reporting

### 3.8.1 General valuation principles

Article 8 of Regulation ECB/2021/2 lays down the relevant accounting principles for the purposes of statistical reporting. The following presents a general summary of applicable valuation principles accepted in MFI balance sheet statistics. Further details on the valuation and accounting principles of individual asset and liability items are presented in Chapter 4.

**Deposits and loans** are to be reported at the principal amount outstanding, excluding amounts written off or written down, as specified in the ESA 2010. While loans should be reported gross of provisions, a few NCBs allow the reporting of loans net of provisions. This is permitted under Regulation ECB/2021/2, provided that such reporting practices are applied by all resident reporting MFIs and are in line with long-standing statistical reporting practices. Deposit liabilities and loans must not be netted against each other or against any other assets or liabilities. More broadly, Article 8 of the Regulation states that all financial assets and liabilities must be reported on a gross basis. This requirement conforms to the gross recording approach advocated in the ESA 2010 (1.110).

One exception to the rule of gross recording is the treatment of **holdings of own instruments issued**. For the purposes of MFI balance sheet statistics, holdings of own instruments issued (holdings of own shares and other securities issued by the MFI) should be recorded on a net basis (i.e. the holding and the liability should not be recorded gross on separate sides of the balance sheet), as specified in the ESA 2010 (5.30). Regulation ECB/2021/2 requires NCBs to transmit data on MFIs' holdings of own securities issued.

The valuation and treatment of **other balance sheet items** are covered by Article 8 of Regulation ECB/2021/2, which requires MFIs to follow the rules laid down in the national transposition of Council Directive 86/635/EEC on the annual accounts and

consolidated accounts of banks and other financial institutions,<sup>33</sup> as well as any other international standards applicable. Market valuation is generally required under the ESA 2010 and other international statistical and accounting practices. Nevertheless other valuations may be acceptable provided that the reported amounts do not diverge significantly from the market value. In this regard, the revaluation adjustments reported by euro area MFIs in different countries also reflect the impact of different national accounting practices and therefore avoid distortions when transaction data are compiled. Efforts are being made to standardise the valuation practices for MFI debt securities based on market prices.

With specific regard to **statistical reporting by central banks** (S.121), Guideline ECB/2021/11 states that NCBs and the ECB itself should follow the harmonised accounting rules set out in Guideline ECB/2016/34 in their statistical reporting. There are limited exceptions: NCBs are required for statistical purposes to revalue their securities portfolio on a monthly rather than quarterly basis (see also Section 4.5.2), intra-Eurosystem positions are to be reported on a gross basis (not on a net basis), revaluation accounts are to be reported on a net basis (not on a gross basis) and unrealised losses are to be reported under “other assets”.

**Transactions** are recorded net within each instrument and sector category, meaning loans extended are net of repayments, purchases of securities are net of sales, etc. As such, the data do not measure gross financial transactions or turnover, which is consistent with the approach advocated in the ESA 2010. Another provision of the ESA 2010 applying to MFI balance sheet statistics is that financial transactions are recorded at the transaction value (5.19), which may not necessarily be the same as the price quoted in the market at the time of the transaction (5.21). The transaction value excludes charges, fees, commissions, etc., which are treated as separate transactions under services (5.22). How transaction data are compiled in practice is explained in Chapter 5 and Section 7.2.

### 3.8.2 Accrued interest

Since the data are mainly used for monetary analysis, the treatment of accrued interest in MFI balance sheet statistics departs (at least for deposits and loans) from the approach advocated in the ESA 2010, which prefers accrued interest to be recorded under the relevant instrument category (5.242).<sup>34</sup> This means that the accrual of interest is shown as a transaction in the instrument concerned, with a matching entry under interest income in the non-financial accounts. In contrast, Regulation ECB/2021/2 requires accrued interest on deposits and loans to be recorded under “remaining liabilities” or “remaining assets”.

The Regulation contains no rule on the treatment of accrued interest on securities issued or held by MFIs. In the interests of coherent data, Part 2 of Annex I to

---

<sup>33</sup> [Council Directive 86/635/EEC of 8 December 1986 on the annual accounts and consolidated accounts of banks and other financial institutions](#) (OJ L 372, 31.12.1986, p. 1).

<sup>34</sup> In the balance of payments and international investment position, accruals are recorded under the relevant instrument category.

Guideline ECB/2021/11 suggests that accrued interest intrinsic to the accounting price as reported on the MFI balance sheet should be subject to a revaluation adjustment, while accrued interest excluded from the reported value of the securities to which it relates should be classified under “remaining liabilities” or “remaining assets” and not treated as a revaluation adjustment. In neither case would the accrual of interest be recorded as a transaction in the security concerned.

### 3.8.3 Time of recording

The ESA 2010 states that financial transactions and their counterpart transactions (financial or non-financial) must be recorded at the same point in time (5.49). A distinction is made between two main cases depending on the nature of the counterpart transaction. When the counterpart of a financial transaction is a non-financial transaction (e.g. sale of a non-financial asset), both transactions are to be recorded at the time when the non-financial transaction takes place (5.50), i.e. when the ownership of the non-financial asset changes, which may not coincide with payment (1.101 and 1.102).<sup>35</sup> MFI balance sheet outstanding amounts, however, are mostly affected by transactions within the financial account (where the counterpart of a financial transaction is another financial transaction). Where this is the case, the ESA 2010 criterion usually relates to the time when the payment is made (5.51). More specifically, three possibilities can be distinguished: (i) if both financial transactions are transactions in cash or other means of payment<sup>36</sup> (for example, where currency or deposits are exchanged), they should be recorded at the time the first payment is made; (ii) if only one of the two financial transactions is a transaction in cash or other means of payment (e.g. a sale of securities for deposits), they should be recorded at the time payment is made; (iii) if neither of the two financial transactions is a transaction in cash or other means of payment (e.g. an exchange of securities), they should be recorded at the time the first financial transaction takes place (i.e. the change in ownership). An MFI loan should therefore be recorded when the payment is made to the borrower, which also coincides with the creation of the claim against the borrower (case (ii)). Similarly, when an MFI buys a security in exchange for cash, the transaction should be recorded when the payment occurs, not when the security is traded or delivered (case (ii)). In contrast, when an MFI exchanges a loan against a security, the financial transactions are to be recorded when the first change in ownership (whether of the loan or the security) takes place (case (iii)).

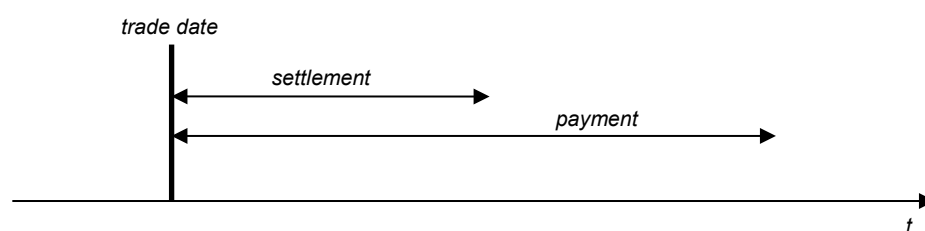
Under accounting rules, the time of recording may differ from the treatment envisaged under the ESA 2010 for transactions within the financial account. In particular, under international financial reporting standards (IFRS) transactions in financial assets are to be recorded on either the trade date (trade accounting) or the settlement date (settlement accounting). The trade date is defined as the date when two entities commit to the purchase or sale of an asset (IFRS 9.B3.1.5), while the

<sup>35</sup> For instance, when a service is provided giving rise to a claim on the customer (e.g. trade credit), this financial transaction is to be recorded when the entries are made in the non-financial account.

<sup>36</sup> Under the ESA 2010, means of payment comprise monetary gold, SDRs, currency and transferable deposits (Annex 7.1, summary of *Financial assets and liabilities (AF)*, p. 186).

settlement date is the date on which an asset is delivered to or by an entity (IFRS 9.B3.1.6), which is the moment when the ability to exercise the rights associated with the transacted financial asset are received or transferred. The payment may take place on a different date, however, and does not determine the time of recording under IFRS. The trade date and the settlement date often coincide, but this may not necessarily be the case. For instance, for transactions in equity instruments, regulated stock exchanges often require delivery to be made on the trade date, while the corresponding payment follows at a later stage. In such cases, the counterpart of the transaction in the equity instrument is a receivable/payable that will be reversed when the payment is made. For transactions in bonds, however, the way in which some regulated exchanges are organised means that require delivery is recorded when payment occurs, which may not coincide with the trade date.<sup>37</sup> In such cases, the counterpart of the transaction in the bond instrument is the payment and no receivable/payable amounts arise.

**Figure 2**  
Recording of transactions under IFRS and the payment date



For the purposes of MFI balance sheet statistics, MFIs should record financial transactions on the date when payment occurs, which often coincides with the date when delivery is made<sup>38</sup> (i.e. the settlement date in IFRS terminology).<sup>39</sup> In cases where, in accordance with the accounting provisions, MFIs do not record transactions when delivery is made (e.g. they record transactions on the trade date), they may do the same for MFI balance sheet statistics reporting, provided this does not create significant distortions in the reported figures. If significant distortions arise as a result of not using the settlement date, the NCB should develop suitable techniques to make the necessary adjustments to remove such distortions.

Recording transactions on the settlement date may give rise to amounts receivable or payable. MFIs should record such amounts on a net basis under “remaining

<sup>37</sup> Securities exchanges do not all operate in the same way in terms of the timing of trading versus delivery and payment, so there may be differences between countries.

<sup>38</sup> For transactions in financial assets that do not take place on regulated exchanges (e.g. deposits, loans and non-negotiable securities), delivery usually takes place when the payment occurs.

<sup>39</sup> The sixth edition of the [Balance of Payments and International Investment Position Manual \(BPM6\)](#) recommends that transactions be recorded “when economic ownership changes”, but goes on to state that “when the delay between the transaction and settlement date is short, the time of settlement may be considered as an acceptable proxy”; the BPM6 (3.55) therefore provides guidance supplementing the ESA 2010 (5.51). The BPM6 may depart from the recommended ESA treatment in certain cases when there is a longer delay between the transaction and settlement date. As the notion of a “longer delay” is rather subjective, the recommended practice for MFI balance sheet statistics reporting is to maintain the IFRS settlement date recording approach, which also corresponds with the ESA 2010 guidance in most cases.

assets” or “remaining liabilities” according to their sign (this may also apply if transactions are recorded on the trade date).

The suggested practice for MFI balance sheet statistics is thus in line with IFRS, given that the settlement date is one of the options available under IFRS.

National variations in determination of the reference date for balance sheet data (see Section 3.6) may lead to different practices in relation to the time of recording. This can lead to quality issues, particularly for short-term comparisons, and may contribute to discrepancies between aggregated inter-MFI assets and liabilities. These should even out over longer time periods, however.



## 4 Statistical treatment of selected instrument categories

Regulation ECB/2021/2 lists the instrument categories to which reporting agents (guided where necessary by NCBs) allocate the financial instruments found at national level, rather than detailing individual instruments. This chapter draws on the detailed description of the instrument categories in Part 2 of Annex II to the Regulation.

### 4.1 Valuation principles under the ESA 2010 versus ECB statistical regulations and guidelines

As noted in Section 3.8.1, the valuation principles for outstanding amounts reported under Regulation ECB/2021/2 impose the use of nominal value for currency, deposits and loans (including finance leases).<sup>40</sup> Loans are to be reported at less than nominal value only if they have been written off or written down as wholly or partially irrecoverable, or if the NCB instructs that loans are to be reported net of provisions. While market valuation of securities is preferred, Regulation ECB/2021/2 accepts various reporting practices if required under national accounting procedures.

In cases where the accounting rules are not specified, the national transposition of Council Directive 86/635/EEC and any other applicable international standards (whether accounting, supervisory or statistical) should be applied, as set out in Article 8 of the Regulation. As noted in Section 3.3, instruments denominated in foreign currency are to be reported as euro amounts converted at the market exchange rates prevailing on the date to which the data relate.

The following table summarises the valuation principles required for MFI balance sheet statistics, as laid down in Regulation ECB/2021/2 and Guideline ECB/2021/11, with a detailed discussion contained in the sections below. The corresponding accounting requirements set out in the ESA 2010 are referred to for completeness and comparison.

---

<sup>40</sup> To be valued as if they are loans repayable by instalment; see also Section 4.3.9.1.

**Table 2**

## Valuation principles for MFI balance sheet statistics and under the ESA 2010

ESA items		MFI balance sheet items	
<b>Monetary gold (AF.11)</b>	Price established in organised gold markets (7.62)	<b>Gold and gold receivables (AC1)</b>	Market price on the balance sheet date
<b>SDRs (AF.12)</b>	Value determined daily by the IMF (7.63)	<b>Receivables from the IMF (AC2); Counterpart of special drawing rights (SDRs) (LC1)</b>	Value determined by the IMF and converted into euro at rate published by the IMF
<b>Currency (banknotes and coins) (AF.21)</b>	Nominal or face value (7.64)	<b>Cash (A10); Currency in circulation (L10)</b>	Nominal or face value
<b>Deposits (AF.22, AF.29)</b>	Nominal value (7.65), includes interest accrued (5.43)	<b>Deposits (L20)</b>	Nominal or principal amount outstanding, excluding interest accrued
<b>Debt securities (AF.3)</b>	Market value (7.67), nominal value allowed for short-term debt securities issued at par and short-term discounted debt securities (7.68), includes interest accrued (5.242)	<b>Debt securities held (A30); Debt securities issued (L40)</b>	Market value or close equivalent (fair value), includes interest accrued <sup>41</sup>
<b>Financial derivatives (AF.71)</b>	Market value, or if unavailable, the value of the amount required to buy out or to offset the contract or the amount of premium payable (7.86)	<b>Remaining assets, o/w financial derivatives (A74); Remaining liabilities, o/w financial derivatives (L74)</b>	Market value on a gross basis, allocated to remaining assets or remaining liabilities depending on positive or negative market value
<b>Loans (AF.4)</b>	Nominal value, for both creditors and debtors, irrespective of whether the loans are performing or non-performing (7.70), includes interest accrued (5.43), provisions recorded as memorandum item (4.165 (f))	<b>Loans (A20)</b>	Nominal or principal amount outstanding, excluding interest accrued, less any amounts written down. Preference for gross reporting, i.e. without regard to provisions, provisions recorded as memorandum item
<b>Listed shares (AF.511)</b>	Representative mid-market price observed on the stock exchange or other organised financial market (7.72)	<b>Equity, o/w listed shares (A51)</b>	Market value, in line with the ESA 2010
<b>Unlisted shares (AF.512)</b>	To be estimated with reference to either; the value of quoted shares where appropriate, or; the value of own funds, or; discounting forecast profits by applying an appropriate market-price-to-earnings ratio to the smoothed recent earnings of the institutional unit (7.73)	<b>Equity, o/w unlisted shares (A52)</b>	Market value or close equivalent (fair value), in line with the ESA 2010
<b>Other equity (AF.519)</b>	Nominal value or the value of own funds (7.77)	<b>Equity, o/w other equity (A53)</b>	Nominal value or original cost, in line with the ESA 2010
<b>Investment fund shares (AF.52)</b>	If listed, valued at current market price, if unlisted, the market value may be estimated as per unlisted shares (AF.512), if redeemable by the fund, they are valued at redemption value (7.79)	<b>Investment fund shares/units (A40)</b>	Market value, in line with the ESA 2010
<b>Other accounts receivable/payable (AF.8)</b>	Nominal value, for both creditors and debtors (7.90)	<b>Included under Remaining assets (A70) and Remaining liabilities (L70)</b>	Nominal value, but with no separate breakdowns

ESA items: The ESA item codes refer to the instrument classifications in the ESA 2010, and references to the relevant paragraphs on valuation are also provided in brackets.

MFI balance sheet items: These codes refer to the respective balance sheet items code list (CL\_BS\_ITEM) in the ECB Data Portal. The valuation treatment reflects the preferences outlined in Regulation ECB/2021/2 and Guideline ECB/2021/11.

Loans (AF.4): Although it is also possible that accrued interest may be recorded under other accounts receivable/payable (5.242).

<sup>41</sup> If accrued interest is not recorded with the instrument under “Debt securities held”/“Debt securities issued”, it should be reported under “Remaining assets” or “Remaining liabilities”.

## 4.2 Cash and currency in circulation

These items on the MFI balance sheet correspond to currency (AF.21) in the ESA 2010, i.e. banknotes and coins that are issued or authorised by monetary authorities. Commemorative coins, which are legal tender across the euro area, are included. Unissued banknotes held by central banks, gold coins and collector coins (which are not intended for circulation and are only legal tender in the country of issue) are, in principle, excluded (see Section 4.2.3.3). Virtual and crypto-currencies are not issued or authorised by monetary authorities and are therefore also excluded and those without a counterpart liability should be reported as “non-financial assets”.

### 4.2.1 Cash

The asset category cash comprises banknotes and coins held by reporting MFIs. Also known as vault cash, it includes banknotes and coins held by banks to meet their day-to-day business needs, for example in branches and ATMs. The category includes, with separate identification, holdings of domestic currency (i.e. euro banknotes and coins for MFIs in the euro area) and foreign currency. As currency only includes banknotes and coins that have been put into issuance by the monetary authorities, NCBs should not report holdings of their own currency as assets, and any such holdings should also not be included by NCBs in the reporting of currency in circulation on the liabilities side.

### 4.2.2 Currency in circulation

In the euro area, currency in circulation is recorded as a liability of the Eurosystem only. Euro banknotes are issued only by the Eurosystem, unlike in some countries outside the euro area where commercial banks may issue banknotes. Euro coins are, by convention, always treated as a monetary liability of central banks for statistical purposes, even though it is typically governments that are the legal issuers.

With regard to banknotes issued by the Eurosystem, central banks record the amount of their liability applying the banknote allocation key, whereby 8% of total Eurosystem issuance is allocated to the ECB and the remainder to NCBs according to their respective shares in the capital of the ECB. The liability recorded based on the banknote allocation key is unlikely to coincide with the amount that an NCB has actually put into circulation, and the difference is recorded as a claim on or liability to the Eurosystem. Where the actual amount issued is less than the allocation key amount, the NCB records a claim on the Eurosystem (under “remaining assets”). Where the actual amount issued exceeds the allocation key amount, it records a liability to the Eurosystem (under “remaining liabilities”). As the ECB does not itself put banknotes into circulation, it always records a claim on the Eurosystem under “remaining assets”.

In most euro area countries, the legal issuer of euro coins is the central government rather than the central bank (although NCBs may be responsible for actually putting coins into circulation, and the volume of issuance is subject to the approval of the ECB). In statistical terms, euro coins in circulation are part of the monetary aggregates and so are, by convention, always included under the liability category “currency in circulation” on the central bank balance sheet. Where the legal issuer of euro coins is the central government, the NCB also records a notional claim on central government equal to the amount issued under remaining assets.

## 4.2.3 Specific cases and instruments

### 4.2.3.1 A new country joins the euro area

When a new country joins the euro area, banknotes and coins denominated in the former national currency that remain outstanding after adoption of the euro continue to be reported under “cash” (assets) or under “currency in circulation” (liabilities) for a period of 12 months. They are then transferred to “remaining assets” or “remaining liabilities” and thus cease to be included in the euro area monetary aggregates.<sup>42</sup> Their removal from the monetary aggregates is a reclassification and should not be reflected in monetary growth rates.

### 4.2.3.2 Commemorative coins intended for circulation

Coins intended for circulation include commemorative coins produced to celebrate special occasions (e.g. in 2007 for the 50th anniversary of the signing of the Treaty of Rome). Countries are permitted issue two commemorative €2 coins per year to celebrate a subject of major national or European relevance. These coins are issued at face value and are meant to be used for making payments. They are legal tender throughout the euro area and must be accepted for payments like any other euro coin. They are recorded under “cash” (assets) or “currency in circulation” (liabilities).

### 4.2.3.3 Gold coins and coins not intended for circulation

Gold coins held by MFIs other than central banks should not be treated as cash but as a commodity to be recorded under “non-financial assets”. However, monetary gold is a financial asset and is reported in a separate category on the assets side of the central bank balance sheet (see also Section 4.11).

Commemorative coins are legal tender and are thus in active circulation. They should be included in currency.

---

<sup>42</sup> This point is mainly theoretical given that MFIs typically transfer banknotes and coins not in circulation to NCBs as soon as they receive them.

Coins not intended for circulation are normally collector, numismatic or bullion coins, which have (limited) legal tender status (in the country of issue) but are not produced for use as a means of payment. In contrast to commemorative coins, which are legal tender throughout the euro area, collector coins must be readily distinguishable from coins intended for circulation.

For the purposes of MFI balance sheet statistics, coins that meet at least one of the following three objective criteria are not considered to be in active circulation:<sup>43</sup>

- (i) coins that have legal tender status in the country of issue but are not produced for use as a means of payment, at least not in the euro area as a whole;
- (ii) coins that are issued at a price above their face value and are not intended for circulation (this applies, for example, to most coins that are made of precious metals where the issue price will normally, but not always, exceed the face value, but not to normal circulation coins issued in special packages (sets or rolls of coins) at a price above their face value);
- (iii) coins that have a non-standard denomination.

Holdings by MFIs of coins not intended for circulation are to be classified as non-financial assets. With regard to the issuance of coins not intended for circulation, collector coins issued by NCBs are reported under “remaining liabilities”, while collector coins issued by the Treasury that are deemed not to be in circulation are not reported on the statistical balance sheet of the NCB.

#### 4.2.4 Valuation principles for cash and currency in circulation

As assets and liabilities, banknotes and coins in euro are reported at face value<sup>44</sup> in line with the ESA 2010 (7.64). Currency in circulation (as a liability) excludes amounts held by NCBs as vault cash. Holdings of banknotes and coins in foreign currency are converted into euro at the mid-market closing exchange rate (the mid-point between the buying and selling rates) on the balance sheet date (see also Section 3.3).

Since currency is recorded at nominal or face value, a currency transaction will always be recorded at nominal or face value, converted at the market exchange rate at the time of the transaction if foreign currency is involved. For national currency, the change in holdings between two balance sheet dates must equal the net transactions in the intervening period. Quarterly reporting requirements do not include breakdowns by currency of holdings of non-euro-denominated banknotes and coins. Therefore, for the purposes of compiling transactions, the ECB assumes that the currency composition of these positions, for NCBs and other MFIs

---

<sup>43</sup> These criteria apply only to issues denominated in euro and not to past issues in national currencies.

<sup>44</sup> The nominal or face value is the value of a coin or banknote stamped or printed on the coin or banknote by the issuing authority.

separately, is the same as that of their deposit liabilities vis-à-vis domestic non-MFI units excluding general government (see also Section 7.2.2 on the calculation of exchange rate adjustments).

Monetary gold held by central banks should be reported at market value in euro. Where changes in outstanding amounts are due to fluctuations in the price of gold in euro, an accompanying revaluation adjustment should be reported. One example is where the price of gold in USD remains unchanged but the USD/EUR exchange rate fluctuates. Where this is the case, both effects should be treated as a revaluation adjustment, as opposed to splitting the effect into its two components of a positive exchange rate adjustment and a revaluation adjustment of zero.

## 4.3 Loans

In line with the ESA 2010, Regulation ECB/2021/2 defines loans as “holdings of financial assets created when creditors lend funds to debtors, which are not evidenced by documents or are evidenced by non-negotiable documents”. As described in Part 2 of Annex II to the Regulation, loans also include assets in the form of deposits placed by reporting agents. This would also cover asset positions of nostro and vostro accounts between two financial institutions.

The ESA 2010 instrument category loans (AF.4) comprises loans created when creditors lend funds to debtors, either directly or through an agent, that are either evidenced by non-negotiable documents or not evidenced by any document.<sup>45</sup> Where loans become negotiable, they are only reclassified from loans to debt securities when there is evidence of secondary market trading (5.122). The ESA 2010 makes a distinction in terms of original maturity between short-term loans (loans with a maturity of one year or less and loans repayable on demand – AF.41) and long-term loans (loans with a maturity of over one year or no stated maturity – AF.42). The ESA 2010 (5.114) further states that all sectors may incur liabilities in the form of loans, adding that deposit-taking corporations normally record short-term liabilities as deposits, not as loans (in line with MFI balance sheet statistics).

### 4.3.1 Loans granted to households and non-profit institutions serving households by purpose of lending

Loans to households and non-profit institutions serving households are reported with a breakdown by purpose of the loan, i.e. credit for consumption, for house purchase, or for other purposes. Where a loan is granted for several purposes (for example, a loan granted for investing in housing (lending for house purchase) as well for purchasing a car (credit for consumption)), the loan should be allocated to the purpose which dominates in terms of the borrowed amount.

---

<sup>45</sup> Non-negotiability exists where ownership of a financial claim is not readily capable of being transferred. The ESA 2010 (5.A1.04) outlines the conditions for negotiability.

#### 4.3.1.1 Credit for consumption

Credit for consumption, or consumer credit, refers to loans granted mainly for personal consumption of goods and services. This includes (without being separately identified) loans to sole proprietors/unincorporated partnerships without legal status if the loan is predominantly used for personal consumption and not for house purchase. Typical examples of loans in this category are loans granted for the financing of motor vehicles, furniture, domestic appliances and other consumer durables, holiday travel, etc. Overdrafts and credit card loans also typically belong in this category.

#### 4.3.1.2 Lending for house purchase

Lending for house purchase refers to loans granted for the purposes of investing in housing for own use or rental, including building and refurbishments, or for the purchase of land. Loans included in this category are those secured on residential property that are used for house purchase, as well as other loans for house purchase made on a personal basis or secured against other forms of assets. The category includes (without being separately identified) housing loans to sole proprietors/unincorporated partnerships without legal status, if the housing is predominantly used for personal accommodation.

#### 4.3.1.3 Other lending

Other lending refers to loans granted to households for purposes other than consumption and house purchase, for example:

- business purposes, in particular loans to sole proprietors/unincorporated partnerships without legal status for business purposes;
- investment in financial assets;
- debt consolidation, i.e. where several loans (normally expensive consumer credit or loans for other purposes, including credit card and overdraft debt) are refinanced with a new loan, the purpose of which is usually to provide the household with a more favourable interest rate and/or a more manageable repayment schedule;
- education purposes.

Loans to sole proprietors/unincorporated partnerships without legal status predominantly for business purposes (as opposed to personal purposes) are identified separately, unless the NCB applies a derogation from this requirement.

### 4.3.2 Convenience and extended credit card credit

Credit card debt is credit granted through credit cards that provide convenience credit and extended credit, or through delayed debit cards (charge cards) that provide convenience credit only. Credit card debt is recorded on dedicated card accounts and not on current or overdraft accounts. Convenience credit is the credit granted at 0% interest in the period between the use of the card and the relevant billing date. Extended credit is the amount of convenience credit left outstanding on the account after the relevant billing date on which interest or tiered interest (usually greater than 0%) is charged. Extended credit typically requires minimum monthly instalments in order to make full or partial repayments.

In terms of recording credit card debt in MFI balance sheet statistics, the counterparty for such credit is the cardholder in the case of personal cards, or the company holding the card in the case of company cards. In terms of classification by purpose of lending, convenience and extended credit card credit to households should be classified as credit for consumption. For original maturity allocation, convenience credit is allocated to the “up to 1 year” category. Extended credit is also allocated to the “up to 1 year” category unless the applicable payment schedule reflects a maturity of more than one year. As for loans in general, interest accrued and not yet paid is recorded separately from the underlying instrument.

### 4.3.3 Revolving loans and overdrafts

**Revolving loans** are loans, excluding overdrafts and credit card debt, that have all the following features:

- (i) the borrower may use or withdraw funds up to a pre-approved credit limit without giving prior notice to the lender;
- (ii) the amount of available credit may increase and decrease as funds are borrowed and repaid;
- (iii) the credit may be used repeatedly.

There may or may not be an obligation on the borrower to make regular repayments of drawn amounts of revolving loans.<sup>46</sup>

As with all loan instruments, only the amounts that have been drawn are reported. Amounts available through a line of credit that have not been drawn down or have already been repaid are not recorded on the MFI's balance sheet.

Revolving loans should be allocated to the original maturity category of “up to 1 year” unless additional available information allows for a more accurate maturity allocation. Any such additional information should reflect the economic substance of the loan. For example, a lower interest rate (than for typical short-term facilities) and/or a

---

<sup>46</sup> Until December 2021, before implementation of the reporting requirements of Regulation ECB/2021/2, revolving loans only included those for which there was no obligation for regular repayments by borrowers.



relatively constant outstanding amount would indicate a longer-term maturity of more than one year. Similarly, an effective maturity may be calculated based on previously observed behaviour and relevant supporting information. The MFI should report the total amount owed under such facilities, irrespective of whether this is within or beyond agreed credit or maturity limits.

**Overdrafts** are debit balances on current accounts that allow the borrower to withdraw funds above the balance available. Where a deposit account has an overdraft facility and subsequently becomes overdrawn, the withdrawal to zero is the withdrawal of a deposit, and the amount of the overdraft is recorded as a loan – see also the ESA 2010 (5.82). A balance should only be considered to be an overdraft if the overdraft facility is directly assigned to a current account, otherwise it is a standard loan instrument or a revolving loan (albeit for reporting purposes, overdrafts and revolving loans are reported together).

In terms of original maturity allocation, overdrafts should be allocated to the category of “up to 1 year”, unless additional available information allows for a more accurate maturity allocation. One example would be where the contract for the credit limit specifies a final maturity date, on which the credit limit will be revoked or must be repaid, of more than one year. As indicated above, the total amount yet to be repaid is reported irrespective of the agreed limits.

#### 4.3.4 Reverse repos

Reverse repos (reverse repurchase agreements) are amounts recorded as loans to reflect a transaction in which the reporting MFI lends out cash in exchange for securities purchased at a given price, under a firm commitment to resell the securities at a fixed price on a specified future date. The reporting of such loans includes the cash collateral lent out in reverse repos, as well as the following reverse repo-type operations:

- cash loaned out in exchange for securities temporarily transferred to a third party in the form of securities lending against cash collateral;
- cash loaned out in exchange for securities temporarily transferred to a third party in the form of a sale/buyback agreement.

Every reverse repo (or similar operation) involves a counterparty which receives the cash collateral. These are repos and are included under “deposits” (see Section 4.4.4).

Reverse repos may be cleared through central counterparties (CCPs). A CCP legally interposes itself between counterparties to contracts traded in financial markets, becoming the buyer to every seller and the seller to every buyer. Typically, repos/reverse repos cleared by CCPs relate to business between euro area MFIs. If the CCP is itself a euro area MFI, it reports a repo and reverse repo vis-à-vis the

other MFIs<sup>47</sup>, meaning that all of the resulting transactions are included in inter-MFI deposits and loans. It is more common, however, for CCPs to be classified in the sector other financial intermediaries (S.125). A distinction is therefore made for loans that are reverse repos with CCPs classified in that sector given that these positions effectively reflect inter-MFI business. Repos and reverse repos with such CCPs are excluded from monetary aggregates and counterparts.

More information on repos and reverse repos is provided in Box 1, while Section 4.5.1.10 details the reporting of short selling of securities under reverse repos. Section 7.1.2 provides information on adjustment of the monetary aggregates and lending series to exclude positions with CCPs.

#### 4.3.5 Intragroup positions with deposit-taking corporations

Reporting agents separately identify loans to euro area deposit-taking corporations that belong to the same group, consisting of a parent undertaking and all the subsidiaries (including subsidiaries of subsidiaries) controlled by that parent. This allows for the identification of inter-linkages between credit institutions belonging to the same group within the euro area. For the purposes of a banking group, “control” is defined in Article 4(37) of the CRR. Control means that the parent has the majority of the voting rights in the subsidiary undertaking, or the parent otherwise has the ability to exercise rights or influence the subsidiary such that it is required to draw up consolidated accounts that include that subsidiary.

Branches of parents and subsidiaries that are resident in a different country to that of the branch’s head office must also be considered. Hence intragroup positions include a reporting agent’s loans to branches of other members of the group, whether resident in the same country as the reporting agent or in other euro area countries. Where the reporting agent has branches resident in other euro area countries, it includes loans to those branches within the reporting of intragroup positions. Similarly, where the reporting agent is itself a branch, it reports loans to its head office in intragroup positions.

Where the reporting agent is a non-MFI credit institution, it reports intragroup loans to members of its group that are euro area deposit-taking corporations. However, those group members do not report the corresponding deposits from the non-MFI credit institution as intragroup positions (these are only reported when they are vis-à-vis euro area deposit-taking corporations).

Positions are recorded based on the residency of the respective group member, i.e. as domestic or other euro area residents. In principle, intragroup loans and deposits recorded between deposit-taking corporations should be balanced at domestic and euro area aggregate levels. However, owing to derogations applicable to small reporting agents (“tail institutions”), misalignments in the classification of

---

<sup>47</sup> In accordance with Article 8(2) of Regulation ECB/2021/2, CCPs that are MFI reporting agents must report repos and reverse repos in the statistical reporting of deposits and loans, regardless of their treatment of clearing activities for accounting or other reporting purposes.

counterparties or other errors, this may not necessarily be the case (see also Section 7.1.3 on “excess of inter-MFI liabilities”).

Section 4.3.9.5 provides further information on distinguishing between loans/deposits and equity financing within groups.

#### 4.3.6 Syndicated loans

Syndicated loans are single loan agreements in which several institutions participate as lenders; the borrower must be made aware of this in the loan contract. For statistical purposes, only amounts actually disbursed by lenders (not total credit lines) are recorded. The syndicated loan is usually arranged and coordinated by one institution (the lead manager). Each participating MFI reports the amount it has lent as a loan to the borrower, not as a loan to the lead manager. Syndicated loan instruments reported separately by each participating MFI should share the same characteristics.

#### 4.3.7 Notional cash pooling

Cash pooling is a bank service provided by some banks that allows corporates to externalise intragroup cash management and thus manage their global liquidity effectively with lower costs. There are several types of cash pooling agreement.<sup>48</sup> For example, the cash pool may involve a single legal account that pools the funds of the group as a whole and is linked to sub-accounts recording intragroup balances (“single legal account cash pooling”), or separate accounts for each group entity that are settled, typically on a daily basis, to bring accounts that are in debit and in credit into balance (“physical cash pooling”).

The type most relevant for MFI balance sheet statistics is, however, notional cash pooling, which is defined for statistical purposes as an arrangement provided by an MFI (or MFIs) to a group of entities (pool participants) where:

- (i) the pool participants each maintain separate accounts;
- (ii) the interest to be paid or received by the MFI is calculated on the basis of a “notional” net position of all accounts in the pool;
- (iii) pool participants may draw down overdrafts backed by deposits of other pool participants, without a transfer of funds between accounts.

In notional cash pooling, all accounts maintain a separate legal status (e.g. IBAN accounts) and the participating entities are the direct counterparties of the bank. The pooling is performed by the bank, which provides liquidity to counterparties in need by means of overdrafts, generally on condition that the “pool” is in surplus overall. As

---

<sup>48</sup> For a detailed account of cash pooling and the implications for statistics, see “[The statistical classification of cash pooling activities](#)”, *Statistics Paper Series*, No 16, ECB, July 2016.

such, from an economic point of view these loans do not constitute genuine provision of additional financing to the economy provided by the MFI sector.

In line with Article 8(2) of Regulation ECB/2021/2, notional cash pool positions should be reported on a gross basis and not netted against any other assets or liabilities. Notional cash pool loans are reported under “revolving loans and overdrafts” and/or “loans with a maturity of up to and including one year”, as applicable.

To separate out the impact of such positions from that of other loans and deposits on the balance sheets of MFIs, statistical information on notional cash pools on the balance sheets is required from reporting agents in accordance with Table 1 in Part 2 of Annex I to Regulation ECB/2021/2. Loans (overdrafts) provided by MFIs to pool participants must therefore be separately identified. Loans not contractually covered by the cash pool arrangement but granted to pool participants must not be included in the reporting of notional cash pool positions.

Section 7.4 details the adjustment applied by the ECB to the aggregated loan series to derive a growth rate adjusted for notional cash pooling positions.

#### 4.3.8 Loans to non-financial corporations by economic activity

To enhance analysis of developments in loans to non-financial corporations in the euro area and individual euro area countries, NCBs transmit quarterly data on outstanding amounts of MFI loans to non-financial corporations by branch of their economic activity (manufacturing, construction, wholesale and retail trade, etc.). These are allocated in accordance with the statistical classification of economic activities in the EU, as set out in Regulation (EC) No 1893/2006<sup>49</sup>, referred to as NACE Revision 2 (Rev. 2).

These data are reported by NCBs in accordance with Article 7 of Guideline ECB/2021/11. Part 5 of Annex II of the Guideline sets out two possible reporting templates for loans depending on the disaggregated nature of the data available to NCBs. Data are broken down into varying levels of detail relating to the economic sector that the non-financial corporation operates in and are reported in respect of domestic and euro area non-financial corporations.

These data, collected on a best-efforts basis, derive from data available at national level (e.g. credit registers or surveys). Consequently, they are not harmonised, may differ in terms of breakdowns and coverage across countries and may be partly estimated. Furthermore, if the data are from sources where the ESA 2010 sector of counterparties is not taken into account, loans to units other than non-financial corporations may be included. This may arise, for example, where the relevant NACE classifications are assigned to sole proprietors/unincorporated partnerships

---

<sup>49</sup> [Regulation \(EC\) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation \(EEC\) No 3037/90 as well as certain EC Regulations on specific statistical domains \(OJ L 393, 30.12.2006, p. 1\).](#)

without independent legal status that are classified in the household sector (e.g. in the case of doctors or small retailers), or to public non-market producers that are classified in the general government sector.

Due to this lack of harmonisation and cross-country comparability, these data are not currently published by the ECB. However, the ECB uses those data to derive estimated euro area aggregates of MFI loans to non-financial corporations by economic activity (see Section 7.7).

### 4.3.9 Specific cases and instruments

Regulation ECB/2021/2 (Part 2 of Annex II) indicates how various specific cases are to be treated within the reporting of loans, although there are no separate breakdowns required for such cases. As with the Regulation, not all specific instruments can be covered by this Manual, meaning that the treatment of the selected products set out in this section should be used as a reference for other products with similar characteristics.

#### 4.3.9.1 Financial leases

Financial leases are defined in Regulation ECB/2021/2 as contracts under which the legal owner of a durable good (lessor) lends it to a third party (lessee) for most, if not all, of its economic life, in exchange for instalments covering the cost of the good and an imputed interest charge.<sup>50</sup> The lessee, as the economic owner, enjoys all the benefits from the use of the good and incurs the costs and risks of ownership. In addition, it is the lessee, as the economic owner, that must provide any necessary repair and maintenance of the good. For statistical purposes, financial leases are treated as loans from the lessor (here an MFI) to the lessee (third party), with payments being treated as loan repayments rather than rentals of the asset. The durable goods that are the subject of the lease are recorded not on the MFI's balance sheet but on the balance sheet of the lessee (and valued at the purchase price paid by the lessor).<sup>51</sup> Hire-purchase agreements are considered to be a type of financial lease.

#### 4.3.9.2 Holdings of non-negotiable securities

Holdings of debt securities that are not negotiable and cannot be traded on secondary markets are recorded as loans. These are instruments where the transfer of legal ownership is subject to restrictions that mean that they cannot be marketed or, although they are technically negotiable, cannot be traded owing to the absence of an organised market. Non-negotiable instruments that subsequently become negotiable and can be traded on secondary markets must be reclassified as debt

<sup>50</sup> Financial leases are also defined by the ESA 2010 (15.13).

<sup>51</sup> Operating leases (which are unlikely to be offered by MFIs (as lessors)) are not included under the balance sheet item "loans". See Section 4.9 for further information.

securities. See also Section 4.5.1.1 on the classification of instruments according to negotiability.

Specific examples of financial instruments that are non-negotiable debt securities to be classified as loans include the following:

- *Schuldscheine*, which are classified as loans based on their characteristics at the date of contract or issuance. Although they can be transferred (usually at nominal value and among MFIs), they are subject to restrictions on the number of times they may be transferred and are not negotiable (e.g. there is no bid-ask spread).
- *Namensschuldverschreibungen*, which are classified as loans based on the difficulty and complex process involved in a transfer (e.g., involving a registrar and an assignment agreement between the creditor and debtor) and other constraints (e.g. transfers may not be performed during “excluded” periods).

#### 4.3.9.3 Traded loans

Loans that have de facto become negotiable are called traded loans. Where there is no evidence of secondary market trading in the traded loans, they are classified as loans. Otherwise, they are classified as debt securities (see also Section 4.5.1).

#### 4.3.9.4 Subordinated debt in the form of loans

For MFI balance sheet reporting purposes, subordinated debt held by MFIs is classified as either “loans” or “debt securities” depending on the nature and characteristics of the financial instrument concerned (see also Section 4.5).

An MFI’s holdings of subordinated debt in the form of loans are classified as loans. These are non-negotiable instruments constituting a subsidiary claim on the issuer that can be exercised only after all higher-status claims have been satisfied.

Loans may also include holdings of subordinated debt referred to as shares where the instruments have the characteristics of deposits, as explained in Section 4.4.8.6.

Where holdings of all forms of subordinated debt are recorded as a single figure for statistical purposes, the reporting MFI should record the amount under “debt securities” on the grounds that most subordinated debt is in security form.

#### 4.3.9.5 Intragroup loans versus capital endowments

For branches and subsidiaries, financing through inter-company or interbank funding can be classified either as inter-company lending or as capital endowments (equity) in a branch or subsidiary. Positions should be classified according to the criteria of the loan and equity instruments concerned.

The ESA 2010 (5.113(c)) states that loans are characterised as an unconditional debt to be repaid at maturity and is interest-bearing. This means that loans should have or allow for a final maturity date.<sup>52</sup> A further consideration is the non-negotiable nature of the loans, as discussed at the beginning of Section 4.3. In addition, as per Section 4.3.9.2 non-negotiable debt instruments held or issued are classified as either loans or deposits.

In terms of classifying branch or subsidiary funding as equity, certain equity criteria must be evident. As per Section 4.6, equity is defined as a financial asset that has a claim on the residual value or net worth of the issuing entity after the claims of all other creditors have been met, i.e. in the event of default all third-party liabilities are repaid first. Equity securities typically do not have a maturity date (it can be unlimited or perpetual) and there is no obligation on the issuer to pay the holder a predetermined amount. An instrument such as a perpetual loan with no obligation to make payments, no stated maturity and, in the event of default, where all third-party liabilities are repaid first is classified as equity since it aligns with the characteristics of equity as outlined in Section 4.6.

For recording purposes, where a reporting MFI is the provider of intragroup funding that meets the criteria of loans, that funding should be recorded as such, with similar reporting applying in the case of equity. Where the reporting MFI is the recipient of intragroup funding that meets the criteria of loans, that funding is recorded as a deposit. Sections 4.3.5 and 4.4.5 describe the reporting requirements relating to intragroup positions with deposit-taking corporations.

#### 4.3.9.6 Loans sold or acquired at a discount

MFIs may sell loans at a price which is different from the valuation on the statistical balance sheet before the disposal. This may arise in particular with a sale of non-performing loans. In accordance with Article 8(2) of Regulation ECB/2021/2, loans should be reported on the balance sheet at the principal amount outstanding excluding any amounts written down or written off. A revaluation adjustment (i.e. a write-off/write-down at the time of sale) should be recorded to account for the difference between the change in the outstanding amounts of loans arising from the loan sale and the transaction value (i.e. the sale price). This aligns with the ESA 2010 (6.58), which requires the difference between the redemption price and the transaction price of a sold loan to be recorded under the revaluation account of the seller and the purchaser at the time of the transaction.<sup>53</sup>

Similarly, if an MFI acquires loans at a discount, it should record a positive revaluation adjustment that takes into account the difference between the purchase price of the loans and the change in outstanding amounts resulting from the

---

<sup>52</sup> Certain loan instruments may not have a final maturity date, such as certain overdraft facilities and loans with undefined legal maturity, but the underlying business needs would differ from financing offered by means of equity financing (long-term capital endowment).

<sup>53</sup> Under the ESA 2010 (8.54), the revaluation account “records changes in the value of assets and liabilities due to changes in their prices” and is comparable to a “revaluation adjustment” in MFI balance sheet statistics.

acquisition. Further information on the recording of revaluation adjustments for write-offs/write-downs, including an example at the time of sale, is provided in Section 5.4. The recording of loans acquired by MFIs at a discount can be treated analogously to the case of a sale.

Note that loans classified as held for sale continue to be reported at their gross nominal amount on the MFI statistical balance sheet under their original maturity and original category of “loans” until they are transferred or sold (similar to the treatment of bad debt loans set out in Section 4.3.9.7). Under IFRS 5(6), assets held for sale may be classified and reported separately under the relevant instrument category, but Article 8(2) of Regulation ECB/2021/2 and the ESA 2010 (7.70) require loans to be reported at their principal amount outstanding at the end of the month irrespective of the nature of the loan.

#### 4.3.9.7 Bad loans

Bad loans are those which are overdue or otherwise identified as being impaired. They are not identified separately in MFI balance sheet statistics and are reported in a similar way to other loans, i.e. at the principal amount outstanding excluding any amounts written down or written off, unless the NCB allows MFIs to report loans at the principal amount outstanding excluding provisions, in accordance with Article 8(3) of Regulation ECB/2021/2. The definition in Part 2 of Annex II to Regulation ECB/2021/2 is for the purposes of MFI interest rate statistics, given that bad loans (as well as loans for debt restructuring granted at rates below market conditions) are to be excluded from the weighted average interest rates and new business volumes collected under the MIR Regulation.

Where the loan is still overdue at the time when contractually it should have been fully paid off, the MFI should continue to record the loan’s original maturity according to the contractual terms (until the loan is repaid, written off or the maturity is renegotiated). For the reporting of remaining maturity, i.e. the period from the reference date until the final scheduled payment, loans which are overdue after the final scheduled payment should be excluded from the remaining maturity breakdowns. Where overdue or impaired loans form part of a debt restructuring or become immediately repayable (and there is a contractual agreement between creditor and debtor to this effect), the original maturity remains unchanged unless the final maturity date is prolonged. See also Section 4.3.9.9 on loan renegotiations below.

While accrued interest is recorded under remaining assets, unpaid interest on overdue or bad loans is recorded alongside the loan to which it relates (see also Section 4.3.10).<sup>54</sup> Interest arrears should be included alongside the relevant instrument where the instrument is recorded on the balance sheet. Where the interest arrears are no longer recorded on the accounting balance sheet, write-offs

---

<sup>54</sup> A similar treatment may be adopted in the case of fees and charges that are unpaid when due if these amounts are added to the loan principal owed to the reporting agent.



(revaluation adjustments) should be made to reflect the removal of the unpaid interest from the asset category, thus avoiding a negative transaction under “loans”.

Bad loans are defined for the purposes of MFI balance sheet statistics with reference to the definition of a default in the CRR. Article 178(1) of the CRR states that a “default shall be considered to have occurred with regard to a particular obligor when either or both of the two following have taken place:

- (i) the institution considers that the obligor is unlikely to pay its credit obligations to the institution, the parent undertaking or any of its subsidiaries in full, without recourse by the institution to actions such as realising security (if held);
- (ii) the obligor is past due more than 90 days on any material credit obligation to the institution, the parent undertaking or any of its subsidiaries. Competent authorities may replace the 90 days with 180 days for exposures secured by residential property or SME commercial immovable property in the retail exposure class, as well as exposures to public sector entities [...].”

The statistical definition is based on the CRR, while the accounting definition for FINREP is defined in accordance with international accounting standards.

#### 4.3.9.8 Repossession in the event of loan default

As noted in Section 4.3.9.7, overdue or otherwise impaired loans are reported in a similar way to other loans. If the MFI takes possession of the collateral underlying the loan, the outstanding amount of the loan on the balance sheet is reduced (similar to a repayment of the loan). The reporting agent reports on its balance sheet the seized collateral; for example, repossessed property would be recorded under non-financial assets (see Section 4.9).

The amount the loan is reduced by should equal the recovery amount of the collateral upon sale, or the expected recovery value where there is a lag between repossession and disposal. This amount may not equal the full value of the outstanding loan, thus giving rise to a shortfall. Depending on the reporting MFI's recourse to the borrower, the shortfall loan may be further pursued (where recourse to the borrower exists) or may result in debt cancellation/debt forgiveness (without recourse).

#### 4.3.9.9 Loan renegotiations

As defined in the MIR Regulation (Section VI of Annex I), renegotiation refers to the active involvement of the borrower in adjusting the terms and conditions of an existing deposit or loan contract, including the interest rate. Extensions and other adjustments of the terms and conditions that are carried out automatically, i.e. without any active involvement on the part of customers, are therefore not

renegotiations. All renegotiations are considered to be “new business” in MFI interest rate statistics but not as “pure new loans”.<sup>55</sup>

A loan’s original maturity is based on the difference between the settlement date of the loan and the date of the final scheduled payment. In line with data collected under the MIR Regulation and AnaCredit Regulation,<sup>56</sup> the settlement date of an instrument does not change on renegotiation;<sup>57</sup> the date of the final scheduled payment is the only date that can be impacted by a loan renegotiation.

In practice, therefore, a transaction would only ensue when the new terms and conditions result in an increase in the principal amount advanced, or when there is a movement between reported items. For example, this might arise from a change to/from euro-denominated currency, or an amendment to the legal final maturity date that causes the loan to move between the requested loan maturity brackets in the MFI balance sheet statistics reporting scheme. A change in the interest rate, payment frequency, collateral, or guarantor of the loan, on the other hand, would result in no visible transaction in MFI balance sheet statistics.

Where a loan is refinanced (as opposed to restructured or rescheduled) and a new loan is effectively advanced to replace the original product, it is treated as a transaction with a new settlement date, meaning that a new original maturity applies. The signing of a new contract does not necessarily result in a new settlement date; what is relevant is whether or not a new instrument is advanced as opposed to amendment of the terms and conditions of an existing instrument (i.e. a renegotiation for the purposes of MFI interest rate statistics). Note that the signing of that new contract would not result in a reclassification adjustment.

#### 4.3.9.10 Index-linked loans

Loans may be formally denominated in one currency but the principal and/or interest payments made in or indexed to a different currency. The ESA 2010 (5.94) treatment for debt securities can be applied analogously in the case of loans where instruments with both principal and interest indexed to a currency are classified and treated as though they are denominated in that currency (rather than indexed to it). Instruments may also be partially index linked, for example where either the amount to be paid at maturity or the regular payments are linked to a foreign currency. For the purposes of statistical reporting, such loans should be treated as denominated in the domestic currency.<sup>58</sup>

---

<sup>55</sup> See the [Manual on MFI interest rate statistics](#), Section 5.4.2. Note that AnaCredit reporting goes further and differentiates between forbearance (concessions towards a debtor facing or about to face difficulties in meeting its financial commitments) and renegotiation without forbearance. Both are classed as renegotiation in MFI interest rate statistics.

<sup>56</sup> [Regulation \(EU\) 2016/867 of the European Central Bank of 18 May 2016 on the collection of granular credit and credit risk data \(ECB/2016/13\)](#) (OJ L 144, 1.6.2016, p. 44).

<sup>57</sup> See the [Manual on MFI interest rate statistics](#), Section 7.7.4, and the [AnaCredit Reporting Manual \(Part II\)](#), Section 3.4.4.

<sup>58</sup> See the BPM6 (11.50(c)) for the treatment of index-linked instruments, applied analogously in this case.

This treatment also applies to similar deposit and debt security instruments.<sup>59</sup> As set out in Section 3.3, MFI balance sheet statistics require all amounts to be reported in euro.

#### 4.3.9.11 Loans with undefined legal maturity

Some loan products that are typically long-term in nature may have an undefined maturity (e.g. perpetual loans<sup>60</sup> or loans which mature at the end of the debtor's lifetime). Principal and interest may, or may not, be paid over the loan's lifetime (interest will still accrue and fall due). These loans should be classified to the original maturity category of "over 5 years" unless additional available information allows for a more appropriate maturity allocation.

#### 4.3.9.12 Loan guarantees

A loan guarantee is an arrangement whereby a guarantor agrees to pay a creditor if a debtor defaults. The loan is initially recorded vis-à-vis the borrower (debtor), with the guarantee – as a contingent liability – recorded off-balance-sheet as per Regulation ECB/2021/2. If the debtor defaults and the guarantee is called, the loan should then be recorded vis-à-vis the guarantor instead of the original debtor.

The calling of a loan guarantee is considered to be a type of debt assumption and, as described in Section 5.7.4, does not trigger the recording of reclassification adjustments by the creditor (in this case, the reporting MFI). The assumption of the debt is treated as a capital transfer (i.e. a transaction) given that it results from a mutual agreement of all parties.

#### 4.3.9.13 Loans granted on a trust basis (fiduciary loans)

Loans granted on a trust basis are loans made by an MFI (as the trustee/fiduciary) on behalf of a third party (the trustor/beneficiary), with the latter assuming the credit risk and the MFI being responsible only for managing the loan. Trust loans are not recorded on the balance sheet of the trustee/fiduciary MFI where the risks and rewards of ownership of the funds remain with the beneficiary. They are not regarded as an asset of the MFI in the event that the MFI goes into liquidation.

In accordance with Regulation ECB/2021/2, the risks and rewards of ownership remain with the beneficiary where: (i) the beneficiary assumes the credit risk of the loan, i.e. the trustee is responsible only for the administrative management of the loan; or (ii) the beneficiary's investment is guaranteed against loss should the trustee go into liquidation, i.e. the trust loan is not part of the assets of the trustee that can

---

<sup>59</sup> The [Manual on MFI interest rate statistics](#), Section 7.3, and the [AnaCredit Reporting Manual \(Part II\)](#), Section 3.4.3 outline similar treatment for loans.

<sup>60</sup> See Section 4.3.9.5 for perpetual loans that meet the definition of equity.

be distributed in the event of bankruptcy. (See also Section 4.4.8.7 for the treatment of funds received on a trust basis.)

#### 4.3.9.14 Bill-based lending operations (trade bills)

A bill of exchange is an unconditional order in writing whereby one party (the drawer) instructs another (the drawee) to pay a certain amount of money at a future date to the payee (the payee may be the drawer him/herself or a third party). The payment may take place on demand and either immediately (sight bill) or on a fixed or determinable future date (term bill). Bills of exchange are negotiable, in the sense that the payee (and all future holders) may endorse it to a new party, who then becomes the new beneficiary of the bill. When a bill is transferred, all associated risks and rewards are also transferred and the holder has a primary claim on the drawee, but only a contingent claim on previous holders. Trade bills are bills of exchange used as a means of payment for services or goods.

While Regulation ECB/2021/2 does not specify how bill-based operations should be treated in MFI balance sheet statistics, the ESA 2010 (5.125) states that “trade bills drawn on a customer by the supplier of goods and services and subsequently discounted by the supplier with a financial corporation become a claim by a third party on the customer”. The recommendation is to treat a bill of exchange as a claim of the payee (or the subsequent holders) on the drawee, who is the final debtor (the drawee principle), and not on the previous holder(s) (the presenter principle). With regard to instrument classification, they should be recorded under “debt securities” if they are expected to be traded on an organised market, or otherwise under “loans” or “deposits” (like non-negotiable debt securities). The degree of standardisation of the instruments and the structure of the markets on which they can be traded may also be used as criteria.

Where a reporting agent is the holder of a bill of exchange, the ECB recommends the following:

- reporting agents should record bills of exchange under “loans” or “debt securities” according to the principles outlined above;
- reporting agents should classify bills of exchange as claims on the drawee and not on the previous holder.

An MFI may also be the drawee of a bill of exchange, as in the case of bank acceptances. Where the MFI is the drawee, the ECB recommends the following:

- reporting agents should record the bills drawn on them under “deposits” vis-à-vis the payee (this party is typically the first and last beneficiary of the instrument if it does not go into circulation) or, if the bills are expected to go into

circulation, under “debt securities issued” (in which case the holder is not known and no counterparty sector breakdown is required);<sup>61</sup>

- as a counter-entry, reporting agents should record a loan to the drawer (i.e. to the party who asked the bank for the acceptance) or, if the bill is drawn on a deposit, a decrease in the deposits placed by the drawer.

Trade bills (bills of exchange used as a means of payment for services or goods) are distinct from trade credits (credit extended directly by the suppliers of goods and services to their customers). In line with the ESA 2010 (5.237), trade credits are recorded as remaining assets/liabilities (see also Section 4.10).

#### 4.3.9.15 Factoring and project finance

**Factoring** refers to a transaction whereby an MFI purchases accounts receivable (i.e. invoices) from a third party. Specifically, it is the sale of a firm’s (the factoring client’s) claims (in full or in part) recorded under accounts receivable (in the form of invoices), representing money due from its customers to a financial institution known as a factor (or “factoring company”).

The factor, which may be an MFI, buys from the factoring client (e.g. the company providing goods or services to their customers) the receivables at a price which is lower than the face value of the invoice, thereby effectively charging the applicable fees and interest. The factor (in this case the reporting MFI) manages the sales ledger and the collection of the accounts under the terms agreed by the factoring client. The factoring client’s customers send their payments directly to the factor (the MFI). Finance is therefore extended for the duration of the trade debt. MFIs acting as a factor should record their factoring operations as loans. Factoring may also be referred to as trade receivables or invoice discounting, but the following guidance applies only where the factoring company is the reporting MFI who purchases accounts receivable from a third party. Forfaiting operations are treated analogously to non-recourse factoring.

The factor (the MFI) may assume the full risk of default by the company’s customer (non-recourse factoring), or this risk may be retained by the factoring client, in which case the factor is able to hold the factoring client liable if a debtor is unable to pay (recourse factoring).<sup>62</sup> In particular, in recourse factoring the factor (the MFI) buys the receivables at a discount to the face value of the invoice. This discount (i.e. the reserve fund) is retained as collateral to cover the risks associated with the operation. Upon payment of the invoices by the customers, the factor transmits the proceeds, net of the advanced cash and the applicable fees and interest charges, to the factoring client. In non-recourse factoring, the factor might also hold a reserve;

---

<sup>61</sup> In some countries, bank acceptances are considered by default to be in circulation (and are therefore classified as securities) unless they are sold back to the issuing bank.

<sup>62</sup> Fees and interest charges of non-recourse factoring are usually higher than those of recourse factoring, owing to the different service provided and risk borne by the factor.

however, this will not impact the outstanding amount of the recorded factoring transaction as a loan.

For the purposes of counterparty sector classification in non-recourse factoring, the factoring client's customers are the counterparty given that the factor (the MFI) assumes the risk. In recourse factoring, the ultimate debtor is the factoring client (the company) who should then be the counterparty of the loan. Factoring operations should be recorded on the factor's balance sheet as a loan at the amount of:

- the nominal value of the invoice minus fees, interest charges and discount retained as collateral (i.e. the reserve fund), in the case of recourse factoring (as per Example A below);
- the nominal value of the invoice minus fees and interest charges, in the case of non-recourse factoring.

The factoring transaction should not be recorded at fair value, as allowed under international accounting standards.

The same treatment would, in principle, apply where the factoring company is not an MFI, and hence not a reporting agent. Therefore, if there is a transfer of factoring business from such a company to an MFI, this is to be recorded as a transfer of loans (to the factoring clients or to the customers of those clients, depending on recourse) to the MFI. The MFI includes these transfers with the reporting of loan securitisations and other loan transfers, as outlined in Section 4.3.11.

Assets arising from **project finance** are also recorded as loans. Project finance refers to loans provided to entities created specifically to finance and/or operate physical assets and where the primary source of repayment of the obligations is the income generated by the assets being financed, rather than the independent capacity of a broader commercial enterprise.

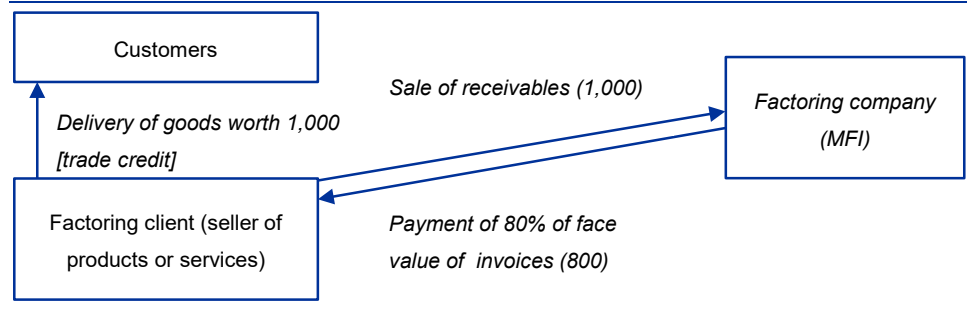
### **Example A** Recourse factoring

---

*This example relates to recourse factoring where the risk of default by the customer is retained by the factoring client (meaning that the factor, in this example an MFI, can hold the factoring client liable if a customer is unable to pay). Non-recourse factoring should be treated analogously.*

*The factoring client (the firm) bills its customers and sends copies of the invoices, amounting to 1,000, to the factor (the reporting MFI). The factor then advances to the client, for example, 80% of the face value of the invoices. The other 20% is retained as collateral.*

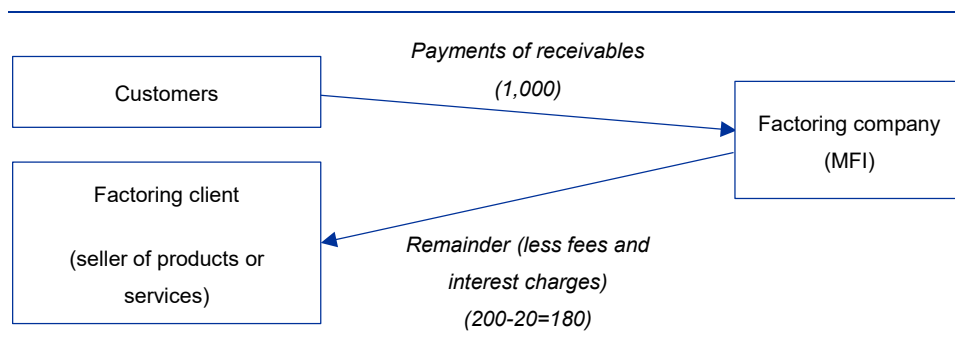
Transactions at the start of the factoring agreement	
Face value of the company's invoices	1,000
Reserve fund held as collateral	200
Cash advanced to the client by the factoring company	800



The factor (MFI) records a loan to the factoring client of 800, matched on the balance sheet by an outflow of cash. Once the factor has received payment of 1,000 from the customers in respect of the outstanding invoices, it will release to the client the retained amount of the invoice (200) minus the appropriate financing fees and interest on the advanced cash (for example 2%). In terms of balance sheet flows, the inflow of cash (1,000) is matched by an outflow of cash to the factoring client (180), the cancellation of the loan to the factoring client (800) and an increase in capital and reserves through profit and loss equal to the total proceeds from fees and interest (20).

If the customers pay only a part of their debts, the factor uses the reserve fund held as collateral to cover the difference. If the reserve fund is not sufficient to cover the difference, a claim would arise vis-à-vis the factoring client for the amount in excess of the reserve fund.

Transactions upon payment of receivables	
Reserve fund paid to the client less fees and interest	180
Cash proceeds retained by the factoring company (fees and interest)	20



*A similar example could be drawn up for non-recourse factoring where the factor assumes the full risk of default by the factoring client's customer. In this case, a loan would be recorded vis-à-vis the customer for an amount equal to the trade credit. The factoring client receives the full amount of the trade credit net of fees and interest charges from the reporting MFI.*

---

#### 4.3.9.16 Lending on the basis of electricity tariff deficit

In several countries, MFIs can provide financing to electricity companies based on the electricity tariff deficit<sup>63</sup>. Tariff deficits in the electricity sector, which stem from an imbalance between regulated tariffs paid by electricity consumers and the actual costs of electricity production, are future receivables of the electricity company. Given these credit rights of electricity companies, they may raise funding through the assignment of this future income to MFIs.

#### 4.3.9.17 NCBs' external reserves

NCBs' external reserves in the form of loans are classified as loans for the purposes of MFI balance sheet statistics. For further details of the Eurosystem's external reserves, see Section 4.11.

#### 4.3.10 Valuation principles for loans

Article 8(2) of Regulation ECB/2021/2 requires reporting agents to report the end-month principal amounts outstanding for deposit liabilities and loans, excluding write-offs and write-downs. This compares with the ESA 2010 (7.70), which requires loans to be valued at the amount of principal that the debtor is contractually obliged to

<sup>63</sup> European Commission report "[Electricity Tariff Deficit: temporary or permanent problem in the EU?](#)" defines electricity tariff deficit as follows: "a shortfall of revenues in the electricity system, which emerges when the tariffs for the regulated components of the retail electricity price are set below the corresponding costs borne by the energy companies".



repay to the creditor, irrespective of whether the loans are performing or non-performing. Regulation ECB/2021/2 also states that “reporting agents shall not net deposit liabilities and loans against any other assets or liabilities”.

Further valuation rules are as follows.

- Loans are to be reported at the nominal amount outstanding (and not, for example, at fair value).
- Loans are to be reported by MFIs on a gross basis, i.e. without regard to any provisions made against them. Doubt about the debtor’s ability to repay should be reflected on the balance sheet only when a loan is written down or written off.
- The MFI must report the amount of write-offs and write-downs in the reporting period, with a breakdown by sector of counterparty. This requirement should include write-offs and write-downs recognised when a loan is sold or transferred to another party (this is to ensure that the recorded transactions in loans and the change in their balance sheet value can be reconciled). Loan write-offs are treated in MFI balance sheet statistics as “revaluation adjustments” (Part 4 of Annex I to Regulation ECB/2021/2), whereas under the ESA 2010 (6.14) and in the international investment position they are regarded as “changes in volume”. However, since write-offs (and write-downs) are the only revaluation item affecting the instrument category “loans”, MFI balance sheet data can easily be converted to the ESA 2010 basis for inclusion in financial accounts or for comparison with the international investment position. A detailed discussion of the reporting of write-downs and write-offs is provided in Section 5.4.
- Despite the general requirement for gross reporting, Article 8(3) of Regulation ECB/2021/2 allows for the reporting of provisioned loans net of provisions, provided that such reporting practices are applied by all resident reporting agents and it is necessary to maintain continuity in the statistical valuation of loans. If loans are reported net of provisions, MFIs should report any change in provisioning in line with Regulation ECB/2021/2 (Part 4 of Annex I), which states that a loan revaluation adjustment should also reflect the changes in loan loss provisions if an NCB allows balance sheet outstanding amounts to be recorded net of loan loss provisions pursuant to Article 8(3).
- Interest receivable on loans should be recorded on the balance sheet as it accrues, rather than when it is actually received, and under the item “accrued interest on loans”, a sub-item of the category “remaining assets”. Accrued interest is excluded from the loan to which it relates. The ESA 2010 also requires interest to be recorded as it accrues, not when it is paid (4.50, 5.43), but requires the accruing interest to be recorded under the appropriate instrument category (5.242) rather than under “remaining assets”. This treatment in MFI balance sheet statistics is preferred for monetary policy analysis given that only loans actually extended – net of repayments – are recorded and not the larger amounts including accruing interest.

- Where loan interest falls due and remains unpaid, it should be included in the outstanding amount of the loan (see also Section 4.3.9.7).<sup>64</sup>
- Should negative interest rates on loans be a consideration, they are treated analogously to negative interest on deposits, as set out in Section 4.4.9 and recorded with a negative sign under “remaining assets” until payment falls due.
- The transaction value of loans excludes fees and any other charges.
- MFIs must distinguish between loans denominated in euro and those denominated in foreign currency in their monthly reporting. When submitting MFI balance sheet data to the ECB, NCBs ensure that asset (and liability) positions denominated in foreign currencies are converted into euro using market exchange rates (see also Section 3.3). MFIs report the amount of loans denominated in each of the main foreign currencies on a quarterly basis, and this information is used by the ECB to remove (as an approximation) the effect of exchange rate changes for the purposes of compiling “flows” data.
- Loans are recorded when they are disbursed (i.e. when they are paid out to the borrower) and not when they are agreed (i.e. when the contract is signed). See also Section 3.8.3, “Time of recording”.

#### 4.3.11 Loan securitisation and other loan transfers

Loan transfers may have a significant impact on the reported outstanding amounts of loans on MFI balance sheets and, more importantly, on month-to-month loan transactions. For this reason, Regulation ECB/2021/2 includes requirements for MFI reporting agents to provide data on securitisation and other loan transfers to enable loans series to be “adjusted” so that credit to the real economy can be properly interpreted, ignoring distortions arising from transfers off (or onto) MFI balance sheets (see also Section 7.4).

The following sections provide an overview of the relevant concepts and breakdowns that are required from MFIs.<sup>65</sup>

##### 4.3.11.1 Key concepts and definitions

#### Securitisation

Securitisation, in general terms, involves the transfer of a pool of assets, and/or the transfer of the credit risk relating to a pool of assets, to a separate entity that issues

<sup>64</sup> This is consistent with the ESA 2010 (5.242 and 5.44) and Section 4.4.9 of the [AnaCredit Reporting Manual \(Part II\)](#). A similar treatment may be adopted in the case of fees and charges that are unpaid when due where the unpaid amounts are added to the loan principal owed to the reporting agent.

<sup>65</sup> Data on loan securitisation are not required from non-MFI credit institutions, POGIs or central government.

marketable securities (“asset-backed securities”) whose payments of principal and interest depend on the performance of the underlying assets. In effect, securitisation allows the transfer of credit risk and the creation of liquid instruments from loans that are normally illiquid.

A **traditional securitisation** involves the transfer of assets – not only the credit risk of those assets. In terms of MFI balance sheet statistics, this typically involves the transfer of a loan from an MFI (acting as originator, i.e. the MFI that either granted or purchased the loan which it is securitising) to a **financial vehicle corporation (FVC)** that has been created or serves the special purpose of the securitisation. As such loan transfers may affect the reporting of loans on the MFI’s balance sheet (depending on the applicable accounting standards, as explained later), traditional securitisations are particularly relevant. Therefore, for the purposes of MFI balance sheet statistics, Regulation ECB/2021/2 defines a securitisation as a transaction that is either:

- (i) a traditional securitisation as defined in Article 2(9) of Regulation (EU) 2017/2402<sup>66</sup> (“Securitisation Regulation”); and/or,
- (ii) a securitisation as defined in Article 1(2) of Regulation ECB/2013/40<sup>67</sup> in which there is a disposal of the loans being securitised to an FVC.

Securitisation operations under (i), the Securitisation Regulation, are those where the credit risk associated with an exposure or pool of exposures is tranching and the subordination of tranches determines the distribution of losses on the underlying assets among the holders of the related asset-backed securities (payments must also be dependent on the performance of the exposure). In addition, the securities issued do not represent payment obligations of the originator institution.<sup>68</sup> The Securitisation Regulation also defines traditional securitisation as the economic transfer of the exposures being securitised from the originator institution to a securitisation special-purpose entity (SSPE) or through sub-participation by an SSPE.<sup>69</sup>

Securitisation operations under (ii), Regulation ECB/2013/40, are those where an asset or pool of assets, or the associated credit risk, is transferred to an entity (FVC) that is separate from the originator and is created for or serves the purpose of the transaction or scheme. As in the Securitisation Regulation, the instruments issued in a securitisation must not represent payment obligations of the originator. There is no

<sup>66</sup> [Regulation \(EU\) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations \(EC\) No 1060/2009 and \(EU\) No 648/2012 \(OJ L 347, 28.12.2017, p. 35\).](#)

<sup>67</sup> [Regulation \(EU\) No 1075/2013 of the ECB of 18 October 2013 concerning statistics on the assets and liabilities of financial vehicle corporations engaged in securitisation transactions \(recast\) \(ECB/2013/40\) \(OJ L 297, 7.11.2013, p. 107\).](#)

<sup>68</sup> This makes securitisations involving MFIs distinct from covered bonds issued by MFIs. Covered bonds are debt securities issued by a credit institution directly (or fully guaranteed by a credit institution) and covered by a pool of loans (typically mortgage loans) or public sector debt which do not leave the issuer’s balance sheet. Covered bonds represent the payment obligations of the originator, which are not dependent on the performance of the pool of assets itself. In the event of default of the issuing or guarantor credit institution, bond holders have a priority claim on the cover pool in addition to their ordinary claim on the credit institution (dual recourse).

<sup>69</sup> AnaCredit reporting also follows the Securitisation Regulation definition of securitisation.

requirement under Regulation ECB/2013/40 for the financing instruments issued from the securitisation transaction or scheme to be tranching (ESA 2010, 5.104) also defines a securitisation operation without any tranching stipulation). In this respect, it is assumed that all SSPEs are FVCs, but that the population of FVCs is broader.<sup>70</sup> A single securitisation operation may involve several FVCs if, for example, one FVC is established to hold the loans backing the securitisation, whereas another FVC issues debt securities backed by the securitised loans. Multi-vehicle structures may be used when it is advantageous to have the securities issued by an entity subject to the law of a jurisdiction different from that of the FVC holding the securitised assets. In determining whether an operation should be treated as a securitisation, the structure as a whole needs to be considered. As a general rule, where the structure as a whole would qualify as an FVC if its individual component entities were to be consolidated, then each individual entity within the structure qualifies as an FVC. For the purposes of identifying euro area FVCs, MFIs may use the list published on the [ECB's website](#) on a quarterly basis.<sup>71</sup>

Typically, loans are packaged and transferred to an FVC in a so-called “warehousing” phase, prior to the issuance of the asset-backed securities. As explained in Part 5 of Annex I of Regulation ECB/2021/2, loans transferred in a warehousing phase are to be treated as a securitised loans, and the counterparty that has received the transfer is therefore to be treated as an FVC.

With regard to loans transferred in a securitisation, the accounting treatment of the loans is particularly relevant, given that this will determine whether or not the transferred loans leave the balance sheet of the transferor. This is explained further below and illustrated in examples C and D. A **synthetic securitisation** involves a transfer of credit risk without the transfer of the assets themselves. The credit risk may be transferred from the MFI to the FVC through credit default swaps, guarantees or similar mechanisms, which effectively insure the MFI against the default of the borrower. The MFI is said to be buying protection on a reference portfolio of underlying assets, and the FVC is said to be selling protection. The proceeds of the FVC's debt securities issuance are used to acquire assets to place as collateral against a default in the underlying pool of assets. This collateral often takes the form of a deposit with the MFI originating the loans, or it may be invested by the FVC in high grade assets. If the collateral raised by the issuance of debt securities by the FVC in a synthetic securitisation is equivalent to the exposure to the reference portfolio on which it has sold protection, the securitisation is said to be “fully funded”. In some securitisations the collateral may not fully reflect the exposure but may be related to expected losses, including the recovery value in the event of default on the reference portfolio. Synthetic securitisations do not affect the reporting of loans on the MFI balance sheet. Consequently, they are not reported separately for the purposes of MFI balance sheet statistics and should not be included in the reporting requirements on loan securitisations and other loan transfers.

---

<sup>70</sup> In addition, FVCs may have secondary activities in addition to their principal activity of performing securitisation transactions. SSPEs however are required to limit their business to securitisation. FVCs which undertake secondary activities may therefore not be classified as SSPEs.

<sup>71</sup> See the [Statistics section](#) of the ECB's website.

## Other loan transfers

MFIs may sell or purchase loans in operations that are not related to securitisations, for example as part of intragroup reorganisations (e.g. a financial corporation engaged in lending transfers its loan portfolio to an MFI in the same group; see also Section 5.6.1), restructurings of cross-border banking groups or the trading of syndicated loans (see Example B below).

For the purposes of MFI balance sheet statistics, securitisation involves a transfer of loans to an FVC; an “other” transfer is therefore any transfer to (or from) a counterparty that is not an FVC.

### Example B

A domestic MFI sells its share of a syndicated loan to a foreign MFI

A domestic MFI has a share in a syndicated loan to (domestic) non-financial corporation A (for a total amount of 20). A foreign MFI buys that share from the domestic MFI. The initial balance sheets of the two MFIs are as follows:

Domestic MFI			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	70
o/w syndicated loans to corporate A	20	Capital and reserves	30
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

Foreign MFI			
Assets		Liabilities	
Cash	20	Loans and deposits	60
Loans and deposits	80	Capital and reserves	40
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

*The foreign MFI purchases the share in the loan for 20 in cash. The balance sheets become:*

Domestic MFI			
Assets		Liabilities	
Cash	20	Loans and deposits	70
Loan and deposits	80	Capital and reserves	30
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

Foreign MFI			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	60
o/w syndicated loans to corporate A	20	Capital and reserves	40
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

The asset transfer and its counterpart are both recorded as transactions. As a result of this operation, loans to non-financial corporations provided by domestic MFIs fall by 20, while loans to non-financial corporations reported by foreign MFIs rise by 20.

In terms of the reporting requirements for loans securitised or otherwise transferred, as outlined below the operation is reported if the acquiring MFI is resident in another euro area country.

## Derecognition

MFI balance sheet statistics differentiate between loans transferred that are derecognised (removed from the balance sheet) and loans that are not derecognised and thus remain on the MFI's balance sheet.

For the analysis of MFI balance sheets and credit developments, loan sales (or purchases) that result in a decrease (or increase) in reported loan outstanding amounts are the most relevant. The net impact of loan derecognition is therefore an important feature of the statistical requirements for securitisations and other loan transfers. A stylised example of the treatment of a sale of loans by an MFI to an FVC with derecognition is provided in Example C below.

A transfer in the legal ownership of assets may not necessarily result in those assets being derecognised from the MFI balance sheet. Under IFRS 9, the derecognition of assets is subject to an assessment of whether or not substantially all the risks and rewards of ownership have been transferred with the asset. If they are substantially retained by the MFI, the MFI must continue to recognise the asset on its balance sheet. In addition, if the MFI has neither retained nor transferred substantially all of the risks and rewards of ownership of the asset and has not relinquished control of the asset, it must continue to recognise the asset to the extent of its continuing involvement. In the case of a loan securitisation without derecognition, the reporting MFI continues to report the securitised loans on its balance sheet together with a liability which counterbalances the consideration received for the sale.<sup>72</sup> A stylised example of the treatment of a sale of loans by an MFI to an FVC without derecognition is provided in Example D below.

<sup>72</sup> By convention, a deposit with an agreed maturity of over two years is recorded vis-à-vis the transferee. In economic terms, it is similar to the case in which an MFI has itself borrowed against collateral provided by the loans.

### Example C

#### Sale of loans with derecognition

An MFI sells at face value loans recorded on its balance sheet at 100. It receives from the FVC 50 in cash and 50 in the senior tranches of the securities issued by the FVC. If the expected losses on the portfolio are (for example) 15 and the FVC's junior tranches amount to 50, all risks of the portfolio are deemed to have been transferred through the junior tranches and, under IFRS 9, the MFI is allowed to derecognise the portfolio of securitised loans. The MFI records a reduction of 100 in loans on its balance sheet in the reference month, matched by increased holdings of 50 each in cash and FVC securities.

Item	Assets	Liabilities
Cash	+50	
FVC securities	+50	
Loans	-100	

Assuming that the reporting MFI continues to service the loans, it will report the outstanding amounts of serviced loans of 100 (less any possible redemptions taking place in the reporting period).

### Example D

#### Sale of loans without derecognition

In this case, the 50 in FVC securities received by the originating MFI consists of junior tranches only. Risks related to the loans are thus deemed to remain with the MFI, meaning that the loan portfolio cannot be derecognised from the MFI balance sheet. The securitisation is therefore effectively treated as secured borrowing by the MFI. The MFI reports in the reference month receipts from the FVC of 50 in cash and 50 in securities issued by the FVC, but this time records no change in holdings of loans. Instead, a deposit liability of 100 is recorded under deposits with an agreed maturity of over two years.

Item	Assets	Liabilities
Cash	+50	
FVC securities	+50	
Deposits with agreed maturity of over 2 years		+100

*In accordance with Regulation ECB/2021/2, the MFI must not net the FVC securities acquired against the deposit liability arising from the securitisation. As in Example C above, if the reporting MFI continues to service the loans it will report the outstanding amounts of serviced loans of 100.*

---

#### 4.3.11.2 Reporting requirements relating to securitisation and other loan transfers

The reporting requirements with respect to loan securitisation and other transfers are set out in Tables 5a and 5b in Part 5 of Annex I to Regulation ECB/2021/2. Table 5a concerns the reporting of net loan transfers, while Table 5b concerns the reporting of outstanding amounts of transferred loans and revaluation adjustments affecting those amounts. In accordance with Guideline ECB/2021/11, NCBs also transmit reclassification adjustments with respect to each of the outstanding amounts contained in Table 5b. The reporting of revaluation and reclassification adjustments is essential given that they are used to calculate transactions in the transferred loans and, consequently, the transactions and growth rates in loans are adjusted for loan sales and securitisation (see Section 7.4).

The Regulation Tables 5a and 5b are split into three "blocks": Block 1 refers to loan transfers affecting the reporting of loans on MFI balance sheets where the outstanding amount of transferred loans is serviced by the MFI; Block 2 refers to loan transfers affecting the reporting of loans on MFI balance sheets where the outstanding amount of transferred loans is not serviced by the MFI; and Block 3 refers to loan transfers not affecting the reporting of loans on MFI balance sheets. The reporting requirements are summarised in this section, while Tables 3 and 4 below provide a more specific allocation of reporting items to the respective blocks depending on the type of transfer and the role of the reporting agent.

**Data on transfers for which the reporting agent acts as servicer of the outstanding amount of transferred loans and which affect the reporting agent's balance sheet are reported in Block 1 as follows:**

- Loan transfers during the month are reported on a net basis as acquisitions minus disposals in Regulation Table 5a. The transfer affects the amount reported on the MFI's balance sheet, meaning that if the reporting agent is the transferor (seller) of the loans, the transfer results in a derecognition of the loans from its balance sheet; if the reporting agent is the transferee (acquirer), the transfer results in a recognition of the loans on its balance sheet.
- Net loan transfers are included in Block 1 only where the reporting agent is acting as the servicer of the respective outstanding amounts of transferred loans. This means that where the reporting agent is selling loans, it is acting as the servicer of the outstanding amounts of transferred loans after the disposal. Alternatively, where the reporting agent is acquiring loans, it had previously sold



those loans and was acting as the servicer of those loans prior to the acquisition.

- Outstanding amounts of transferred loans are reported by MFIs in Regulation Table 5b. These amounts include loans that have been transferred by the reporting agent, with derecognition from its balance sheet, and for which it acts as servicer at the time of reporting.
- The outstanding amounts reported in Block 1 of Table 5b are normally the result of a disposal that has been included in the net loan transfers reported in Block 1 of Table 5a, either in the same or an earlier reference period. There are exceptions, however, where the outstanding amounts of transferred loans to be reported in Block 1 are affected by reclassification adjustments. For example, where the reporting agent takes over the servicing of loans it had transferred in an earlier reference period but which were initially serviced by a different entity, the reporting agent should start reporting the outstanding amounts of transferred loans in the reference period in which it takes over the servicing. A reclassification adjustment must be recorded with respect to the outstanding amount to avoid the increase in the outstanding amounts of transferred loans in Block 1 being interpreted as new lending (a transaction). As stated in Part 5 of Annex I to Regulation ECB/2021/2, NCBs may request additional information from MFIs that would explain developments in outstanding amounts of transferred loans which may necessitate reclassification adjustments.
- Reporting agents report revaluation adjustments affecting the outstanding amounts of transferred loans. Similarly to the general valuation principle for loans (see Section 4.3.10), the outstanding amounts of transferred loans should, in principle, be reported at the nominal amounts outstanding net of write-offs/write-downs (and net of provisions, if the NCB instructs MFIs to report net of provisions). However, as the loans are no longer on the (accounting and statistical) balance sheet of the MFI, this valuation may be reported on a best-efforts basis. In any case, MFIs must report any revaluation adjustments that have affected their respective outstanding amounts of transferred loans in the reporting period.
- Revaluation adjustments are also to be reported where there is a difference between the price at transfer and the value of the outstanding amount of transferred loans either immediately after the transfer (the MFI disposes of the loans), or immediately before the transfer (the MFI (re)acquires the loans). The treatment is analogous to the treatment of loans sold at a discount by MFIs (see Section 4.3.9.6). Hence, the sale of loans at a discount by an MFI that results in a negative revaluation adjustment in the reporting of its balance sheet might lead to an opposite revaluation adjustment being reported in Block 1 of Table 5b.
- In addition to reporting the sector of borrowers, MFIs report the sector of the entity holding the outstanding amounts of transferred loans. Again, this refers to the holder of the loans immediately after a transfer in the case of disposal by the MFI, or before the transfer in case of an acquisition by the MFI.

- By definition, the entity holding the loans in a securitisation is an FVC, and a distinction is made for FVCs resident in the euro area. This is to complement the statistics on euro area FVCs collected in accordance with Regulation ECB/2013/40.
- For other loan transfers, a distinction is made for transfers to domestic MFIs and MFIs resident in other euro area countries. This is to monitor inter-MFI transfers within the euro area and to derive adjusted loans series at the national as well as at euro area level (see Section 7.4).
- Where the holder of transferred loans reported changes, the change in the holder counterparty should be reported as a reclassification. For example, a loan is transferred with derecognition by the reporting agent to an FVC (i.e. a securitisation) and the reporting agent is servicing the loan. The loan is subsequently acquired by a different domestic MFI with an effect on its balance sheet and serviced by the reporting agent. After the acquisition, the reporting agent no longer reports the loan as a securitisation, but reports the loan as being transferred to a domestic MFI under “other loan transfers”. This change is treated as a reclassification adjustment in the Table 5b data reported by the reporting agent, even though the change is the result of an acquisition between the FVC and other domestic MFI, given that it is not a transaction involving the reporting agent directly. It should be noted that the other domestic MFI in this example would report the acquisition under Regulation ECB/2021/2; the reporting scheme and the derivation of adjusted loans are, however, designed in such a way that the national credit developments are accurately captured.
- With regard to transfers between MFIs, it is worth noting that only loan transfers that are transactions between institutional units should be included in the reporting. The impact of mergers or divisions between MFIs are to be treated as reclassification adjustments (see Section 5.6) and are not to be included in the reporting of net loan transfers given that this would lead to a double correction for the purposes of deriving statistics on loans adjusted for loan transfers.

**Data on transfers for which the reporting agent does not act as servicer of the outstanding amount of transferred loans and which affect the reporting agent’s balance sheet are reported in Block 2 as follows:**

- Net loan transfers during the month are reported as acquisitions minus disposals in Regulation Table 5a in a similar manner to the reporting in Block 1 described above. However net loan transfers are included in Block 2 only where the reporting agent is not acting as the servicer of the respective outstanding amounts of transferred loans. This means that the reporting agent is not acting as servicer of the loans after the transfer in the case of a disposal, nor was it acting as the servicer of the loans prior to an acquisition.
- Outstanding amounts of transferred loans that are not serviced by reporting agents are outside the scope of Regulation ECB/2021/2. There are therefore no corresponding outstanding amounts to be reported in Block 2 of Regulation Table 5b. Nevertheless, information on such loans would contribute to the

overall picture of credit provided by the MFI sector. Hence, if NCBs have data on the outstanding amounts of loans derecognised from MFI balance sheets that are not serviced, they may transmit this information to the ECB in accordance with Part 2 of Annex II of Guideline ECB/2021/11. Where this is the case, NCBs must also report transactions in those loans (excluding the impact of loan transfers) so that these may contribute to the derivation of adjusted loans.

**Table 3**  
Data on transfers that affect the reporting agent's balance sheet

Type of transfer	Transfer counterparty	Role of the reporting agent	Net loan transfers (1)	Outstanding amounts, revaluation adjustments, reclassification adjustments (2)	Outstanding amounts (3)	Financial transactions (excluding transfers) (4)
Securitisation	Not a euro area FVC	Transferor/transferee and servicer	1.1	1.1		
		Transferor/transferee of loans serviced by other domestic MFIs	2.1			
		Transferor/transferee of loans not serviced by domestic MFIs	2.1		4.1.1	4.2.1
	Euro area FVC	Transferor/transferee and servicer	1.1 & 1.1.1	1.1 & 1.1.1		
		Transferor/transferee of loans serviced by other domestic MFIs	2.1 & 2.1.1			
		Transferor/transferee of loans not serviced by domestic MFIs	2.1 & 2.1.1		4.1.1	4.2.1
Other transfers	Not a euro area MFI	Transferor/transferee and servicer	1.2	1.2		
		Transferor/transferee of loans serviced by other domestic MFIs	2.2			
		Transferor/transferee of loans not serviced by domestic MFIs	2.2		4.1.2	4.2.2
	Domestic MFI	Transferor/transferee and servicer	1.2 & 1.2.1	1.2 & 1.2.1		
		Transferor/transferee of loans serviced by other domestic MFIs	2.2 & 2.2.1			
		Transferor/transferee of loans not serviced by domestic MFIs	2.2 & 2.2.1			
	Euro area non-domestic MFI	Transferor/transferee and servicer	1.2 & 1.2.2	1.2 & 1.2.2		
		Transferor/transferee of loans serviced by other domestic MFIs	2.2 & 2.2.2			
		Transferor/transferee of loans not serviced by domestic MFIs	2.2 & 2.2.2			

(1) MFIs report to NCBs the net loan transfers specified in Table 5a in Part 5 of Annex I to Regulation ECB/2021/2.

(2) MFIs report to NCBs the outstanding amounts and revaluation adjustments specified in Table 5b in Part 5 of Annex I to Regulation ECB/2021/2. NCBs report to the ECB monthly reclassification adjustments with respect to each outstanding amount item.

(3) Where available, NCBs report to the ECB the outstanding amounts specified in Table 1 in Part 2 of Annex II to Guideline ECB/2021/11.

(4) Where available, NCBs report to the ECB the financial transactions (excluding the impact of transfers) specified in Table 1 in Part 2 of Annex II to Guideline ECB/2021/11.

**Data on transfers that do not affect the reporting agent's balance sheet are reported in Block 3 as follows:**

- Net loan transfers during the month are reported as acquisitions minus disposals in Regulation Table 5a. Disposals refer to loans sold by the MFI that it is unable to derecognise from its balance sheet due to the applicable accounting rules (IFRS 9 or similar). Acquisitions refer to the (re)purchase of loans that the reporting agent had previously transferred and that were recognised on its balance sheet prior to the acquisition.
- Outstanding amounts of transferred loans are reported by MFIs in Regulation Table 5b. These amounts are normally the result of a disposal that has been included in the net loan transfers reported in Block 3 of Table 5a, either in the same or an earlier reference period. There are exceptions, however, where the outstanding amounts of transferred loans to be reported in Block 3 are affected by reclassification adjustments. For example, a reporting agent that initially applied national accounting rules that led to the derecognition of all loan transfers then applies the rules of IFRS 9. When assessed against the relevant test for derecognition, the outstanding amounts of transferred loans must be recognised on its accounting balance sheet. This necessitates a positive reclassification adjustment in Block 3 of Table 5b. If, in addition, the outstanding amounts of transferred loans were serviced by the reporting agent, there would then also be a negative reclassification adjustment in Block 1 of Table 5b in the period in which the change in rules affect the MFI's balance sheet.
- Reporting agents report revaluation adjustments affecting the outstanding amounts of transferred loans. As the loans are on balance sheet, the valuation is the same as for loans in general. Any write-downs/write-offs made by the reporting agent should be reported as revaluation adjustments.
- Similarly to loans reported in Block 1, MFIs report the sector of the entity holding the outstanding amounts of transferred loans, with a distinction being made for euro area FVCs, domestic MFIs and MFIs resident in other euro area countries. If the entity transfers loans to entities in another sector, this is treated as a reclassification adjustment.

**Table 4**  
Data on transfers that do not affect the reporting agent's balance sheet

Type of transfer	Transfer counterparty	Role of the reporting agent	Net loan transfers (1)	Outstanding amounts, revaluation adjustments, reclassification adjustments (2)
<b>Securitisation</b>	Not a euro area FVC	Transferor/transferee	3.1	3.1
	Euro area FVC	Transferor/transferee	3.1 & 3.1.1	3.1 & 3.1.1
<b>Other transfers</b>	Not a euro area MFI	Transferor/transferee	3.2	3.2
	Domestic MFI	Transferor/transferee	3.2 & 3.2.1	3.2 & 3.2.1
	Euro area non-domestic MFI	Transferor/transferee	3.2 & 3.2.2	3.2 & 3.2.2

(1) MFIs report to NCBS the net loan transfers specified in Table 5a in Part 5 of Annex I to Regulation ECB/2021/2.

(2) MFIs report to NCBS the outstanding amounts and revaluation adjustments specified in Table 5b in Part 5 of Annex I to Regulation ECB/2021/2. NCBS report to the ECB reclassification adjustments with respect to each outstanding amount item.

### Other data requirements relating to securitisations

- MFIs report deposit liabilities to euro area FVCs on a monthly basis as breakdowns of euro and non-euro-denominated deposits from counterparties in the sector “other financial intermediaries” (S.125). Deposits of FVCs mainly consist of two components: (i) a counterparty liability relating to loans that have been securitised but not derecognised from the balance sheet of MFIs (recorded by the MFI under the category “deposits with agreed maturity over two years”), and (ii) collateral in the form of deposits placed by FVCs engaged in synthetic securitisation. Deposits from FVCs with MFIs also arise in the normal course of their business.
- MFIs report credit granted to euro area FVCs as breakdowns of loans to counterparties in the sector “other financial intermediaries” (S.125).
- MFIs report their holdings of securities issued by FVCs in the euro area on a monthly basis. This is again broken down by domestic FVCs and FVCs resident in other euro area countries, providing further links with data submitted under Regulation ECB/2013/40. This requirement includes securities held by MFIs as part of a retained securitisation. It should be emphasised that, as is the case for other balance sheet items, MFIs must not net asset positions (security claims on FVCs) against deposit liabilities to FVCs. The treatment of securities held as part of a retained securitisation is not analogous to the treatment of holdings of own securities (detailed in Section 4.5.1.8).

#### 4.3.12 MFI undrawn credit lines

Credit lines are commitments made by MFIs to lend. As described in Section 4.3.10, the reporting of loans in MFI balance sheet statistics refer to outstanding amounts borrowed; amounts that are available but not (yet) drawn are not reported on balance sheet. Nevertheless, information on undrawn credit provides useful information on whether MFIs are tightening or loosening credit standards and on borrowers' use of credit lines as alternatives to other types of lending agreements.

To complement the analysis of credit developments in the euro area and individual euro area countries, NCBs provide statistical information on undrawn credit lines granted by other MFIs on a quarterly basis in accordance with Article 6 of Guideline ECB/2021/11. NCBs are required to compile and report aggregated data on MFI credit lines granted to domestic and other euro area residents broken down by institutional sector, as set out in Part 4 of Annex II to Guideline ECB/2021/11. The Guideline also requires NCBs to provide reclassification adjustments affecting the amounts reported.

Given that Regulation ECB/2021/2 does not include statistical requirements for reporting agents to provide data on undrawn credit lines, NCBs provide this data based on that available from other sources, on a best-efforts basis. For this purpose, they may report:

- undrawn credit facilities classified as medium risk, medium/low risk or low risk, as defined in the CRR; and/or,
- off-balance-sheet amounts of the relevant instruments collected in accordance with the AnaCredit Regulation, although this Regulation does not cover lending commitments made to households.

Where NCBs do not report data according to the above definitions, they may alternatively report undrawn credit lines with reference to national definitions. However, due to the lack of harmonisation and cross-country comparability, these data are not currently published by the ECB.

## 4.4 Deposits

Deposits are amounts that are owed to creditors by reporting agents and that are not negotiable instruments and therefore not marketable. They combine the features of transferability, convertibility and certainty (in terms of their nominal value) referred to in Part 1 of Annex I to Regulation ECB/2021/2. Instruments may be non-negotiable if their ownership is not readily capable of being transferred so that they cannot be marketed or, although technically negotiable, they cannot be traded owing to the absence of an organised market. Non-negotiable instruments issued by reporting agents that subsequently become negotiable and can be traded on secondary markets should be reclassified as debt.

For the purposes of the ECB reporting scheme, deposits are broken down into overnight deposits, deposits with an agreed maturity, deposits redeemable at notice and repurchase agreements (also known as repos). MFI balance sheet reporting also identifies transferable deposits within overnight deposits (see Section 4.4.1.1). The ESA 2010 defines deposits in paragraphs 5.79 to 5.88 and distinguishes between transferable deposits (AF.22) – although the definition differs from that for MFI balance sheet statistics – and other deposits (AF.29).

For the purposes of MFI balance sheet statistics, the category “deposits” appears by convention on the liabilities side of the MFI balance sheet only. Deposit-type assets held by MFIs are recorded as loans, or in some circumstances (as explained below) as securities, while loan liabilities are recorded as deposits. Interbank or intergroup placements will therefore be recorded as a deposit by the debtor MFI and as a loan by the creditor MFI. This would also cover liability positions of nostro and vostro accounts between two financial institutions. Shares issued by reporting agents (such as credit unions) are classified as deposits for statistical purposes where there is (i) a debtor-creditor economic relationship between the issuer and the holder, (ii) the shares can be converted into currency or redeemed without significant restrictions or penalties, and (iii) the other criteria outlined in Regulation ECB/2021/2 are met.

The ESA 2010 (5.118-5.119) states that all sectors other than deposit-taking corporations may hold deposits as assets and that all placements between deposit-taking corporations are always recorded as deposits (in line with MFI balance sheet statistics in the case of loan liabilities).

#### 4.4.1 Overnight deposits

Overnight deposits, as defined by Regulation ECB/2021/2, are convertible into currency and/or transferable on demand by cheque, banker's order, debit entry or similar means, without significant delay, restriction or penalty. They include (i) balances (interest-bearing or not) that are convertible on demand, or by close of business on the following day without significant penalty or restriction, but which are not transferable; and (ii) balances (interest-bearing or not) representing prepaid amounts in hardware-based or software-based e-money schemes (e.g. prepaid cards). Overdrafts on current accounts are always treated as loans and must not be netted under overnight deposits.

Deposit accounts, such as some online-only accounts, that do not have payment instruments attached (e.g. debit card or direct transfers to third parties) are only accessible through transfers to other accounts and are also regarded as overnight deposits where they do not have an agreed maturity or a period of notice, even if the conversion into currency may involve a delay owing to the clearance time of the transfers.

Loan liabilities of reporting agents recorded as deposits are classified as overnight deposits where they are to be repaid by close of business on the day following that on which the loan was granted.

##### 4.4.1.1 Transferable deposits

For the purposes of MFI balance sheet statistics, transferable deposits are a sub-category of overnight deposits. They comprise such deposits as are directly transferable on demand to make payments to other economic agents by commonly used means of payment, such as credit transfers, direct debits, credit or debit cards, e-money transactions, cheques, or similar means, without significant delay, restriction or penalty. Deposits that can only be used for cash withdrawal and deposits from which funds can be withdrawn or transferred only through another account of the same owner are not transferable deposits.<sup>73</sup>

Transferable deposits held with central banks include the accounts that each credit institution has with its domestic NCB and that serve payment/settlement functions. Accounts with the Eurosystem Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET2) fall within this category, including when the end-of-day balance on a credit institution's TARGET2 account serves to fulfil its minimum reserve obligations.<sup>74</sup> Some central banks also have current

<sup>73</sup> Note that this differs from "transferable deposits" (AF.22) for the purposes of the ESA 2010, which includes both deposits exchangeable for currency on demand and/or which are directly usable for making payments (ESA 2010, 5.80).

<sup>74</sup> The Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET) consists of various modules in which different types of accounts are kept. Not all of the accounts would qualify as transferable for the purposes of MFI balance sheet statistics; in particular, NCBs should not include within transferable deposits any "technical" TARGET accounts and those from the ancillary systems within transferable deposits (for example, NCB-ECB accounts are technical accounts). It is worth noting that, although these do not qualify as transferable, they are nonetheless inter-MFI deposits/loans and, as such, should not be reported under "remaining assets" or "remaining liabilities".

accounts for employees. Those are typically used for payment transactions and should therefore be included in the transferable deposits category; the same may apply to deposits held by the government sector and by entities located in the rest of the world.

Where reporting agents have loan liabilities recorded as deposits, such as an overdraft on a nostro account that it holds with another financial corporation, these are not to be included in transferable deposits given that the amounts relate to credit drawn, and not balances transferable on demand to make payments.

#### 4.4.2 Deposits with an agreed maturity

Deposits with an agreed maturity are non-transferable deposits that cannot be withdrawn before an agreed fixed term, or that can be withdrawn only subject to a penalty. Deposits with roll-over provisions must be classified according to their earliest maturity. Deposits with an agreed maturity that permit early redemption subject to notice, or that are redeemable on demand subject to a penalty, are nevertheless classified as deposits with an agreed maturity. Where early redemption is permitted, the balances must be reclassified, once notification has been given, as deposits redeemable at notice of up to three months or as deposits redeemable at notice of over three months, as applicable.

The maturity periods to be reported are “up to and including one year”, “over one year and up to and including two years” and “over two years”, in each case with reference to the original maturity.

Administratively, regulated savings deposits are reported in the maturity band “over two years” where the actual maturity criterion is not relevant. For example, in some Member States there are deposit products for which the interest rates and/or terms and conditions are specified in national legislation and which are held for specific purposes (such as qualification for a housing loan at a discounted rate) occurring after two years, even if the deposits may technically have a shorter maturity or be redeemable on demand.

This item also includes counterpart liabilities related to securitisation transactions in which the loans or other assets remain on the MFI’s statistical balance sheet (i.e. they are not derecognised from the balance sheet). In this case, a balancing liability to the consideration received for the loan sale is recorded vis-à-vis the transferee, which, by convention, is assigned to deposits with an agreed maturity in the band “over two years”.

Deposits frozen at a premium, margin deposits and earmarked balances are generally classified as deposits with an agreed maturity (see Section 4.4.8).



### 4.4.3 Deposits redeemable at notice

Deposits redeemable at notice are non-transferable deposits, usually with no agreed maturity, but which may be withdrawn without penalty only after a period of notice. The notice periods to be reported are “up to and including three months” and “over three months” (with the sub-category “of which, over two years’ notice”). They include deposits which, although legally withdrawable on demand, would be subject to penalties and restrictions under national practice and thus do not qualify as “overnight” deposits; these are classified in the first maturity band. They also include investment accounts that do not have a period of notice or agreed maturity, but that have restrictive drawing provisions (classified in the second band: “over three months’ notice” and “of which, over two years’ notice”). In certain cases, deposits redeemable at notice also include deposits placed with a fixed term to maturity/agreed maturity that allow early redemption after prior notification. These are normally classified as deposits with an agreed maturity, but are included under deposits redeemable at notice (and allocated to the first or second maturity band, depending on the period of notice applicable) once notification has been given. Non-transferable sight deposits (sight saving deposits) are included in the “up to three months” maturity band.

Earmarked balances may be classified as deposits redeemable at notice (see Section 4.4.8.5).

### 4.4.4 Repos

This item includes amounts borrowed by the reporting MFI in exchange for securities sold, with a commitment to repurchase them at a fixed price on a specified future date, i.e. a repurchase agreement (repo). The MFI has an obligation to return that cash when the securities are bought back.

Liabilities arising from the following repo-type operations are also recorded under this item:

- cash deposited as collateral against the lending of securities or gold by the MFI;
- cash deposited with an MFI in exchange for securities temporarily transferred to a third party under a sale/buyback agreement.

A loan of securities or gold without cash collateral (whether with no collateral or with collateral other than cash) is not recorded on the balance sheet; see Box 1 for further details.

Repos may be cleared through central counterparties (CCPs). A CCP legally interposes itself between counterparties to contracts traded in financial markets, becoming the buyer to every seller and the seller to every buyer. Typically, repos/reverse repos cleared by CCPs relate to business between euro area MFIs. Where this is the case and the CCP is itself a euro area MFI, it reports a repo and

reverse repo vis-à-vis the other MFIs<sup>75</sup>, meaning that all of the resulting transactions are included in inter-MFI deposits and loans.

As explained in Section 4.3.4, most CCPs are classified in the sector other financial intermediaries (ESA 2010, S.125) rather than as MFIs. There is therefore a requirement within the deposit category “repos” to report business with CCPs classified in that sector. Given that these positions, which are intermediated by non-MFIs, effectively reflect inter-MFI business, they are excluded from monetary aggregates and counterparts (see also Section 7.1.2).

## Box 1

### Repurchase agreements, securities lending and similar operations

---

Repurchase agreements (repos), securities lending and similar operations are treated statistically as loans against collateral and not as transactions in the security or other instrument involved, which remains on the balance sheet of the original holder. The original holder retains all the benefits and risks of owning the assets that have been lent (including entitlement to the interest accruing on them), meaning that such operations do not result in a change in economic ownership of those assets.<sup>76</sup>

A repo is the process of borrowing money by combining the sale of an asset (usually a debt security) with the subsequent repurchase of that same asset for a slightly higher price (which reflects the interest rate). Where an MFI borrows money in a repo, it records a deposit liability (under “repos”) to the counterparty in the agreement. A reverse repo is the purchase of securities combined with a binding agreement to sell them back later. A repo for one party to the transaction is thus a reverse repo for the other party. Therefore, where an MFI is a party to a reverse repo, it records a loan with respect to the money lent against the collateral of the security or other asset. When the repo matures, the borrower returns more money than originally received, the difference reflecting interest during the life of the contract. This interest should be accrued under “remaining liabilities” on the balance sheet of the cash borrower and under “remaining assets” on the balance sheet of the cash lender.

The recording practice is the same where an MFI (usually an NCB, in this case) swaps (lends or borrows) gold against money, usually in the form of foreign currency deposits. Furthermore, if the entity borrowing the security or other instrument sells it, it should record a negative holding on its balance sheet to avoid double-counting, given that both the original holder and the purchaser will record the security or other instrument on their balance sheet (see also the treatment of short selling in Section 4.5.1.10).

Where securities lending operations are undertaken without cash collateral (the collateral may be some other instrument, for example, or there may be no collateral), nothing should be entered on the balance sheet. As in repo-type operations, securities lent without cash collateral remain on the original owner’s balance sheet if there is a binding agreement to reverse the operation. Since no cash has changed hands, no entries are to be made under “deposits” or “loans”. As before, if the temporary acquirer later sells the securities outright, the sale should be recorded as a transaction in

---

<sup>75</sup> In accordance with Article 8(2) of Regulation ECB/2021/2, CCPs that are MFI reporting agents must report repos and reverse repos in the statistical reporting of deposits and loans, regardless of their treatment of clearing activities for accounting or other reporting purposes.

<sup>76</sup> See also the ESA 2010 (5.126-133).

securities and entered on the balance sheet of the temporary acquirer as a negative position in the instrument.

#### **Repurchase transactions intermediated by central counterparties (CCPs)**

Central counterparties (CCPs) intermediate in market transactions between two parties (“clearing members”) by providing clearing and settlement services.<sup>77</sup> This has the advantage of reducing counterparty credit risk for the parties. Repos involving CCPs may be structured as follows: (i) the seller (borrower) enters into a repurchase agreement, classified as a deposit, with the buyer (lender); (ii) the CCP is introduced as the direct counterparty to the seller and the buyer, thus entering into a reverse repo with the former and a repo with the latter and assuming the risk of default. Alternatively, buyers and sellers might trade in repos cleared with CCPs in automatic repo trading systems.

In general, CCPs are classified in the other financial intermediaries (except insurance corporations and pension funds) subsector (ESA 2010, S.125); however, a number of credit institutions also act as CCPs that are therefore classified in the MFI sector. Owing to the impact of such operations on monetary aggregates, it is important that positions vis-à-vis euro area CCPs that are classified as other financial intermediaries (S.125) are identified separately within loans and deposits. The impact of operations with central counterparties on monetary aggregates and their counterparts is discussed in Section 7.1.2.

Clearing members may enter into repurchase operations through CCPs on behalf of their clients. If the CCP is a reporting agent, it should report the repurchase operations against cash collateral vis-à-vis the clearing member, rather than vis-à-vis the clearing member’s clients, given that the CCP has not entered into a mutually agreed transaction with those clients. Similarly, where the clearing member is a reporting agent, it should report the corresponding positions vis-à-vis the CCP, in addition to any relevant positions with its clients.

---

#### **4.4.5 Intragroup positions with deposit-taking corporations**

Reporting agents separately identify deposits from euro area deposit-taking corporations that belong to the same group. A group consists of a parent and its directly or indirectly controlled subsidiaries (see Section 4.3.5 for further information). Intragroup positions include a reporting agent’s deposits from its own branches resident in other euro area countries, as well as from euro area branches of other members of the group. This makes it possible to identify inter-linkages between credit institutions belonging to the same group within the euro area. Where the reporting agent is a non-MFI credit institution, it reports deposits with group members that are euro area deposit-taking corporations. Those group members do not, however, report intragroup loans to the non-MFI credit institution given that intragroup positions are only reported where the counterparties are euro area MFIs.

---

<sup>77</sup> The [list of CCPs](#) that have been authorised to offer services and activities in the EU can be found on the website of the European Securities and Markets Authority (ESMA).

Branches of parents and subsidiaries that are resident in a different country to that of the branch's head office also need to be considered. Hence intragroup positions include a reporting agent's deposits from branches of other members of the group, whether resident in the same country as the reporting agent or in other euro area countries. Where the reporting agent has branches resident in other euro area countries, it includes deposits from those branches within the reporting of intragroup positions. Similarly, where the reporting agent is itself a branch, it reports deposits from its head office in intragroup positions.

Where the reporting agent is a non-MFI credit institution, it reports intragroup deposits from members of its group that are euro area deposit-taking corporations. However, those group members do not report the corresponding loans to the non-MFI credit institution as intragroup positions (these are only reported when they are vis-à-vis euro area deposit-taking corporations).

Section 4.3.9.5 provides further information on distinguishing between loans/deposits and equity financing within groups.

#### 4.4.6 Syndicated loan liabilities

As set out in Section 4.4, loan liabilities of MFIs are recorded as deposits by the receiving MFI. This includes syndicated loans received by reporting agents, which are identified separately under "deposits". Syndicated loans are single loan agreements in which several institutions participate as lenders; the borrower (here the reporting MFI) must be made aware of this in the loan contract.

Syndicated loans are usually arranged and coordinated by one institution (the lead manager). As each participating MFI reports the amount it has lent as a loan to the borrower, and not as a loan to the lead manager, the positions reported should only reflect syndicated loans in which the reporting MFI is the borrower and not the lead manager.

#### 4.4.7 Notional cash pooling

Notional cash pooling is covered in detail in Section 4.3.7, under loans, with analogous treatment applying for deposit positions. In line with Article 8(2) and (3) of Regulation ECB/2021/2, notional cash pool positions should be reported on a gross basis and not netted against any other assets or liabilities. Notional cash pooling deposit positions should be included under "overnight deposits". To separate out the impact of such positions from that of other loans and deposits on the balance sheets of MFIs, statistical information on notional cash pool positions is reported in accordance with Table 1 in Part 2 of Annex I to Regulation ECB/2021/2.

## 4.4.8 Specific cases and instruments

Regulation ECB/2021/2 (Part 2 of Annex II) indicates how various kinds of instrument are to be reported (without being identified separately) under deposits. As is the case in the Regulation, not all specific instruments can be covered by this Manual; the treatment of the selected products defined in this section should therefore be used as a reference for other products with similar characteristics.

### 4.4.8.1 Non-negotiable debt instruments

Non-negotiable debt instruments issued by reporting agents are generally classified as deposit liabilities. These are instruments where the transfer of legal ownership is subject to restrictions which mean that they cannot be marketed or, although technically negotiable, cannot be traded owing to the absence of an organised market. Non-negotiable instruments issued by MFIs that subsequently become negotiable and can be traded on secondary markets should be reclassified as debt securities.

### 4.4.8.2 Deposits that can be frozen at a premium

Some overnight or redeemable at notice-type deposit products may give the customer the option to freeze a specified amount for an agreed period of maturity in exchange for a higher interest rate than that of the underlying contract.

For the purposes of MFI balance sheet statistics, the frozen part of the deposit should be recorded together with the original product where the only consequence of early redemption or cancellation is the loss of the bonus on the frozen part. Where further penalties apply in addition to the loss of the bonus, the frozen part of the deposit should be classified under the relevant agreed maturity category.

Where penalties and charges apply to early withdrawal from such accounts, this acts as a disincentive to withdraw funds before the agreed maturity and thus renders such deposits less liquid. As a consequence, the loss of the interest bonus alone is not a sufficient constraint to prevent early withdrawal of the frozen part of the deposit and should therefore not be a determinant in classification as deposits with an agreed maturity.

### 4.4.8.3 Deposits with embedded derivatives

Deposits with embedded derivatives (hybrid deposits) are classified according to the ESA 2010 (5.220), which requires the underlying instrument and associated derivative to be reported separately where possible. Where separation is not possible, the instrument should be classified according to the main characteristics of the entire contract.

The treatment is similar under IFRS 9 (4.3). Where the host contract is not considered to be a financial asset (e.g. it is a financial liability), it may be recorded either entirely as a deposit or separated into the host contract (i.e. the deposit) and the embedded financial derivative. Where the host contract is an asset under IFRS 9, the embedded derivative is not separated; instead, the hybrid instrument is classified as a whole based on the main characteristics of the contract. It is recommended, however, that the ESA 2010 treatment is adopted for MFI balance sheet statistics.<sup>78</sup> The classification used for accounting purposes in the case of deposits also applies for statistical reporting (i.e. recorded either entirely as a deposit or separated out).

#### 4.4.8.4 Margin deposits

Repayable margin deposits (margins) made under derivative contracts should be classified by reporting MFIs as deposits with an agreed maturity where they represent cash collateral deposited with them and where they remain in the depositor's ownership and are repayable to the depositor when the contract is closed out. The MFI receiving the amount should be free to use the funds for on-lending. Where part of the margin must be retained, e.g. for the clearing house, only that part that is at the disposal of the MFI should, in principle, be classified as a deposit liability. The maturity classification is determined by the period of the derivative contract, given that the deposit is, in effect, blocked until the derivative matures.

All repayable margin deposits are therefore to be treated as loans/deposits, while non-repayable margin deposits are to be treated as transactions in the financial derivative given that they reduce the liability created through the financial derivative. Where repayable and non-repayable margin deposits are recorded in the same account, it may be very difficult to distinguish between the two. In such cases, Regulation ECB/2021/2 permits them to be recorded under "deposits" or "remaining liabilities". Where margin deposits are placed by the MFI, the treatment is symmetric to the above but the deposits are recorded under "loans".

#### 4.4.8.5 Earmarked balances

Earmarked balances relating, for example, to leasing or other loan contracts (e.g. deposits "blocked" to serve as collateral for specific loans or guarantees) are classified as deposits with an agreed maturity or redeemable at notice, depending on the provisions of the underlying contract or on the maturity/period of notice in the underlying leasing/loan contract. Deposits that are only partly blocked should be treated accordingly with respect to that part serving as collateral, while the other part should continue to be recorded within overnight deposits.

---

<sup>78</sup> This represents a divergence from IFRS guidance on the assets side, but uniform treatment for both assets and liabilities is important from a statistical reporting perspective.

Earmarked shares relating to loans made by the MFI should also be classified as deposit liabilities, and their breakdown by agreed maturity or period of notice should follow the maturity provisions of the loan contract.

#### 4.4.8.6 Subordinated debt and shares issued by MFIs

Subordinated debt issued by an MFI in the form of deposits or non-negotiable loans is recorded under “deposits”, in the appropriate maturity category (see also Section 4.3.9.4 on subordinated debt in the form of loans).

Some deposit-type instruments issued by MFIs are referred to as shares. They are classified as deposits instead of as capital and reserves if: (i) the relationship between the issuing MFI and the holder is essentially that of debtor and creditor (regardless of any property rights in these shares); and (ii) the shares can be converted into currency or redeemed without significant restrictions or penalties, although perhaps with a notice period (see also Regulation ECB/2021/2, Part 2 of Annex II). The notice periods for the conversion of such shares into currency are used to classify these shares according to the appropriate maturity breakdown. The shares must also comply with the following conditions:

- (i) the regulatory provisions provide the MFI with no unconditional right to refuse to redeem them;
- (ii) the shares will normally be redeemed at nominal value;
- (iii) the holders cannot lose more than the nominal value of the shares in the event of the MFI’s insolvency.

The treatment suggested by Regulation ECB/2021/2 for shares that are deposit-type instruments is consistent with international accounting standards and supervisory standards for cooperative shares issued by MFIs. Where “significant restrictions or penalties” are associated with redemption of the shares, this would, however, lead to them being classified under capital and reserves in statistical reporting. This criterion is not included in accounting and supervisory standards and could possibly result in divergences between them and the statistical treatment.

Reporting MFIs that hold such shares as assets should classify them as loans, in line with the convention that deposits do not appear on the assets side of an MFI’s balance sheet (see Section 4.3.9.4).

#### 4.4.8.7 Deposits received on a trust basis (fiduciary deposits)

An MFI that receives funds or deposits as a trustee/fiduciary from a customer (the trustor/beneficiary) for placement on deposit with another MFI or some other institution (the recipient)<sup>79</sup> should not report them as a deposit on its own balance

---

<sup>79</sup> The trustee may also be the recipient MFI.

sheet. This conforms to the ESA 2010 requirement to recognise the principal party to a transaction.<sup>80</sup> The funds should be recorded as a deposit on the recipient's balance sheet only. This rule avoids double-counting. The trustee is responsible for repaying the funds to the beneficiary, with the beneficiary retaining the risks and rewards of ownership of the funds. The trustee's involvement is confined to the administration of the account, with the funds protected in the event that the trustee MFI fails.

Where an MFI is the recipient of fiduciary deposits from a trustee, it should make every effort to classify such accounts based on the classification of the beneficial owner as derived from the information that is usually available to MFIs. If, however, the recipient bank has insufficient information about the beneficiary to provide an accurate sector classification, the deposit should be classified according to the residency and sector of the trustee.

The above treatment applies analogously for securities received on a trust basis and for escrow deposit accounts where an MFI receives funds as a trustee and disburses them depending on fulfilment of the contractually agreed conditions. See also Section 4.3.9.13 for the treatment of funds granted on a trust basis.

#### 4.4.8.8 Travellers' cheques

Travellers' cheques issued by MFIs have similar properties to currency in circulation. Regulation ECB/2021/2 does not state how they should be classified within the reporting scheme. Nevertheless, the ECB would expect travellers' cheques to be treated in a similar way to prepaid money balances stored on technical devices (electronic money); they should therefore be classified under "overnight deposits". Paper-based travellers' cheques are not, however, classified as electronic money in the MFI balance sheet reporting scheme, given that they are excluded from the scope of Directive (EU) 2015/2366.

#### 4.4.8.9 Gold swaps and gold loans/deposits

Gold swaps represent the liability counterpart of cash (usually foreign currency deposits) received by MFIs (in most cases, NCBs) in exchange for gold that they have temporarily relinquished, but retain on their balance sheet, under a binding agreement to reverse the transaction at an agreed price and on a specific future date. The treatment is similar to that for repos and also applies to gold loans against cash collateral. The economic risks and benefits of ownership of the gold (such as the right to gains and losses) remain with the original owner (here the reporting MFI, usually an NCB). The institution lending the gold records the cash received as an

---

<sup>80</sup> The ESA 2010 (1.78) states that when a unit carries out a transaction on behalf of another unit (the principal) and is funded by that unit, the transaction is recorded exclusively in the accounts of the principal. As a rule, one should not go beyond this principle by trying, for instance, to allocate taxes or subsidies to ultimate payers or ultimate beneficiaries under the adoption of assumptions.



asset, with a matching liability in deposits; the institution borrowing the gold records a decline in cash assets and an offsetting increase in loans to the lender.

The statistical treatment of gold swaps (where cash is received in exchange for gold temporarily relinquished) thus differs from a case in which gold temporarily changes hands without collateral, or against a pledge of securities or other non-cash collateral. In these cases, no cash is recorded on the assets side and no corresponding deposit entry is made under “deposit liabilities”. Where no cash is transferred or pledged, the gold swap or loan is not recorded on the balance sheet, i.e. it should be treated as an off-balance-sheet operation.

Where the temporary acquirer of gold (under either a gold swap or a gold loan) later sells the gold outright, the sale should be recorded as a transaction in gold and entered on the balance sheet of the temporary acquirer (the short seller) as a negative position in gold. This is to prevent double-counting, given that the gold will be recorded by both the original owner (on whose balance sheet it has remained) and the new buyer.

#### 4.4.8.10 Deposit accounts jointly held by households resident in different jurisdictions

A deposit account may be jointly held by residents in different jurisdictions. Regulation ECB/2021/2 does not provide specific guidance on the allocation of deposits for such cases. The amounts could be allocated to one of the residents or be split between the residencies of the account holders, for example.

Under the sixth edition of the [Balance of Payments and International Investment Position Manual \(BPM6\)](#) (4.145) special treatment applies for emigrant workers who have a joint account with non-resident family members that is opened either in the emigrant’s host country or in the home country. These would, by convention, be reported as domestic deposits by the bank (located in the host or home country). It is worth noting, therefore, that if an account with an MFI is jointly held by a domestic household and a non-resident household, allocating the deposits fully to domestic residents would be in line with that convention for balance of payments purposes.

#### 4.4.9 Valuation principles for deposits

Article 8 of Regulation ECB/2021/2 states that “deposit liabilities and loans shall be reported at their principal amount outstanding at the end of the month” and that “deposit liabilities and loans shall not be netted against any other assets or liabilities”.

The following rules apply for statistical reporting.

- Deposit liabilities are to be reported at the nominal amount outstanding and on a gross basis, where nominal amount means the amount of principal that a debtor (in this case, the reporting MFI) is contractually obliged to repay to a

creditor, in line with the ESA 2010 (7.65). On a gross basis means that no claims against the deposit holder are deducted from the deposit.

- Interest payable on deposits should be reported on the balance sheet as it accrues rather than when it is actually paid, and should be recorded under the item “accrued interest on deposits”, sub-item “remaining liabilities”, rather than being added to the deposit to which it relates. The ESA 2010 also requires interest to be recorded as it accrues, not when it is paid (4.50, 5.43), and the accruing interest to be recorded under the appropriate instrument category (5.242) rather than under “remaining liabilities”. The treatment in MFI balance sheet statistics is preferred for monetary policy analysis, given that it records the amount actually in the account of the deposit holder and not an imputed amount (the accruing interest) not yet credited to the account.
- MFI balance sheet statistics require negative interest accruals on deposits, where relevant, to be recorded on a gross basis (i.e. without a set-off between the assets and liabilities side). Negative accrued interest on deposits should be imputed to the liabilities side of the balance sheet (where the underlying business is recorded) and recorded with a negative sign under “remaining liabilities” until payment falls due.
- The transaction value of deposits excludes fees and any other charges.
- When submitting MFI balance sheet data to the ECB, NCBs must ensure that liability (and asset) positions denominated in foreign currencies are converted into euro using market exchange rates prevailing on the balance sheet date (see also Section 3.3 and the ESA 2010, 7.66). MFIs must distinguish in their monthly reporting between deposits denominated in euro and those denominated in foreign currency. MFIs report the amounts of deposits denominated in each of the main foreign currencies on a quarterly basis, and this information is used by the ECB to remove (as an approximation) the effect of exchange rate changes from the derivation of transactions (see also Section 7.2.2).

These requirements ensure that MFI balance sheet reporting of deposits for statistical purposes are unaffected by the concept of “fair valuation” in international accounting standards.

## 4.5 Debt securities held and debt securities issued

As defined in Regulation ECB/2021/2, and in line with the ESA 2010 (5.90), debt securities are securities with the following characteristics:

- (i) are negotiable and can be traded or offset on secondary markets, or can be sold on the market;
- (ii) do not grant the holder any ownership rights over the issuer;

- (iii) give the holder the unconditional right to a fixed or contractually determined income in the form of coupon payments and/or a stated fixed sum on a specific date or dates, or starting from a date specified at the time of issue;
- (iv) state an issue date, issue price, redemption date (or maturity date) and redemption price.

Debt securities are reported in MFI balance sheet statistics with an original maturity of up to and including one year, over one year and up to and including two years, and over two years. These items on the MFI balance sheet correspond to debt securities (AF.3) in the ESA 2010. The ESA 2010 has two original maturity classes: one year or less (AF.31) and more than one year (AF.32).

Debt security categories exclude financial derivatives, *Schuldscheine* and similar instruments (see also Sections 4.3.9 and 4.4.8).

For the purposes of the ECB reporting scheme for MFI balance sheet statistics, debt securities are broken down into holdings of debt securities vis-à-vis all institutional sectors, including quarterly requirements vis-à-vis individual countries. Debt security issuance is broken down vis-à-vis individual currencies and aggregated at domestic, euro area and rest of world levels.

## 4.5.1 Specific cases and instruments

Regulation ECB/2021/2 (Part 2 of Annex II) indicates how various debt security-type instruments are to be reported. Not all specific instruments can be covered by this Manual; the treatment of the selected products defined in this section should therefore be used as a reference for other products with similar characteristics.

### 4.5.1.1 Negotiable deposits or loans

The category “debt securities” includes deposits or loans (traded loans) that have become negotiable, i.e. that have been restructured into a large number of identical documents that can be traded on secondary markets. Evidence of secondary market trading must exist, including in the form of market makers, and of frequent quotation of the financial asset, such as provided by bid-offer spreads (see also Section 4.3.9 on the classification of borderline debt instruments). Non-negotiable instruments issued by MFIs that subsequently become negotiable and can be traded on secondary markets should be reclassified as debt securities.

### 4.5.1.2 Negotiable debt securities not actively traded

Debt instruments that are negotiable but are not actively traded are nevertheless classified as debt securities. The distinction lies in the fact that the issuer of a negotiable instrument has no obligation to redeem the security from the holder

before maturity, while the issuer of a non-negotiable instrument has a commitment to redeem the security prematurely at the request of the holder.

An example of debt instruments that are not actively traded are those sold in private placements. Private placements involve an issuer selling debt securities directly to a small number of investors. These debt securities are typically not assessed by credit rating agencies and are not generally resold or repriced; consequently, the secondary market is shallow. However, most private placements meet the criterion of negotiability and are hence classified as debt securities (see ESA 2010, 5.103).

Sections 4.3.9.2 and 4.4.8.1 set out details of non-negotiable instruments that are not actively traded and are therefore classified as loans or deposits.

#### 4.5.1.3 Structured debt securities without 100% nominal capital guarantee

Structured debt securities are hybrid instruments that combine a debt security, or a basket of debt securities, with a financial derivative, or a basket of financial derivatives that are typically embedded and therefore inseparable from the debt securities. They fall into two main categories: “capital guaranteed” or “principal invested” securities, and “capital-at-risk” securities where it is not guaranteed that 100% of the capital originally invested will be repaid at maturity.

Regulation ECB/2021/2 defines debt securities with nominal capital guarantee below 100% as instruments that, at maturity, may have a contractual redemption value in the issuing currency lower than the amount originally due. Under the Regulation, amounts of debt securities issued with a less than 100% nominal capital guarantee must be identified separately within the original maturity band of up to and including two years. This is because debt securities issued by an MFI with an original maturity of up to two years are monetary instruments included in M3, but items with some degree of capital uncertainty at redemption may be viewed differently from other instruments in this category.

#### 4.5.1.4 Subordinated debt

Subordinated debt issued by MFIs in security form is classified as debt securities issued (just as subordinated debt issued by MFIs in the form of deposits is classified as deposits). Where all subordinated debt issued by an MFI is identified as a single amount for statistical purposes, Regulation ECB/2021/2 classifies the amount as debt securities issued on the ground that most subordinated debt is in security form. Subordinated debt should not be included in capital and reserves (see also Section 4.4.8.6 on subordinated debt in the form of deposits). Similar treatment applies for holdings of subordinated debt in security form.

#### 4.5.1.5 Securities with embedded derivatives

Negotiable instruments combining debt and derivative features, including negotiable debt instruments containing embedded derivatives, and negotiable instruments whose redemption value and/or coupon is linked to the performance of an underlying reference asset, asset price or other reference indicator over the life of the instrument are classified under “debt securities held”, if assets, or under “debt securities issued”, if liabilities. This type of instrument may be referred to as a hybrid debt security.<sup>81</sup>

Debt securities with embedded derivatives are classified according to the ESA 2010 (5.220), which requires the underlying instrument and associated derivative to be reported separately where possible, similarly to deposits with embedded derivatives (hybrid deposits) in Section 4.4.8.3. Where separation is not possible, the instrument should be classified and valued according to the main characteristics of the entire contract. The instrument is valued based on its primary characteristics, even though the value of that security or loan may well differ from the values of comparable securities and loans because of the embedded derivative.<sup>82</sup> Where valuation changes arise from one reporting period to the next, they are reported as revaluation adjustments.

While IFRS 9 (4.3) requires a host contract, which is an asset falling within the scope of IFRS, not to be separated but classified according to the main characteristics of the entire contract, the ESA 2010 guidance is the approach followed for MFI balance sheet reporting of debt securities held (assets) owing to the need for equal treatment on both sides of the balance sheet.

Where the original maturity of the instrument is up to two years and the contractual redemption value in the issuing currency at maturity is lower than the amount originally invested, it is reported under the sub-item “debt securities up to two years and nominal capital guarantee below 100%”.

#### 4.5.1.6 Depositary receipts

Depositary receipts, also called global depositary receipts, are negotiable instruments issued by a bank to represent securities (bonds or equities) that are listed on a foreign stock exchange (see also the ESA 2010, 5.143). The depositary receipt is traded on a local stock exchange and thus enables the holder to (indirectly) trade the underlying security on the local stock exchange even though this security remains listed on its (foreign) home stock exchange.

The mechanism regulating the issuance and life of a depositary receipt is as follows:

---

<sup>81</sup> Examples include turbos, which allow for leveraged participation in rising or falling prices of underlying assets, and equity warrant bonds, which give holders the option to purchase equity at a fixed contract price during a predetermined period or on a particular date.

<sup>82</sup> See the BPM6 (5.83(d)) on the types of financial arrangements that are not considered to be financial derivatives.

- (i) the (domestic) bank issuing the depositary receipt purchases securities of the (foreign) company on the foreign stock exchange;
- (ii) the securities are grouped into packets and each packet is issued as a depositary receipt on the local stock exchange;
- (iii) the depositary receipt is typically denominated in the local currency.

For the purposes of MFI balance sheet statistics, the holder of a depositary receipt records a holding of the underlying security (asset) and does not record a claim on the issuer of the depositary receipt, which merely administers the arrangement. The holding of the underlying security is recorded vis-à-vis the original issuer. Analogously, the bank that issues the depositary receipt excludes the holdings of the underlying securities and the depositary receipts that it has issued from its statistical balance sheet.

#### 4.5.1.7 Non-participating preference shares

Non-participating preference shares are classified as debt securities in line with the ESA 2010 (5.97). They pay a fixed dividend to holders (treated as interest income), but do not allow the holder to participate in the issuer's residual assets on liquidation. All other types of preference shares are classified as equity.

#### 4.5.1.8 Holdings of own debt securities

Holdings by MFIs of own securities comprise securities which were purchased by another investor at issue and then repurchased by the original issuer, as well as securities effectively issued and retained by the holder at issuance. Own holdings of debt securities are not envisaged in the ESA 2010, given that an institutional unit cannot have a claim on itself (ESA 2010, 2.01). The purchase by an institution's unit of its own debt securities is to be recorded as a "redemption of liabilities rather than an acquisition of consolidating assets" and it results in a netting of assets and liabilities (ESA 2010, 5.30).

In accordance with Article 8(4) of Regulation ECB/2021/2, MFIs must exclude their own holdings of debt securities from "debt securities held" and "debt securities issued". The definition of "own holdings of securities" in Article 2 of that Regulation is broad in order to ensure that such holdings are reported off-balance-sheet in a harmonised manner across jurisdictions.

MFIs' own holdings of debt securities are collected as an off-balance-sheet item in accordance with Table 1 in Part 2 of Annex I to Regulation ECB/2021/2. The purpose of the collection is to interpret how developments in MFIs' actual issuance into the market may relate to, or be substituted by, the retention of own securities (e.g. for use as collateral in refinancing operations). MFIs should preferably report the off-balance-sheet item at market value, or alternatively at the value at which the debt securities were purchased by the reporting institution if they had previously

been sold, or at the value recorded in their accounting balance sheet in accordance with Article 8(1) of Regulation ECB/2021/2 (if they are recorded in the accounting balance sheet).

Holdings of debt securities resulting from “retained” or “internal” securitisations (i.e. where the debt securities issued by an FVC are placed with the originating MFI) are not to be treated as holdings of own securities. They are to be reported on the MFI balance sheet as holdings of FVC securities.

#### 4.5.1.9 Debt securities issued or held on a trust basis

Securities issued or held by a reporting MFI on a trust basis are treated analogously to deposits received and loans issued on a trust basis, as detailed in Sections 4.3.9.13 and 4.4.8.7.

Where securities are issued by a reporting MFI on behalf of a third party, the securities should not appear on the reporting MFI’s balance sheet. They are reported as securities issued on the balance sheet of the third party only. The holders of such securities should classify their holdings vis-à-vis the original issuer (i.e. the third party in this case). This may happen, for example, where a parent MFI issues securities through a branch. Only where the branch itself is the legal issuer may such securities be reported on its balance sheet.

#### 4.5.1.10 Securities lending, short selling and reverse repos

Securities temporarily acquired or sold under a repo or similar agreement, or borrowed or lent under a securities lending operation, remain on the original owner’s balance sheet and are not to be recorded on the balance sheet of the temporary acquirer. An MFI which sells securities acquired under a repo or that are borrowed must record a negative holding under debt securities held.

As per the ESA 2010 (5.126), legal title passes on both sides of the transaction so that borrowed securities and collateral can be sold or “on-lent”. A trader in securities who does not own a particular security but expects its price to fall may nevertheless sell it in the expectation of buying it back more cheaply later. This is called going short. The short seller must deliver the security to the buyer, and to do so the seller must borrow the security, probably through a reverse repo. Since the security will remain on the balance sheet of the original owner and appear on the balance sheet of the new owner, the short seller must record a negative holding to avoid double-counting. Similar treatment applies where the security has not first been borrowed (naked short selling).

#### 4.5.1.11 NCBs' external reserves

NCBs' external reserves in the form of debt securities are classified as debt securities for the purposes of MFI balance sheet statistics. (For further details on the Eurosystem's reserve assets, see also Section 4.11.)

#### 4.5.2 Valuation principles for debt securities

Article 8 of Regulation ECB/2021/2 states that the accounting rules to be followed by MFIs are those laid down in the national transposition of Council Directive 86/635/EEC, as well as in any other international standards applicable, unless otherwise provided for in the Regulation. It also requires all financial assets and liabilities to be reported on a gross basis for statistical purposes, without prejudice to the accounting practices and netting arrangements prevailing in Member States. For debt securities held and issued it is recommended that market valuation is applied in line with the requirements of the ESA 2010 (7.33) and other international statistical and accounting practices. Nevertheless, other valuations may be acceptable provided that the reported amounts do not diverge significantly from the market value.

The following guidance on valuation applies for statistical reporting.

- The ECB's preference is that reporting MFIs should present asset and liability positions in MFI balance sheet statistics at current market value or a close equivalent to market value (fair value). It is, however, accepted that MFIs may, in practice, continue to use local accounting rules requiring a valuation other than current market value, such as acquisition value or the lower of market price and acquisition value (i.e. the book value, provided that this value does not diverge significantly from the market value).
- While securities on the liabilities side of the statistical balance sheet may not necessarily always be reported at market value, on the assets side at least some or all holdings must be valued at current market prices. As mentioned above, local accounting valuations may also be used, provided they are not substantially different from market valuation. The use of different valuation methods inevitably affects balance sheet outstanding amounts and transactions (see also Sections 5.2 and 5.3). Similarly, the ESA 2010 requires both short-term debt securities issued at par and short-term debt securities issued at a discount to be valued at nominal value if current market prices are not available (7.68). The ESA 2010 states that such treatment should be confined to short-term debt securities, whereas longer-term debt securities are always to be valued at current market price, whether they are coupon bonds or deep-discounted/zero-coupon paper (7.69). In principle, consistency in the valuation of issues and holdings of securities issued by MFIs is important in MFI balance sheet statistics because they may be monetary instruments and because holdings of the money-holding sector are calculated as a residual.



- Part 1 of Annex II to Guideline ECB/2021/11 requires accrued interest on debt securities held and issued to be identified within “remaining assets” and “remaining liabilities” respectively or within the corresponding instrument category. NCBs should report these accruals in accordance with national practices. Interest receivable should be recorded on the balance sheet as it accrues rather than when it is actually received and is recorded as a transaction. The ESA 2010 also requires interest to be recorded as it accrues and not when it is paid (4.50, 5.43), but requires the accruing interest to be recorded under the appropriate instrument category (5.242). In addition, the ESA 2010 requires that for securities issued at a premium or discount, the difference between the issue price and its face or redemption value when it matures is a measure of interest that the issuer is obliged to pay over the life of the debt security (6.53).
- Debt securities denominated in foreign currency should be converted into national currency at the mid-market closing exchange rate on the balance sheet date, in line with the ESA 2010 (6.64) (see also Section 3.3).
- Fluctuations in the valuation of assets and liabilities that arise from changes in the price at which assets and liabilities are recorded or traded give rise to revaluation adjustments. These include the changes that occur over time in the value of end-of-period outstanding amounts because of changes in the reference value at which assets and liabilities are recorded, i.e. holding gains/losses. The nature and extent of revaluation adjustments depend on the valuation method used. Although market valuation is recommended on both sides of the balance sheet, in practice a variety of different valuation methods may be employed to avoid the need for reporting agents to provide data on different bases. It is important, however, that revaluation adjustments properly complement the accounting rules that are applied, so that changes in outstanding amounts corrected for revaluation adjustments result in accurate transaction data, which are the most important data for analysis. The adjustment of price revaluations of assets and liabilities and how transactions in debt securities are derived based on varying valuation practices are discussed in Chapter 5.
- The ECB uses quarterly data on the amount of debt securities issued, denominated in each of the main foreign currencies, to remove (as an approximation) the effect of exchange rate changes from the “flows” data (see also Section 7.2.2).

## 4.6 Equity (assets)

Equity represents property rights on corporations or quasi-corporations. It also has the following characteristics:<sup>83</sup>

---

<sup>83</sup> See Regulation ECB/2021/2 (point 4 in the table in Part 2 of Annex II), the ESA 2010 (4.53 and 5.154) and the International Monetary Fund [Handbook on Securities Statistics](#) (2.26).

- (i) it provides the holder with a claim on the residual value or net worth of the issuing entity after all claims of all other creditors have been met, i.e. in the event of default, all third-party liabilities are repaid first;
- (ii) there is no obligation to pay the holder a fixed or predetermined income or dividend;
- (iii) there is not usually a stated maturity date, but there is a specific issue date with a stated issue price;
- (iv) they are negotiable, in the case of listed and unlisted shares only.

Equity as defined in Regulation ECB/2021/2 includes unlisted shares, listed shares and other equity. These items correspond to the ESA 2010 item “equity” (AF.51), which is further broken down into “listed shares” (AF.511), “unlisted shares” (AF.512) and “other equity” (AF.519).

For the purposes of the ECB reporting scheme for MFI balance sheet statistics, holdings of equities are reported monthly; they are further broken down by type of equity and by institutional sector of the counterparty on a quarterly basis. Total equity holdings vis-à-vis individual EU countries are also reported on a quarterly basis.

Issues of equity by a reporting MFI are identified separately as a sub-item of the liability category “capital and reserves”, along with undistributed profits and other elements of shareholders’ funds (see Section 4.8).

#### 4.6.1 Listed shares

Listed shares, also referred to as quoted shares, are equity securities listed (or registered) on an exchange. The exchange may be a recognised stock exchange or any other form of secondary market. As per the ESA 2010 (5.146), the existence of quoted prices on an exchange means that current market prices are usually available for listed shares. However, it is also possible that listed shares might only be traded infrequently, or not at all.

#### 4.6.2 Unlisted shares

Unlisted shares, also referred to as unquoted shares, are equity securities that are not listed (or registered) on an exchange. This includes shares issued by limited liability companies where the criteria in the ESA 2010 (5.147-148) are met. Unlisted shares may be referred to as “private equity”.

### 4.6.3 Other equity

Other equity is defined as all other forms of equity held in a corporation that are not shares and not reported as listed or unlisted shares, as per the ESA 2010 (5.153-5.154).

This category includes capital invested in quasi-corporations, such as capital invested by reporting agents in their non-domestic branches (see Section 4.6.4.2). It also includes holdings of capital in central banks (see Section 4.6.4.5).

### 4.6.4 Specific cases and instruments

#### 4.6.4.1 Debt securities convertible to equity

Convertible debt securities, such as contingent convertible (coco) bonds, are recorded as debt securities until such time as conversion to equity takes place. The conversion from debt securities to equity is a transaction, owing to the mutual agreement of both parties implicit in the characteristics of the convertible security, and should not be treated as a reclassification between debt securities and equity. If there is a difference between the valuation of the debt securities (prior to conversion) and equity (at conversion), a revaluation adjustment should be made to debt securities.

#### 4.6.4.2 Capital endowments versus intragroup loans

For branches and subsidiaries, financing through inter-company or interbank funding can be classified as either capital endowments (equity) or inter-company lending to a branch or subsidiary. Such positions should be classified according to the criterion of loan and the equity instruments concerned, as detailed in Section 4.3.9.5 on the recording of intragroup loans versus capital endowments. That section also addresses a borderline case, in which a perpetual loan with no obligation to make payments, no stated maturity and where all third-party liabilities are repaid first, is classified as equity based on the characteristics of the equity, as outlined above (beginning of Section 4.6).

Where the reporting MFI is the provider of intragroup funding, its corresponding equity holdings should be reported at market value in line with the valuation principles outlined in Section 4.5.2. Where valuation effects arise from changes in the reported value of equities, they are recorded as revaluation adjustments (see Chapter 5). Should losses occur in the issuing entity, the following treatment applies.

- Where the reporting MFI holds equity in a subsidiary, that MFI (head office) is not liable for any losses in the subsidiary given that there is a lower bound of zero on the value of the shares it owns. Equity held in subsidiaries should be

allocated according to the characteristics of the listed shares, unlisted shares and other equity, as outlined in Section 4.6.

- Where the reporting MFI holds equity in a branch, the investment by the reporting MFI (head office) can assume a negative position should losses in the branch occur. This should be reported as a negative position under “equity held” by the reporting MFI (head office). Should the loss-making branch cease to exist as a result (and be non-resident), the losses are assumed by the reporting MFI (head office) and reported under “capital and reserves” rather than under “equity held”. Equity in branches should be allocated to “other equity”.

Where the reporting MFI (branch or subsidiary) is the recipient of such funding, it is reported as “equity capital raised”, a sub-item of “capital and reserves”. As outlined in Section 4.8 on the recording of capital and reserves, equity capital raised is recorded at its original value on the balance sheet. It should reflect the amount raised, including any share premium or discount. Revaluation adjustments should therefore not arise.

#### 4.6.4.3 Preference shares

Holdings of participating preference shares are classified as equity securities, regardless of income considerations, on the basis that they provide the holder with a claim on a share in the residual value of the corporation on dissolution. Similarly, redeemable or retractable preference shares, which can be redeemed at the request of either the issuing entity or the shareholder (and have strict conditions attached on issue), are classified as equity securities. Where such shares are retained following redemption rather than being cancelled, they are classified as unlisted equity securities. Such shares continue to entitle the holder to a share in the residual value of the corporation on liquidation, although they carry no voting rights and no dividends are payable.

Convertible preferred shares, cumulative/non-cumulative preferred shares, perpetual preferred shares, floating preferred shares, etc., are recorded in a similar way if they provide the holder with a claim on the residual value or net worth of the issuing entity.<sup>84</sup> Structured preference shares, which are based on an underlying portfolio of financial instruments including derivatives, are recorded under “equity” or “financial derivatives”, depending on the main characteristics of the contract, where separation is not possible (treated analogously to hybrid debt securities, as discussed in Section 4.5.1.5).

#### 4.6.4.4 Holdings of own equity

An MFI’s holdings of its own equity comprise securities which were purchased by another investor at issue and then repurchased by the issuing MFI, as well as

---

<sup>84</sup> Further examples of equity securities are discussed in Chapter 3 of the IMF Handbook on Securities Statistics.

securities effectively issued and retained by the holder at issuance.<sup>85</sup> Own holdings of equity are not envisaged in the ESA 2010, given that an institutional unit cannot have a claim on itself (ESA 2010, 2.01). Where a corporation buys back its own equity (a share buyback), it is recorded as a financial transaction with existing shareholders that reduces the number of shares outstanding (“equity capital raised”), even if the issuer keeps the shares available for future reissuance (ESA 2010, 5.151).

In accordance with Article 8(4) of Regulation ECB/2021/2, reporting agents’ holdings of equity that they have issued themselves are not to be included under “equity” and should be excluded from “equity capital raised” under “capital and reserves” on the liabilities side of their balance sheet. The definition of “own holdings of securities” in Article 2 of Regulation ECB/2021/2 is broad in order to ensure that such holdings are reported off-balance-sheet in a harmonised manner across jurisdictions. Holdings of own equity do not include share buybacks or stock repurchases where the MFI purchase of the equity results in the shares being extinguished.

MFIs’ own holdings of equity are collected as an off-balance-sheet item in accordance with Table 1 in Part 2 of Annex I to Regulation ECB/2021/2. MFIs should preferably report the off-balance-sheet item at the market value of the equity, or alternatively at the value at which the equity was acquired in the case of share buybacks, or at the value recorded in their accounting balance sheet in accordance with Article 8(1) of Regulation ECB/2021/2 (if the equity is in fact recorded in the accounting balance sheet).

#### 4.6.4.5 Share of capital in the ECB and NCBs

The capital of the ECB comes from contributions by NCBs of all EU Member States in proportions determined by the ECB’s “capital key”. In line with Article 29 of the Protocol on the Statute of the European System of Central Banks and of the European Central Bank, NCBs’ shares in the capital key are weighted according to the respective Member States’ shares in the total population and the gross domestic product of the EU, in equal measure, as notified to the ECB by the European Commission. These weightings are adjusted on a five-yearly basis and whenever there is a change in the membership of the EU. Based on the adjusted capital key, the Governing Council of the ECB adopts decisions on the contribution of paid-up capital and the respective transfers to or from NCBs.

The contributions of paid-up capital to the ECB are to be reported as holdings of other equity (ESA 2010, 5.154). Changes in NCB contributions resulting from adjustment of the capital key are to be treated as transactions.

Typically, the capital of an NCB is held by the respective government and is treated as holdings of other equity (ESA 2010, 5.154). Where capital in the NCB is instead

---

<sup>85</sup> See the definition in Article 2 of Regulation ECB/2021/2.

held by MFIs, those MFIs report equity holdings in the NCB as listed shares or as other equity, as appropriate.

#### 4.6.5 Valuation principles for equity

Article 8 of Regulation ECB/2021/2 states that the accounting rules followed by MFIs are those laid down in the national transposition of Council Directive 86/635/EEC, as well as in any other international standards applicable, unless otherwise provided for in the Regulation. It also requires all financial assets and liabilities to be reported on a gross basis for statistical purposes, without prejudice to accounting practices and netting arrangements prevailing in Member States. For holdings of equity, it is recommended that market valuation be applied in line with the requirements of the ESA 2010 and other international statistical and accounting practices. Nevertheless, other valuations may be acceptable provided the reported amounts do not diverge significantly from the market value.

The ESA 2010 (7.33) requirement is for assets and liabilities to be valued at market prices on the date to which the balance sheet relates. Specifically, the ESA 2010 (7.71) requires listed shares to be valued at market price. The general market price rule also applies to unlisted shares and other equity, although, by definition, no market prices are available for these items. The ESA 2010 (7.73) sets out clear rules for the valuation of unlisted shares. Their values should be estimated with reference to either:

- (i) the values of listed shares, where appropriate;
- (ii) the value of own funds;
- (iii) discounting forecast profits by applying an appropriate market-price-to-earnings ratio to the smoothed recent earnings of the institutional units.

However, these estimates must take into account the liquidity (assumed to be inferior for unlisted shares), the net worth accumulated by the business and its branch of activity (7.73). The ESA 2010 (7.74) goes on to suggest the following formula that takes into account own funds (but with discretion, having regard to differences between listed and unlisted corporations):

- value of unlisted shares = market price of similar listed shares x (own funds of unlisted corporations/own funds of similar listed corporations).

The ESA 2010 (7.07) defines own funds as the sum of net worth (B.90) plus the value of equity and investment fund shares (AF.5) as liabilities in the balance sheet. This is called the capitalisation approach.

Sections 5.2 and 5.3 discuss how transactions in equity (assets) are derived from balance sheet levels based on varying valuation practices.

## 4.7 Investment fund shares/units

Under Regulation ECB/2021/2, investment fund shares/units are those issued by investment funds, themselves defined in the Regulation as CIUs that invest in financial and/or non-financial assets with the object of investing capital raised from the public. The ESA 2010 (5.160-5.161) defines investment fund shares or units (AF.52) as shares of an investment fund if the fund has a corporate structure, or units if the fund is a trust. Investment funds are defined in the ESA 2010 as CIUs through which investors pool funds for investment in financial and/or non-financial assets. They may be mutual funds, unit trusts, investment trusts or undertakings for collective investments in transferable securities (UCITS) and may be open-ended, semi-open or closed-end funds. These instruments are further split depending on the issuer: i.e. MMF and non-MMF investment funds.

### 4.7.1 MMF shares/units

MMFs are defined in Article 2 of Regulation ECB/2021/2 (see Section 2.1.3). MMFs are part of the MFI sector, and their shares/units (ESA 2010, AF.521) are part of the money-holding sector in the euro area and form part of euro area broad money (M3). For this reason, Regulation ECB/2021/2 requires an MFI's holdings of MMF shares/units to be reported separately on the assets side of the MFI balance sheet and an MMF's issues of shares/units to be reported separately on the liabilities side of the MFI balance sheet.

### 4.7.2 Non-MMF investment fund shares/units

Non-MMF investment funds are defined in Article 1(1) of Regulation ECB/2013/38. Non-MMF investment fund shares/units correspond to the instrument category AF.522 in the ESA 2010. They are defined in the ESA 2010 (5.165) as investment fund shares or units other than MMF shares or units that represent a claim on a portion of the value of an investment fund other than an MMF and are issued by investment funds.

### 4.7.3 Valuation principles for investment fund shares/units

Article 8 of Regulation ECB/2021/2 states that the accounting rules to be followed by MFIs are those laid down in the national transposition of Council Directive 86/635/EEC, as well as in any other international standards applicable, unless otherwise provided for in the Regulation. It also requires all financial assets and liabilities to be reported on a gross basis.

Investment fund shares/units should be reported at market value, in line with the ESA 2010. The ESA 2010 (7.33) requirement is for assets and liabilities to be valued at market prices on the date to which the balance sheet relates. The ESA 2010 (5.162 and 5.167) also specifies that investment fund shares may be listed or

unlisted. Unlisted shares are usually repayable on request at a value corresponding to their share in the own funds of the financial corporation. Transactions in investment fund shares or units include the value of net contributions to a fund.

Revaluation adjustments are reported for MMF shares and units issued and held, but not for holdings of non-MMF investment fund shares and units. The allocation should be performed in such a way as to only cover the actual price revaluations that are reflected as changes in the value of MMF shares/units and that are the result of losses/gains on the fund's assets. Where derogations are granted to some or all MMFs in respect of the reporting of revaluation adjustments, as per Guideline ECB/2021/11, NCBs are nevertheless expected to provide information on a best-efforts basis, especially when the amounts involved are significant.

## 4.8 Capital and reserves

This category comprises amounts arising from equity capital issued by reporting agents, representing, for the holder, property rights in the MFI and, generally, an entitlement to a share in its profits and in its residual value in the event of liquidation. Profit (or loss) as recorded in the statement of profit and loss, funds arising from income not distributed to the shareholders and provisions set aside by reporting agents in anticipation of likely future payments and obligations are also included.

Capital and reserves generally includes the counterpart of any revaluations of assets held, which is particularly relevant if the reporting agent is subject to fair value accounting.

Regulation ECB/2021/2 requires a breakdown of capital and reserves into the following components, which are presented in greater detail in the following sections:

- (i) equity capital raised;
- (ii) profit or loss accumulated in the accounting period;
- (iii) income and expenses recognised directly in equity;
- (iv) funds arising from income not distributed to shareholders;
- (v) specific and general provisions against assets.

### 4.8.1 Equity capital raised

This item includes the full amount of equity capital raised. It is recorded at its original value on the balance sheet and should reflect the amount raised, including the share premium or discount, i.e. the difference between the nominal value of issued equity and the amount actually raised. It includes all funds contributed by the owners, from the initial contribution to any subsequent issuance of forms of ownership, and reflects the full amount of capital raised. Equity capital raised is reported net of the reporting MFI's holdings of own securities, as per Section 4.6.4.4.



The distinguishing feature of equity compared with other financial instruments is that equity instruments must convey a right to the residual value of a company and do not give rise to a contractual obligation for the institution to deliver cash or another financial asset under conditions that are potentially unfavourable to the issuer.

Ordinary shares represent the typical form of equity. Other instruments, such as preference shares, partly paid shares, redeemable shares or non-voting shares would also be classified as equity where they meet the functional criteria mentioned above (see also Section 4.6 on equity held). Non-participating preference shares are reported as debt securities, while participating preference shares (provided that the dividend distribution is discretionary) are recorded as equity. Where MFIs issue instruments in tranches with different characteristics, they should be assigned according to the characteristics of the securities in each tranche.

#### 4.8.2 Profit or loss accumulated in the accounting period

This item is a cumulative account consisting of all profits and losses of the current accounting period, as recorded in the statement of profit and loss, that have not yet been transferred to retained earnings. These interim profits and losses result from the accumulation of income-generating items, such as (net) interest, fees and commissions, trading income, dividends/other income from equity investment, etc., and of operating expenses, such as payroll costs, administrative expenses, etc. It also includes realised and unrealised gains and losses where they are allocated to the statement of profit and loss according to the accounting framework.<sup>86</sup>

Operating profits/losses are defined as the amounts that (i) accumulate during the MFI's accounting/financial reporting period (resulting from accumulated interest and commission income and expenditure, gains or losses on financial transactions, etc.) and (ii) are acknowledged for prudential reasons but have not yet been formally recognised as profits/losses in the annual (or quarterly) accounts. They comprise gains/losses and possibly unrealised losses, but generally not unrealised gains (which remain in the revaluation accounts).

Given that operating profits/losses do not represent a third-party claim, reporting agents should preferably report them net of any provisions for future tax and dividend payments (which should be classified under "remaining liabilities"). However, NCBs may follow the supervisory/accounting approach, which requires MFIs to enter profits/losses in "remaining liabilities" and move them to the "capital and reserves" sub-item only after they have been formally recognised as such when the accounts for the financial reporting period have been closed. At the end of the accounting period the accumulated profit or loss is reclassified as retained earnings within the item "funds arising from income not distributed to shareholders" until a decision on the distribution of dividends or appropriation as reserves has been made.

---

<sup>86</sup> If the accounting framework allows "hedge accounting", i.e. the possibility of matching the gain/loss on a hedging instrument to the hedged item, the net gain/loss is normally recorded in the statement of profit and loss or directly in equity.

### 4.8.3 Income and expenses recognised directly in equity

This item is the counterpart to the net revaluations of assets and liabilities which are recorded directly in equity and not in the statement of profit and loss according to the accounting framework. Once realised, these gains and losses are normally moved to profit and loss for the period. This category typically records unrealised gains and losses relating to securities that are not measured at fair value through profit and loss. This item is the accumulated value of the revaluations posted in both current and previous years.

### 4.8.4 Funds arising from income not distributed to shareholders

This item includes reserves and other funds, such as the portion of income from the current year and net income for the period, that will not be distributed to shareholders. Reserves may be required by law and are usually created with the aim of protecting the institution from possible general losses or from specific activities undertaken. It also includes profit or loss brought forward after the end of the accounting period and before a decision on the distribution of dividends or appropriation as reserves has been taken. Once the decision on the distribution of dividends is taken, the component appropriated as reserves remains within “funds arising from income not distributed to shareholders”.

Dividends awaiting distribution are reported under “remaining liabilities”.

### 4.8.5 Specific and general provisions against assets

This item comprises specific and general provisions against loans, securities and other types of assets. Such provisions should comprise all allowances for impairments and loan losses. Provisions should be reflected in capital and reserves only if they are not netted against the asset position of the accounting balance sheet to which they refer, i.e. to balance the loss recorded in the statement of profit and loss. When a new provision is created, “provisions” increases by an equivalent amount, the counterpart being a cost in the statement of profit and loss.

Provisions representing liabilities against third parties, such as provisions for pending legal issues and litigations, pensions and related benefits, etc., should not be included here but reported under “remaining liabilities”.

## Box 2

### Bridging table between IAS/IFRS/GAAP and MFI balance sheet statistics

The table below links the sub-components of capital and reserves with the definition used in FINREP on the basis of IAS/IFRS guidance and national GAAP.

BSI item	FINREP item	Reference for the definition of the FINREP item	FINREP (Annex IV – nGAAP templates) reference (table, row_column)
Equity capital raised	+ Capital	IAS 1.54(r), BAD Art. 22, IAS 1.78(e)	F01.03,010_010
	+ Share premium	IAS 1.78(e); CRR Art. 4(124)	F01.03,040_010
	+ Equity instruments issued other than capital	FINREP Annex V, Part 2.18-19, IAS 32.28-29	F01.03,050_010
	+ Other equity	IFRS 2.10; FINREP Annex V, Part 2.20	F01.03,080_010
	- Treasury shares	IAS 1.79(a)(vi); IAS 32.33-34, AG 14, AG 36; FINREP Annex V, Part 2.30	F01.03,240_010
	- Share capital repayable on demand (1)	IAS 32 IE 33; IFRIC 2; FINREP Annex V, Part 2.12	F01.02,270_010
Profit and loss accumulated in the accounting period	+ Profit or loss attributable to owners of the parent	IAS 1.81B (b)(ii)	F01.03,250_010
	- Interim dividends	IAS 32.35	F01.03,260_010
	- Fair value changes of the hedged items in portfolio hedge of interest rate risk (assets)	IAS 39.89A(a); IFRS 9.6.5.8	F01.01,250_010
	+ Fair value changes of the hedged items in portfolio hedge of interest rate risk (liabilities)	IAS 39.89A(b); IFRS 9.6.5.8	F01.02,160_010
Income and expenses recognised directly in equity	+ Accumulated other comprehensive income	CRR Art. 4(1)(100)	F01.03,090_010
Funds arising from income not distributed to shareholders	+ Retained earnings	CRR Art. 4(1)(123)	F01.03,190_010
	+ Revaluation reserves	IFRS 1.30, D5-D8; FINREP Annex V, Part 2.28	F01.03,200_010
	+ Other reserves	IAS 1.54; IAS 1.78(e)	F01.03,210_010
Specific and general provisions against assets (2)	+ Loans and advances (3) – Allowances for financial assets without increase in credit risk since initial recognition (Stage 1)	IFRS 9.5.5.5, FINREP Annex V, Part 1.32, 44(a)	F12.01,080_100 Also: see references to columns 20-90
	+ Loans and advances – Allowances for debt instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	IFRS 9.5.5.3, FINREP Annex V, Part 1.32, 44(a)	F12.01,250_100 Also: see references to columns 20-90
	+ Loans and advances – Allowances for credit-impaired debt instruments (Stage 3)	IFRS 9.5.5.1, 9. Appendix A, FINREP Annex V, Part 1.32, 44(a)	F12.01,430_100 Also: see references to columns 20-90
	+ Non-trading financial assets mandatorily at fair value through profit or loss – Loans and advances – Accumulated negative changes in fair value due to credit risk on non-performing exposures (4)	FINREP Annex V, Part 2.69, FINREP Annex V, Part 1.32, 44(a)	F04.02.01,110_020
	+ Financial assets designated at fair value through profit or loss – Loans and advances – Accumulated negative changes in fair value owing to credit risk on non-performing exposures	FINREP Annex V, Part 2.69, FINREP Annex V, Part 1.32, 44(a)	F04.02.02,120_020

(1) That part to which significant restrictions do not apply is not considered equity in statistical terms and is therefore subtracted.

(2) Under IAS/IFRS this category only includes allowances on loans.

(3) This FINREP item also covers instruments that are not classified as loans in statistical terms. The allowances relating to instruments that do not meet the statistical definition should be excluded.

(4) As a proxy for impairment losses.

## 4.8.6 Transactions in capital and reserves

Operations which have an impact on capital and reserves result in transactions if they affect the reporting MFI's cash flows or the share of these flows for the investors.

Transactions in **equity capital raised** include new funds contributed by owners less withdrawal of equity. Given that equity is recorded net of own holdings (see Section 4.6.4.4), a buyback of the MFI's shares is recorded as a transaction, as is the conversion of bonds from debt to equity at the time of conversion.

Transactions in **profit or loss accumulated in the accounting period** would include income and expenses arising from actual business transactions, e.g. accrual of interest, reception of income from dividends and income generated by fees. Conversely, any changes arising from gains or losses recorded in the statement of profit and loss are recorded as revaluation adjustments (see Chapter 5). As set out in Section 4.8.2, when accumulated profit or loss is officially transferred to retained earnings, the transfer of the amounts between "profit and loss accumulated in the accounting period" and "funds arising from income not distributed to shareholders" should be regarded as a reclassification adjustment within "capital and reserves".

Transactions do not typically occur in **income and expenses recognised directly in equity**. Unrealised valuation changes should be recorded as revaluation adjustments. Realised valuation changes, which may represent an outflow of funds, occur when the valuation changes imputed to this item are realised and recorded in the statement of profit and loss, for example on the sale of a security whose valuation changes are recorded directly at equity. This operation would be considered to be a reclassification adjustment but, given that it is within capital and reserves, the aggregate will not change.<sup>87</sup>

Transactions in **funds arising from income not distributed to shareholders** would include outflows arising from dividend distributions to shareholders. As indicated above, the transfer of accumulated profit and loss to retained earnings should be recorded as a reclassification within capital and reserves.

**Specific and general provisions against assets** are normally impacted by the creation of new provisions, their reversal, or the write-off/write-down (or revaluation) of assets. When a provision is created or reversed, a counterpart entry is made in the statement of profit and loss, meaning that capital and reserves remains unchanged in the aggregate. In statistical terms, this effect can be viewed as an anticipation of future write-offs/write-downs on loans or revaluations on other assets and should therefore be treated as a revaluation adjustment. When a loan is written off/written down (as detailed in Section 5.4), the decrease in outstanding amounts is matched by a corresponding decrease in capital and reserves, impacting provisions

---

<sup>87</sup> The reclassification adjustment covers the gains/losses already accumulated under equity, while newly incurred gains/losses at the time of sale are directly recorded in the statement of profit and loss and represent revaluation adjustments.

(and the statement of profit and loss where the loss exceeds the imputed provisions). These effects should be treated as revaluation adjustments.

The treatment of provisions imputed against securities or other types of assets at the time that the corresponding asset ceases to be recorded on the balance sheet (i.e. in the case of sale) is more complicated. The treatment depends on the valuation method applied to the assets (i.e. statistical discrepancies arising from different valuation methods in the statistical and accounting balance sheet), but the underlying principle is that changes in provisions owing to such effects should not result in transactions.

## 4.9 Non-financial assets

Under the ESA 2010, non-financial assets fall into various categories of produced non-financial (AN.1) and non-produced non-financial assets (AN.2). Produced non-financial assets are outputs from production processes and include fixed assets, such as buildings, intellectual property, inventories and valuables. Non-produced non-financial assets comprise economic assets that come into existence other than through processes of production. They include land, natural resources, contracts, leases, licences and goodwill.

In accordance with Regulation ECB/2021/2, this category consists of tangible or intangible assets other than financial assets held by reporting agents, including for example:

- real estate (reported as a separate item on a quarterly basis), i.e. dwellings, other buildings and structures (both existing and under development) and land legally owned by reporting agents – this includes all real estate that is for the own use of reporting agents or that those agents may have taken into their possession as collateral on defaulted loans;
- machinery and equipment, valuables and intellectual property products, such as computer software and databases owned by the reporting agent;
- holdings of coins that are not intended for circulation, such as collector coins (see Section 4.2.3.3);
- gold, including in the form of coins, held by reporting agents (except central banks – see “monetary gold” in Section 4.11), as well as other types of commodities;
- virtual or crypto-currencies that are not financial assets;

- assets underlying financial leases used by the reporting agents (as lessees), as well as operational lease assets subject to on-balance-sheet recognition under IFRS 16<sup>88</sup>;
- emissions allowances, i.e. permits giving the owner the right to emit one tonne of carbon dioxide or equivalent, that may be held by reporting agents for trading or speculative purposes.

Financial assets regarded by the reporting MFI as fixed (e.g. shareholdings in subsidiaries or affiliates, loans, or debt securities that the MFI intends to hold to maturity) are not recorded here but under “equity”, “debt securities” or “loans” according to the type of instrument.

#### 4.9.1 Valuation principles for non-financial assets

The ESA 2010 (7.42) states that fixed assets are recorded at market prices if possible (or basic prices in the case of own-account production of new assets) or, if this is not possible, then at purchasers’ prices at acquisition reduced by the accumulated consumption of fixed capital. Items should be valued as if they were being acquired on the date to which the balance sheet relates (i.e. at current market prices). The valuation of non-financial assets should include any associated costs of ownership transfer.

Regulation ECB/2021/2 provides no specific guidance on the valuation of non-financial assets. They are covered by the general provisions of Article 8 of the national transposition of Council Directive 86/635/EEC with respect to the accounting rules to be followed by MFIs. For harmonisation purposes, the ESA 2010 guidance should be followed.

#### 4.10 Remaining assets and remaining liabilities

Remaining assets (or remaining liabilities) are the residual items on the balance sheet, comprising assets (or liabilities) not included elsewhere. NCBs may require the reporting of specific sub-positions included in this item. For the purposes of MFI balance sheet statistics, remaining assets (or liabilities) include what the ESA 2010 calls “other accounts receivable/payable” (AF.8), but also certain other items such as positions in financial derivatives (AF.71 in the ESA 2010) and accrued interest on deposits and loans, which the ESA 2010 recommends be recorded under the underlying instrument (see also Section 3.8.2). Net amounts receivable/payable in respect of future settlement of transactions in securities or foreign exchange

<sup>88</sup> IFRS 16 *Leases* introduced the on-balance-sheet recording of operating leases, except short-term leases or those with a low-value underlying asset (see IFRS 16:5). It includes a revised definition for identifying leases (see IFRS 16:9). The offsetting entry to an operational lease obligation is recorded under “remaining liabilities”. This is an apparent deviation from the definition of operating leases under the ESA 2010. Operating leases are defined by the ESA 2010 (15.08). The durable good that is the subject of the operating lease is recorded on the balance sheet of the lessor, given that there is no change of economic or legal ownership, and payments under the lease are rentals (a form of payment for services).

operations are also included, as are any statistical discrepancies that may arise when the statistical balance sheet is derived from the accounting balance sheet.

Under Guideline ECB/2021/11, some data on MFIs' remaining assets and remaining liabilities are reported monthly on a best-efforts basis (i.e. not as mandatory items but only to the extent that they are available to the NCB), e.g. transit items and suspense items. In addition, some items are relevant only for the Eurosystem and are to be reported by NCBs under Guideline ECB/2021/11 with respect to their own balance sheets, e.g. intra-Eurosystem positions arising from the allocation of euro banknotes (see Section 4.2 for an explanation of how these positions arise). Some additional quarterly breakdowns of MFIs' remaining assets and remaining liabilities are provided on a best-efforts basis for the purposes of compiling euro area financial accounts (see Section 8.2).

The categories "remaining assets" and "remaining liabilities" exclude certain financial instruments such as guarantees, commitments and administered and trust loans, which should not be recorded on the reporting MFI's statistical balance sheet if the reporting MFI does not bear the economic risks and returns of the loan (see also Sections 4.3.9 and 4.4.8). They should also exclude non-financial assets such as land and commodities, which are recorded under "non-financial assets" (see Section 4.9), and liabilities that the reporting MFI may regard as non-financial but which represent shareholders' funds (to be included in "capital and reserves" as per Section 4.8).

Remaining assets (or liabilities) on the MFI balance sheet include the positions outlined in the following sections. These are the contents of remaining assets/remaining liabilities, as set out in Regulation ECB/2021/2.

#### 4.10.1 Financial derivative positions subject to on-balance-sheet recording

A financial derivative is a financial instrument that is linked to another financial instrument, index or commodity and enables specific risks (e.g. changes in interest rates, foreign exchange rates, prices or credit standing) to be traded in financial markets in their own right. The ESA 2010 requires positions in financial derivatives to be recorded for both involved parties, whether the market value is available or not. In the latter case, the derivatives should be valued at either the amount required to buy out or to offset the contract (e.g. for over-the-counter options) or the amount of premium payable (7.86). The current market price of a derivative serves as the value of the claim of one party on the other. It is this value that is recorded in MFI balance sheet statistics if an MFI is a party to the contract. Whether it is recorded as an asset or as a liability depends on the market value, which may fluctuate between positive (an asset) and negative (a liability) over the life of the contract (the same derivative instrument could thus be recorded as an asset or a liability over the course of its lifetime). The market price may also be zero, as it is at the start of a swap contract.

Derivatives are recorded in the MFI balance sheet on a gross basis at market value unless business accounting rules require off-balance-sheet recording. They are identified separately under “remaining assets” if they have a positive value for the reporting MFI or under “remaining liabilities” if they have a negative value. Positions are reported vis-à-vis MFIs and aggregated “non-MFI” counterparts, with a geographical breakdown (domestic, euro area other than domestic and rest of the world residents).

For statistical purposes, a derivative is treated as a financial instrument separate from the instrument on which the contract is based. Derivative positions recorded in the MFI balance sheet are therefore not linked to the underlying financial instrument, nor do they reveal the nominal amount for which the contract was struck. See also Section 4.4.8.3 on deposits with embedded derivatives and Section 4.5.1.5 on debt securities with embedded derivatives.

### **Box 3**

#### Interest rate swaps and currency swaps

---

Interest rate swaps are derivative contracts that commit two parties to a future exchange of payment streams related to fixed or floating interest rates in the same currency for an agreed period of time. Currency swaps (sometimes called cross-currency interest rate swaps) are similar derivative contracts except that the payment streams relate to fixed or floating interest rates in different currencies. The payments are based on notional amounts of principal, which are fixed at the initiation of the swap. The swap contract may (but typically does not) involve an exchange of these principal amounts. Central bank swap arrangements are treated as standard currency swaps for the purposes of MFI balance sheet statistics. Consequently, an NCB or the ECB purchases foreign currency with local currency and simultaneously recognises a forward contract which reflects the obligation to unwind the operation at a certain date.

In accordance with the statistical treatment applicable to all financial derivative instruments, MFI balance sheets should include, at market value, those interest rate or currency swap contracts that have a market value, i.e. the market price that reflects the net present value of the (known or expected, payable or receivable) streams of cash flows. That net present value is then allocated according to its sign, i.e. to its sub-item under “remaining assets” if positive or under “remaining liabilities” if negative. No other entries should be made on the balance sheet in respect of the outstanding commitment to a future exchange of payment streams or principal.

If accounting conventions require interest rate and currency swaps and other forward-type instruments to be recorded on the balance sheet on a gross basis (i.e. recording the present values of inflows and outflows separately, without netting), reporting agents should, for the purposes of MFI balance sheet statistics, calculate the net value of these entries and allocate it as described above.

---



#### 4.10.2 Non-repayable margins lodged under derivative contracts (remaining liabilities)

Section 4.4.8.4 on repayable margin deposits noted that margins under financial derivative contracts placed as cash collateral with reporting MFIs should be classified as deposits with an agreed maturity where they remain in the depositor's ownership and are repayable to the depositor when the contract is closed out and the MFI receiving the amount is free to use the funds. In principle, where part of the margin must be retained, e.g. for the clearing house, only the part at the disposal of the MFI should be classified as a deposit liability. All repayable margin deposits are therefore to be treated as loans/deposits, while non-repayable margin deposits are to be treated as transactions in the financial derivative since they reduce the liability created through the financial derivative. Where repayable and non-repayable margin deposits are recorded in the same account, it may be very difficult to distinguish between the two. In such cases, Regulation ECB/2021/2 allows them to be recorded under "deposits" or "remaining liabilities" (analogous to Section 4.4.8.4). The maturity classification is determined by the period of the derivative contract, given that the deposit is, in effect, blocked until the derivative matures. However, in cases where a central counterparty is involved and there is no link between the deposit and the derivative contract, the maturity is as stated in the deposit contract.

#### 4.10.3 Gross amounts receivable (remaining assets) or payable (remaining liabilities) in respect of suspense items

Suspense items are balances on an MFI's balance sheet that are not booked in the name of customers but nevertheless relate to customers' funds (e.g. amounts awaiting investment, transfer or settlement). As a general rule, reporting agents should present suspense items on the balance sheet on a gross basis. Suspense items that represent a liability for the reporting MFI (e.g. customer funds awaiting transfer) should be reported as a separate "of which" item under "remaining liabilities", while asset suspense items should be reported separately under "remaining assets". There may be exceptions to this general rule. Where asset suspense balances are closely associated with the balance sheet items to which they relate, reporting agents could continue to record suspense balances within those items without identifying them separately, thus retaining the breakdowns by sector, residence, etc. In such cases, reallocating the amount involved to the residual categories of "remaining assets" or "remaining liabilities" would result in a loss of information.

#### 4.10.4 Gross amounts receivable (remaining assets) or payable (remaining liabilities) in respect of transit items

Transit items represent funds (usually belonging to customers) that are in the course of being transmitted between MFIs. Remaining assets include cheques and other forms of payment that have been sent for collection to other MFIs. Remaining

liabilities include credit transfers and other items for which the corresponding payment has not yet been made by the reporting MFI. Reporting agents should record, on a gross basis, amounts receivable/payable in respect of transit items that are outstanding on the reporting date, classifying them as a separate “of which” item under “remaining assets” or “remaining liabilities” as appropriate.

#### 4.10.5 Net amounts receivable/payable in respect of future settlement of foreign exchange transactions

For statistical purposes, the exchange of deposits usually associated with spot foreign exchange transactions should be recorded on the settlement date (ESA 2010, 5.51) requires financial transactions to be recorded when payment takes place). Nevertheless, the ECB accepts that this exchange may be recorded on the contract date if this is the current treatment in MFIs’ accounting systems. Reporting agents should then enter foreign exchange amounts receivable/payable on the balance sheet on the contract date. The aggregate of amounts receivable/payable should be recorded on a net basis at market value in “remaining assets” or “remaining liabilities”, according to the sign.

Given the limited analytical value of the information, however, the ECB accepts that these amounts receivable/payable may be treated as off-balance-sheet items for the purposes of MFI balance sheet statistics if this is the current treatment in MFIs’ accounting systems. MFIs’ accounting systems may not distinguish such amounts receivable/payable from forward contracts with a residual maturity of 1-2 days. If forward positions are already recorded as financial derivatives on the balance sheet at market value (see Section 4.10.1 on financial derivatives), the ECB accepts that the amounts receivable/payable arising from unsettled spot foreign exchange operations may also be classified as “financial derivatives” (which are also classified under “remaining assets” or “remaining liabilities”).

#### 4.10.6 Accrued interest receivable (remaining assets) or payable (remaining liabilities)

Interest receivable on loans and debt securities held should be recorded on the balance sheet as it accrues and not when it is actually received. In a departure from the treatment preferred by the ESA 2010, it should be reported as a separate “of which” item under “remaining assets” rather than being added to the underlying asset to which it relates (see also Section 3.8.2). Similarly, interest payable on deposits and debt securities issued should be reported as a separate “of which” item under “remaining liabilities” rather than being added to the underlying liability to which it relates. Unpaid interest past due is included in the outstanding nominal amount of the instrument and is not recorded here.

Accrued interest is defined in Regulation ECB/2021/2 (Point 7(d) in the table in Part 2 of Annex II), as interest receivable on loans, which should be recorded on the

balance sheet as it accrues (accruals basis) rather than when it is actually received (cash basis).<sup>89</sup>

#### 4.10.7 Dividends to be received (remaining assets) or paid (remaining liabilities)

In accordance with the ESA 2010 (4.57), and unlike the treatment of interest, dividends are recorded when they become due rather than being accrued over the period to which they relate. They are recorded at the point in time at which the share price starts to be quoted on an ex-dividend basis and not at a price that includes the dividend. In line with FINREP, dividends to be received (paid) should be included under “remaining assets” (“remaining liabilities”) at the time when the shareholder’s right to receive a payment is established (i.e. awaiting distribution, as per Section 4.8.4).<sup>90</sup> The receipt of income from dividends or the distribution of dividends is recorded as a transaction (with a counter-entry in the profit and loss account).

#### 4.10.8 Provisions representing liabilities to third parties

Provisions made by reporting agents for liabilities to third parties (for dividends, legal costs, pensions, for example) are reported under “remaining liabilities”. Provisions are made for probable future expenses that have arisen from past events where the timing or amount are uncertain and are recorded on the statistical balance sheet in accordance with the applicable accounting rules. These provisions are reported monthly by NCBs under Guideline ECB/2021/11 in respect of their own balance sheets and of the balance sheets of other MFIs, where those data are available.

This item includes “net equity of households in pension funds reserves”, which are direct pension commitments to current and former employees (ESA 2010, 5.180-184), as well as indirect commitments where the reporting agent contracts with a third party to look after the pension funds for employees and retains the responsibility for any deficit in funding (ESA 2010, 5.185-186). Net equity of households in pension funds reserves is reported quarterly by NCBs under Guideline ECB/2021/11 in respect of their own balance sheets and of the balance sheets of other MFIs, where those data are available.

This item does not include provisions against losses on assets, which are instead recorded under “capital and reserves” (see Section 4.8.5).

---

<sup>89</sup> This is in accordance with the general principle of accruals accounting and FINREP and AnaCredit reporting.

<sup>90</sup> See IAS 18.29-30 and Section 7.3.3 of “[Bridging the reporting requirements – methodological manual](#)”, published in May 2014.

#### 4.10.9 Amounts receivable (remaining assets) or payable (remaining liabilities) that do not relate to the reporting MFI's main business

This category includes amounts receivable or payable in respect of trade credit, amounts due to suppliers, tax due or rebates receivable, wages and social contributions payable, etc.

#### 4.10.10 Asset counterpart to coins issued (remaining assets – central bank balance sheets only)

In euro area countries, coins are usually a liability of central government and not of the central bank, although in all cases coins are reported under the liability item “currency in circulation” on central banks’ balance sheets and are part of the monetary aggregates (see Section 4.2.2). Where central government is the legal issuer of coins, a notional offsetting claim on central government is entered under “remaining assets”. This is reported monthly by NCBs under Table 1 in Part 1 of Annex II to Guideline ECB/2021/11.

#### 4.10.11 Banknotes and coins denominated in the former national currency which remain outstanding after adoption of the euro

As noted in Section 4.2.3.1, outstanding amounts of banknotes and coins in a former national currency continue to be reported under “cash” or “currency in circulation” for 12 months and are then transferred to remaining assets and liabilities.

#### 4.10.12 Intra-Eurosystem net assets or liabilities related to the allocation of euro banknotes

As discussed in Section 4.2.2, euro currency in circulation is, for statistical purposes, allocated among Member States based on the banknote allocation key, with 8% of total Eurosystem issuance being allocated to the ECB and the remainder to the NCBs according to their respective shares in the capital of the ECB. The difference between this allocation and the amount actually put into circulation by the central bank is recorded under “remaining assets” or “remaining liabilities”, depending on the sign.

#### 4.10.13 Irrevocable payment commitments (IPCs)

An IPC is an obligation from one party to another, formalised in a contract, to execute a future payment under certain circumstances. The obligation is typically perpetual and irrevocable, and will remain unchanged until that obligation is fulfilled. This type of financial arrangement is usually guaranteed by a pledge of assets (securities or cash). IPCs can be used as an alternative payment to cash for the ex

ante contribution of credit institutions to national resolution funds, deposit guarantee schemes and the SRF.

For the purposes of statistical reporting, IPCs used as an alternative way of financing ex ante contributions to the SRF are to be treated as firm financial liabilities of the credit institution contributing to the SRF (i.e. as opposed to an off-balance-sheet contingent liability).<sup>91</sup> They should therefore be recorded under “remaining liabilities” by the reporting MFI using them (matched by an expense in “capital and reserves”). Such IPCs correspond to payments not settled with cash, on the basis that all SRB ex ante contributions are treated as taxes. This is in line with the ESA 2010 (5.06) definition of a financial liability as an obligation to provide a payment or a series of payments to a creditor. Should the IPC be cancelled, the liability is extinguished and a reclassification should be recorded for both “remaining liabilities” and “capital and reserves”, as opposed to considering them to be transactions.

Collateral underlying the IPC is treated analogously to the recording of securities lending with cash collateral or a reverse repo, as outlined in Section 4.3.4. In the case of cash collateral, a loan vis-à-vis the SRB is recorded by the reporting MFI, matched by a decrease in cash (actually paid to the Banque de France, which manages the IPCs of credit institutions to the SRB and acts as the depository of assets pledged).

As outlined in Section 3.5.1, the SRF is considered to be part of the SRB and is classified as a central government entity within the “rest of world” sector.

#### 4.10.14 Prepayment for insurance premiums and reserves for outstanding claims

Prepayment for insurance premiums and reserves for outstanding claims, reported under “remaining assets”, relates to that part of gross premiums paid by MFIs that is to be allocated to the following accounting period, plus claims by MFIs that are not yet settled, including cases where the amount is in dispute or the event leading to the claim has occurred but has not yet been reported. In the ESA 2010, this item corresponds to “non-life insurance technical reserves” (ESA 2010, 5.169-173).

This item is reported quarterly by NCBs under Guideline ECB/2021/11 in respect of their own balance sheets and of the balance sheets of other MFIs, where those data are available.

#### 4.10.15 Adjustment for accounting/statistical discrepancies

A balancing item may be required for the balance sheet, in particular where the statistical balance sheet is derived from the accounting balance sheet. Where

---

<sup>91</sup> For further details, see the European Commission’s [“Eurostat guidance note on statistical implications of new resolution legislation”](#). Under Article 8(1) of Regulation ECB/2021/2, however, the accounting rules followed by banks form the basis for their statistical reporting, meaning that not all banks will diverge from their accounting treatment of IPCs.

balancing of the outstanding amounts or adjustments is required, it should be made in net terms under “remaining liabilities”, with a positive or negative sign as appropriate.

Such discrepancies may arise in the following cases, for example:

- In line with the preference for statistical reporting in ESA 2010, reporting agents report holdings of debt securities at market value, which differs from the valuations of their respective portfolios for accounting purposes. Consequently, statistical adjustments for price revaluations do not match the unrealised gains and losses in accounting terms that are recorded under “capital and reserves”. The balancing of the outstanding amounts and revaluation adjustments should be reflected in remaining liabilities.
- NCBs compile the debt securities holdings of reporting agents based on security-by-security information using market prices. The outcome is similar to the above example.
- Loans in the statistical balance sheet (reported as nominal outstanding amounts net of write-offs/write-downs) differ from the value of the loans recorded in the reporting agent’s accounting balance sheet. Where such differences are not fully reflected in the provisions on loans included in “capital and reserves”, a balancing item may be required.

In order to monitor the effect of such balancing within remaining liabilities, Guideline ECB/2021/11 includes this item so that NCBs may report the total adjustment in respect of their own balance sheets and of the balance sheets of other MFIs. It is not expected that this item would be derived directly item by item; instead it can be derived as a residual at the level of the balance sheet as a whole.

#### 4.10.16 Valuation principles for remaining assets and remaining liabilities

Regulation ECB/2021/2 provides no specific guidance on the valuation of remaining assets and remaining liabilities. They are covered by the general rule established in Article 8 of the Regulation, under which the accounting rules followed by MFIs are those laid down in the national transposition of Council Directive 86/635/EEC. For harmonisation purposes, ESA 2010 guidance should be followed. As with all MFI balance sheet data, financial assets and liabilities are reported on a gross basis.

The ESA 2010 (7.90) states that trade credits and advances and other accounts receivable/payable are to be valued on the balance sheet of both the creditor and debtor at nominal value. For financial derivatives (included in a separate instrument category in the ESA 2010 (AF.71) rather than in other accounts receivable/payable), the general rule of market valuation applies.

## 4.11 Eurosystem reserve assets

Under Guideline ECB/2021/11, NCBs and the ECB must report data on their own holdings of monetary gold under “gold and gold receivables (only monetary gold)” and on their receivables from the IMF. The latter includes the international reserve asset created by the IMF, special drawing rights (SDRs), which is reported under the assets item “receivables from the IMF – drawing rights, SDRs, other”. In addition, NCBs report their SDRs allocations on the liabilities side of the balance sheet as a separate item under “counterpart of SDRs”<sup>92</sup>.

Gold,<sup>93</sup> SDRs and external claims of the NCB which meet the IMF’s definition of reserve assets, in terms of liquidity, ready availability for use and credit standing of the debtor, constitute external reserves. These external claims will typically include substantial assets denominated in foreign currencies, representing claims on non-residents, typically central banks, other MFIs or governments. For euro area countries, cross-border claims within the euro area (irrespective of the currency of denomination) and claims denominated in euro are not reserve assets, irrespective of the identity of the debtor.

The ECB publishes monthly data on the reserve assets of the Eurosystem as part of the balance of payments and international investment position of the euro area. The MFI balance sheet reporting framework for NCBs does not, however, include a reserve asset instruments position. Monetary gold is instead recorded under a dedicated sub-item, while holdings of SDRs together with other asset positions vis-à-vis the IMF are reported in the item “receivables from the IMF”. The ECB does not show these items separately in the MFI balance sheet statistics published, but includes them indistinguishably in MFIs’ external assets without identifying them separately (see also Section 7.1).

Receivables from the IMF represent the asset position that a member country holds vis-à-vis the Fund. In accordance with the IMF’s definition, these receivables consist of (i) the reserve tranche, i.e. any foreign currency holdings (including SDRs) that a member country may draw at short notice; (ii) any debt of the IMF (under a loan agreement) in the General Resource Account, the General Arrangements to Borrow and the New Arrangement to Borrow; and (iii) any existing claims arising from contributions to trusts, such as that related to the Poverty Reduction and Growth Facility (formerly the Enhanced Structural Adjustment Facility – ESAF). Points (i) and (ii) correspond to the reserve position vis-à-vis the IMF as collected for the balance of payments and international investment position.

---

<sup>92</sup> For two euro area countries (Greece and Latvia), the SDR allocation is reported on the government balance sheet and not on that of the NCB.

<sup>93</sup> As noted in Section 4.2.3.3, gold held by a central bank is normally classified as monetary gold and is a financial asset, whereas gold held by anyone else (including other MFIs) is treated statistically as a commodity and thus reported under “non-financial assets”.

#### 4.11.1 Valuation principles for reserve assets

With regard to the valuation of monetary gold and receivables from the IMF, the former should be valued at its market price on the balance sheet date, in line with the ESA 2010 (7.62). Receivables from the IMF are denominated in SDRs and should be converted into euro at the rate published by the IMF on the balance sheet date, in line with the ESA 2010 (7.63). SDRs are issued without charge. To balance holdings of SDRs, a notional accounting entry (“counterpart of IMF special drawing rights”) is recorded on the liabilities side of the balance sheet. As stated in the ESA 2010 (5.71), the creation of SDRs through their allocation, and their extinguishment through cancellations, are transactions. Fluctuations in the euro amount of all positions denominated in SDRs arising from exchange rate changes should be taken into account by way of a revaluation adjustment for “receivables from the IMF” under assets and for “counterpart of SDRs” under liabilities.



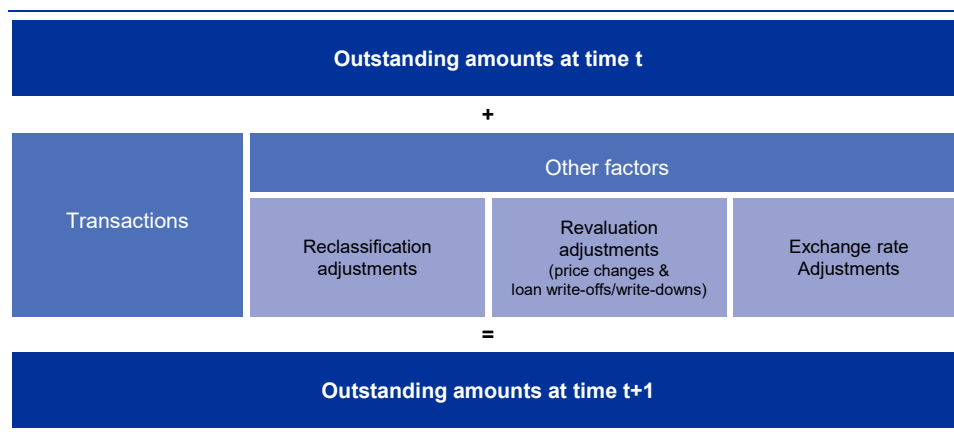
## 5 Transactions and adjustments

### 5.1 Conceptual overview

An important element in MFI balance sheet statistics is the distinction between transactions and other factors affecting balance sheet outstanding amounts and their change over a reference period. These other factors comprise valuation effects arising from changes in prices, or in exchange rates, on the one hand and reclassifications (which the ESA 2010 among other things refers to as “other changes in the volume of assets”) on the other. It is, however, transactions that are used to measure the flow of financing between MFIs and other sectors and the rest of the world, and it is from transactions that the growth rates of monetary aggregates and certain counterparts are calculated.

**Figure 3**

Factors affecting balance sheet outstanding amounts over a reference period



The ESA 2010 (1.66) defines a transaction as “an economic flow that is an interaction between institutional units by mutual agreement or an action within an institutional unit that it is useful to treat as a transaction, often because the unit is operating in two capacities”. The ESA 2010 (5.01) goes on to define financial transactions as “transactions in financial assets (AF) and liabilities between resident institutional units, and between them and non-resident institutional units”. Transactions would cover sales and purchases of items recorded on balance sheets at the start and end of a reporting period, as well as transactions reversed within the reference period. The ESA 2010 (5.19) further states that financial transactions are to be recorded at transaction values independently of the valuation principle in use for on-balance-sheet recording. Transaction values may not necessarily be the same as prices quoted in the market at the time of the transaction (5.21) and exclude charges, fees, etc. (5.22), which are recorded separately as payments for services.

Financial transactions are computed by the ECB as the difference between outstanding amounts positions at end-of-month reporting dates, from which the effect of changes that arise due to influences other than transactions is removed. Financial

transactions are therefore derived by the ECB, as explained in further detail in Section 7.2, from input received from NCBs, which includes data on:

- outstanding amounts, as collected from reporting agents;
- price revaluation adjustments on securities (issued or held by MFIs), equity, non-financial assets, capital and reserves, remaining assets and liabilities;
- loan write-offs/write-downs, as collected from reporting agents;
- reclassification adjustments, as derived by the NCBs using available information.

Revaluation adjustments are typically reported directly by MFIs in relation to at least a minimum set of items covering the write-offs and write-downs on loans and the price revaluation of securities. With regard to the price revaluation of securities, NCBs can approach reporting agents in two distinct ways. The first is to allow reporting agents to report directly observed transactions, from which NCBs derive revaluation adjustments to be transmitted (on an aggregated basis) to the ECB. Section 5.2 describes the two methods for direct reporting of transactions, the transaction method and the balance sheet method. The alternative is to allow MFIs to report revaluation adjustments for securities, as explained in Section 5.3. NCBs also transmit revaluation adjustments for certain items specific to their balance sheets: gold and gold receivables and receivables from the IMF. Revaluation adjustments on currency and deposits are not collected, given that these are recorded at nominal value on the balance sheet. There are specific reporting requirements relating to the transmission of revaluation adjustments in respect of loan write-offs/write-downs and write-downs at the time of a loan transfer or sale (see Section 5.4 for further details).

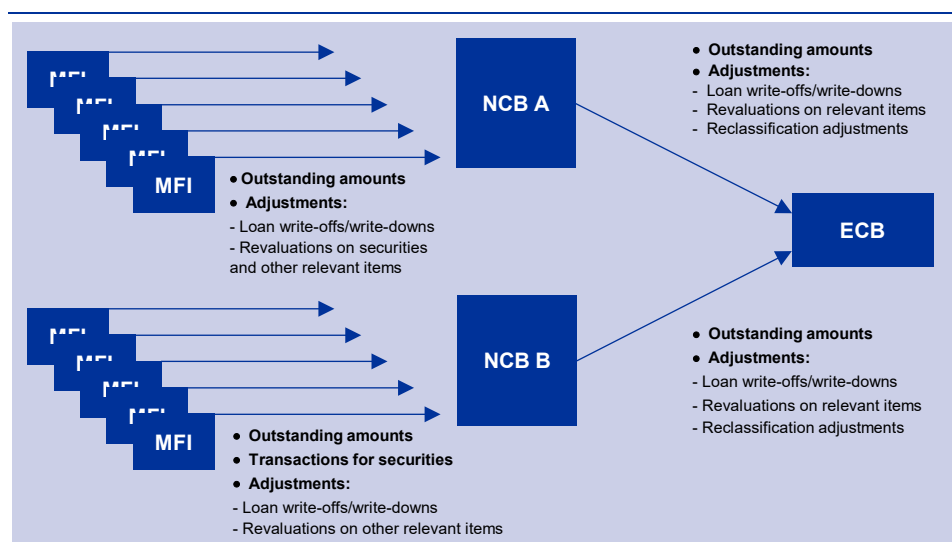
Reclassification adjustments comprise any change in the balance sheet of the MFI sector that arises as a result of changes in the MFI reporting population, corporate restructuring, reclassification of counterparties and of assets and liabilities, the (partial) correction of reporting errors and the introduction of new statistical concepts or definitions, all of which give rise to breaks in the series and hence affect the comparability of successive end-of-period levels. NCBs compile data on reclassification adjustments in accordance with Guideline ECB/2021/11 using supervisory information, plausibility checks, ad hoc enquiries (e.g. related to outliers), information on joiners and leavers of the reporting population and any other source available to them (including other national statistical requirements), and report them to the ECB. Annex I to Guideline ECB/2021/11 contains specific guidance on the treatment of certain types of reclassifications. In principle, as a minimum, NCBs send information on all reclassification adjustments exceeding €50 million. Where developments give rise to reclassification adjustments across national frontiers, NCBs may need to collaborate to ensure consistent treatment throughout the euro area. The compilation principles for reclassification adjustments are set out in Sections 5.5, 5.6 and 5.7 and include the treatment of euro area enlargements, which may be seen as a special type of reclassification.

Exchange rate adjustments are detailed in Section 5.8. The current section covers proxies for valuation effects arising from exchange rate fluctuations that are calculated by the ECB, unless provided by NCBs (in cases where more detailed information is available at national level, thus leading to better estimations).

Detailed numerical examples are included at the end of each related section for ease of reference.

The following flow chart depicts the data flow from individual reporters to NCBs, and from NCBs to the ECB, with NCB A receiving revaluation adjustments for securities from MFIs and NCB B receiving transaction data from MFIs.

**Figure 4**  
Flow of data



## 5.2 Revaluation adjustments: direct reporting of transactions in securities by MFIs and the derivation of revaluation adjustments

Where reporting agents are allowed to directly report transactions in securities, they may do so following one of two distinct methods: the transaction method or the balance sheet method. Each method may give different results and may affect the allocation of changes in broad money (M3) among counterparts. The two methods are also relevant for the use of MFI balance sheet data in financial accounts, which are constructed in line with the principles laid down in the ESA 2010 (see Section 8.2). The methods are described in the following sections.

## 5.2.1 Transaction method versus balance sheet method

### Transaction method

The transaction method records all sales and purchases of items held on balance sheets at the start and/or end of a reporting period, as well as all transactions reversed within the reference period. This method requires the flow to be valued at the transaction value, which is normally the market value of the securities on the transaction date in accordance with the ESA 2010.

The transaction method may, however, make it difficult to relate recorded transactions in some categories to developments in reporting MFIs' balance sheets. This is because recorded transactions will include purchases that are reversed during the period and whose effects are therefore not visible in the end-of-month balance sheet positions for the securities portfolio. Transactions may also be valued at different prices to those at which the relevant securities are valued on the balance sheet (where they actually appear on the balance sheet), given that MFIs report transactions at transaction value but will still follow national practice for valuing securities when it comes to balance sheet outstanding amounts.

### Balance sheet method

The balance sheet method records all sales and purchases of items held on balance sheets at the start and/or end of a reporting period, but not transactions reversed within the reference period.

Under the balance sheet method, the sale during the month of any securities held on the balance sheet at the end of the previous month is deemed to have taken place at the price at which the securities were recorded on the previous month's balance sheet, irrespective of the price at which the sale actually took place. Similarly, a purchase during the month of any securities retained on the balance sheet at the end of the current month is deemed to have taken place at the price at which the securities are recorded on the current month's balance sheet. Consequently, if securities are carried on balance sheets at current market prices, sales and purchases will be recorded at the market prices on the previous and current balance sheet dates respectively, although the transactions may have taken place at other market prices. Similarly, if securities are carried at their nominal value, sales and purchases will also be recorded at their nominal value. In addition, if securities are carried at their acquisition price, a sale will be recorded at the price originally paid no matter how long ago, while the purchase of a security will be recorded at the price paid for it, which will also be its carrying value on the end-of-period balance sheet.

The balance sheet method does not record transactions reversed during the reference period. It includes only those transactions that influence balance sheet positions (e.g. sales of securities that were on the previous balance sheet and purchases of securities that are retained at the current balance sheet date), recorded at the value at which they affect the balance sheet. If a security held on the opening balance sheet is sold and subsequently repurchased and retained, this is considered to be an entirely new purchase.

## 5.2.2 Advantages and disadvantages of each method

The direct recording of transactions applying the transaction method makes it possible to derive total net transactions measured at market value. This is in line with the ESA 2010 and consistent with other statistics, such as financial accounts and the balance of payments. It does complicate the comparison of transactions with balance sheet outstanding amounts, however, and is therefore not ideal for the purposes of calculating growth rates, given that operations that have no link to end-of-period outstanding amounts are included.

The lack of harmonisation of valuation rules across the euro area and the fact that even the same reporting institution may use different valuation rules to value different portfolios supports the use of the balance sheet method, which provides a closer link between statistics on outstanding amounts and transactions, and is therefore a better basis for calculating growth rates reflecting only transactions with an impact on end-of-period outstanding amounts. The balance sheet method omits an important element of transactions, however: transactions conducted and then reversed during the reference period. It therefore departs from the definition of transactions in the ESA 2010, leading to possible inconsistencies with other statistics.

## 5.2.3 Examples of the direct recording of transactions and the derivation of revaluation adjustments

Example E below provides a numerical illustration of the transaction method and balance sheet method for the direct recording of transactions in securities when valued at market prices. Example F illustrates the transaction method and balance sheet method for the direct recording of transactions in securities when valued at historic cost. Example G then outlines the differing revaluation adjustments that are derived from each method.

### Example E

#### Securities carried at market value

---

*Suppose that, during the reference month of February, the securities portfolio of an MFI comprises four bonds (A, B, C and D). For the sake of simplicity, the bonds are assumed to be euro-denominated, meaning that no exchange rate-related effects arise, and to have the same changes in market price as shown below.*

*On 31 January the MFI holds one bond A and one bond B, each of which has a market price on that date of 99. Both bonds were bought at 98 on 15 January. While bond A is kept on the balance sheet until the end of the reference period, bond B is sold on 20 February at 102. In addition, on 10 February the MFI buys one bond C at 101 and one bond D at 101. While bond D is kept on the balance sheet until the end of the period, bond C is sold on 20 February at 102. On 28 February, therefore, the MFI holds one bond A and one bond D, each of which has a market price on that date of 103.*

Item	Prices	15/01 98	31/01 99	10/02 101	20/02 102	28/02 103
Securities	A	BUY 1	1 IN STOCK			1 IN STOCK
	B	BUY 1	1 IN STOCK		SELL 1	
	C			BUY 1	SELL 1	
	D			BUY 1		1 IN STOCK

During the reference period the holdings of securities have therefore increased by 8, from 198 to 206, as follows:

Item		31/01	10/02	20/02	28/02	
Amounts outstanding	A	99			103	
	B	99				
	C					
	D				103	
		1-Open			2-Close	3-Difference=(2)-(1)
Total outstanding		198			206	8

- Transaction method at market value

Two inflows are recorded on 10 February related to the purchases of bonds C and D. The value of each transaction is 101, which is the market price of each of the securities on that date. In turn, two outflows are recorded on 20 February related to the sale of securities B and C. The transactions are each valued at 102, which represents the market price of each of the securities on that date. As above, this method requires the flow to be valued at the transaction value, which is normally the market value of the securities on the transaction date. Overall, transactions in securities amount to -2, as follows:

Transactions		31/01	10/02	20/02	28/02	
Transaction method	A					
	B			-102		
	C		101	-102		
	D		101			
						4-Total flow
						-2

- Balance sheet method at market value

The transactions involving bond C (a purchase and resale within the period) are not recorded under this approach. The securities are carried on the balance sheet at market value, so the prices used for the valuation of the individual transactions would then be 99 for the sale of bond B (because this was its balance sheet value on the

end-January balance sheet) and 103 for the purchase of bond D (because this is its balance sheet value on 28 February). This method would then record an outflow of 99 related to the disposal of bond B and an inflow of 103 related to the purchase of bond D. Overall, transactions in securities amount to 4, as follows:

Transactions		31/01	10/02	20/02	28/02	
Balance sheet method	A					
	B			-99		
	C					
	D		103			4-Total flow
						4

### Example F

#### Securities carried at historic cost

On 31 January the MFI records on its balance sheet one bond A and one bond B, each at a value of 98. On 28 February the MFI still carries bond A at 98, while bond D is recorded at 101, its acquisition cost. During the reference period the holdings of securities have therefore increased by 3, from 196 to 199, as follows:

Item		31/01	10/02	20/02	28/02	
Amounts outstanding	A	98			98	
	B	98				
	C					
	D				101	
		1-Open			2-Close	3-Difference=(2)-(1)
Total outstanding		196			199	3

- *Transaction method at historic cost*

The derivation of transactions under the transaction method is independent of the valuation criterion applied to record securities on the balance sheet. In particular, transactions are valued at their respective transaction prices, which are normally the market value of the securities on the transaction date, in line with the ESA 2010 methodology. In addition, all acquisitions and disposals are considered, including purchases reversed within the reference period.

Two inflows are recorded on 10 February related to the purchases of bonds C and D. The value of each transaction is 101, which is the transaction price of each of the securities on that date. In turn, two outflows are recorded on 20 February related to the sale of securities B and C. The transactions are each valued at 102, which represents the transaction price of each of the securities on that date. Overall, transactions in securities amount to -2, as follows:

Transactions		31/01	10/02	20/02	28/02	
Transaction method	A					
	B			-102		
	C		101	-102		4-Total flow
	D		101			-2

- *Balance sheet method at historic cost*

Suppose now that the securities are valued on the balance sheet at historic cost. The prices used for the valuation of the individual transactions would then be 98 for the sale of bond B (because this was its balance sheet value on the end-January balance sheet) and 101 for the purchase of bond D (because this is the balance sheet value on 28 February). The method would then record an outflow of 98 related to the disposal of bond B and an inflow of 101 related to the purchase of bond D. Overall, transactions in securities amount to 3, as follows:

Transactions		31/01	10/02	20/02	28/02	
Balance sheet method	A					
	B			-98		
	C					4-Total flow
	D		101			3

### Example G

Deriving revaluation adjustments to be transmitted to the ECB

Where MFIs report transactions directly, for computational reasons NCBs nevertheless use the transaction data to derive a valuation adjustment to be transmitted to the ECB. In particular, ignoring the effect of reclassifications and exchange rate adjustments, price revaluation adjustments would be obtained as the difference between the change in outstanding amounts and transactions. A further example based on the cases illustrated above may help to explain this process.

Suppose that the securities are carried on the balance sheet at market value; the difference in outstanding amounts over the reference period then amounts to 8. A distinction can be made between the following two cases:

- If transactions are reported using the transaction method, transactions amount to -2 (Example E), thus the NCB derives as a residual a revaluation adjustment of 10:



3-Difference=(2)-(1)	
8	
4-Total flow	5-Revaluation=(3)-(4)
-2	10

- If transactions are reported using the balance sheet method, transactions amount to 4 (Example E), thus the NCB derives as a residual a revaluation adjustment of 4:

3-Difference=(2)-(1)	
8	
4-Total flow	5-Revaluation=(3)-(4)
4	4

Suppose now that those securities are recorded on the balance sheet at historic cost; the difference in outstanding amounts over the reference period then amounts to 3. A distinction can be made between the following two cases:

- If transactions are reported using the transaction method, transactions amount to -2 (Example F), thus the NCB derives as a residual a revaluation adjustment of 5:

3-Difference=(2)-(1)	
3	
4-Total flow	5-Revaluation=(3)-(4)
-2	5

- If transactions are reported using the balance sheet method, transactions amount to 3 (Example F), thus the NCB derives as a residual a revaluation adjustment of 0:

3-Difference=(2)-(1)	
3	
4-Total flow	5-Revaluation=(3)-(4)
3	0

These examples show that where transactions are reported by MFIs, the NCB will derive (by residual) different estimates of the revaluation adjustment depending on whether the MFI reports transactions using the transaction method or the balance

sheet method, and also depending on the practice it follows for valuing balance sheet outstanding amounts. The following section provides an interpretation of the revaluation adjustments obtained in the various cases in terms of gains/losses on holdings of securities.

#### 5.2.4 Interpreting revaluation adjustments under direct recording of transactions

The two methods have different implications in terms of the relationship between the price revaluation adjustments they imply and gains/losses on holdings of securities. In particular, while the revaluation adjustments implied by the transaction method are conceptually equivalent to (realised and unrealised) gains/losses on holdings of securities, the balance sheet method delivers revaluation adjustments that cover the changes in the carrying value of securities held throughout the reference period only (see Example J for the mathematical derivation).

In general, the magnitude of the differences between the two methods depends on a number of factors. The higher the turnover in securities, the larger the number of purchases reversed within the reference period that are omitted under the balance sheet method. The length of the reference period has a similar impact. In other words, the longer the period, the more likely it is that a purchase will be reversed within that period. For instance, if a security is purchased in January and sold in February, the transactions constitute a reversed purchase for quarterly statistics, but not for monthly statistics. Volatility in market prices and the valuation methods used in the balance sheet also play a role, with valuation at market prices usually reducing the differences.

The two approaches also have different implications for monetary statistics, given that they may attribute a change in M3 to different counterparts. Example H illustrates these implications, while Section 7.1 discusses the consolidated MFI balance sheet and M3 and its counterparts in detail.

##### Example H Interpreting revaluation adjustments

---

*Suppose that, within the reference period, MFIs buy corporate bonds from households for 100 and sell them back to households for 105. M3 must fall, both under the transaction method and under the balance sheet method, by the net amount of the transactions (5), given that households reduce cash or deposits by 5. The two methods produce different results with regard to the counterparts of M3, however.*

*The transaction method records a withdrawal of credit by MFIs to non-financial corporations (-5 in the counterpart “credit to euro area residents”); this is because, in net terms, MFIs have sold corporate bonds amounting to 5. But the MFIs have not in fact withdrawn credit from non-financial corporations: the amount of funds available to the non-financial corporations sector is unchanged.*

*By contrast, the balance sheet method records no asset transaction to match the fall in M3, because the trades in corporate bonds took place within the reference period. By default, the counterpart for the decline in M3 appears in the residual “other counterparts” category (i.e. it leads to a compensating increase in the position “capital and reserves” through the profit and loss account, or in “remaining liabilities” depending on the accounting treatment).*

---

For monetary analysis, i.e. the analysis of M3, credit and other counterparts of M3, the balance sheet method proves more helpful (or less misleading) in this case than the transaction method.<sup>94</sup> As mentioned above, the two methods also have different implications for the financial accounts when MFI balance sheet statistics are used as an input. In brief, the transaction method is consistent with the conceptual basis of the financial accounts whereas the balance sheet method is not. These linkages are clarified in Section 8.2.

When MFIs record transactions directly and report these to NCBs, NCBs derive revaluation adjustments to be transmitted (on an aggregated basis) to the ECB as a residual from the change in balance sheet outstanding amounts, corrected for the impact of reclassification adjustments, and from reported transactions.<sup>95</sup> As mentioned above and outlined in Example I below, the revaluation adjustments indirectly obtained under the transaction method equal the (realised and unrealised) gains/losses on the security holdings, while the balance sheet method only covers the change in the carrying value of securities held throughout the period. NCBs then transmit to the ECB the same consistent set of data for outstanding amounts, reclassifications and revaluation adjustments, from which the ECB derives transaction data.

### **Example I**

#### **Revaluation adjustments linkage to gains/losses and carrying values**

---

*Suppose that securities are carried on the balance sheet at market value (Example E above). A distinction can be made between the following two cases:*

- *If transactions are reported using the transaction method, the imputed revaluation adjustments amount to 10, as discussed above. This is the sum of the unrealised gains on bonds A and D (4 and 2 respectively, making a total of 6) and the realised gains on B and C (3 and 1 respectively, making a total of 4):*

---

<sup>94</sup> The transaction method may be applied, however, if one of the following conditions is met: (i) market valuation is the only, or at least the most commonly used, method of valuing holdings of securities; or (ii) the transaction method proves to be less costly to implement than the balance sheet method. Even so, the transaction method is applied only if it provides data of a sufficiently high quality and within the necessarily tight deadlines required for compiling monetary statistics.

<sup>95</sup> The change in the outstanding amounts is also to be corrected for changes in exchange rates. NCBs are required to do this on the basis of internal estimates of the adjustments.

Transactions		31/01	10/02	20/02	28/02			Revaluation components
Transaction method	A							4
	B			-102				3
	C		101	-102		4-Total flow	5-Revaluation=(3) -(4)	1
	D		101			-2	10	2

- If transactions are reported using the balance sheet method, the imputed revaluation adjustments amount to 4, as discussed above. This is equivalent to the change in the carrying value of bond A, which is held throughout the period:

Transactions		31/01	10/02	20/02	28/02			Revaluation components
Balance sheet method	A							4
	B			-99				0
	C					4-Total flow	5-Revaluation=(3) -(4)	0
	D		103			4	4	0

Suppose now that securities are recorded on the balance sheet at acquisition price (Example F above). A distinction can be made between the following two cases:

- If transactions are reported using the transaction method, the imputed revaluation adjustments amount to 5, as discussed above. This is the sum of the realised gains on B and C (4 and 1 respectively, making a total of 5):

Transactions		31/01	10/02	20/02	28/02			Revaluation components
Transaction method	A							0
	B			-102				4
	C		101	-102		4-Total flow	5-Revaluation=(3) -(4)	1
	D		101			-2	5	0

- If transactions are reported using the balance sheet method, the imputed revaluation adjustments amount to 0, as discussed above. This is because the carrying value of bond A, which is held throughout the period, does not change over the reference period:

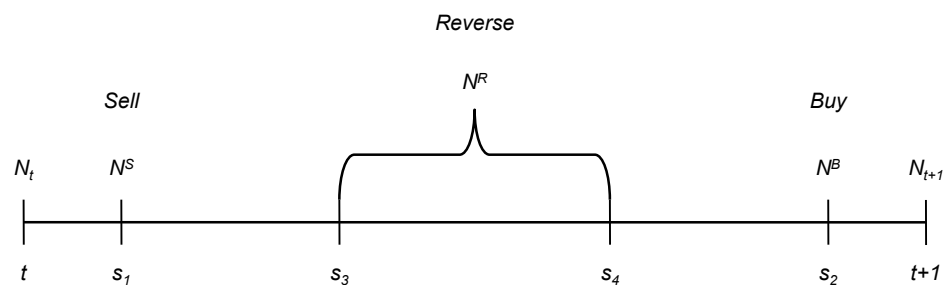
Transactions		31/01	10/02	20/02	28/02			Revaluation components
Balance sheet method	A							0
	B			-98				0
	C					4-Total flow	5-Revaluation=(3) -(4)	0
	D		101			3	0	0

### Example J

#### Derivation of revaluation adjustments under direct recording of transactions

This example provides a detailed overview of the mathematical aspects of the derivation of revaluation data for MFI balance sheet statistics under direct recording of transactions. In particular, it shows that the revaluation adjustments implied by the transaction method are equivalent to the (realised and unrealised) gains/losses on holdings of securities, while the balance sheet method delivers revaluation adjustments that cover the changes in the carrying value of securities held throughout the reference period only.

Suppose that an MFI trades only in one security  $S$  and denote by  $N_t$  the number of such securities at time  $t$ . Between  $t$  and  $t+1$  the MFI sells  $N^S$  securities at time  $s_1$  and purchases  $N^B$  securities at time  $s_2$  which are then kept until time  $t+1$ . In addition, a number  $N^R$  of securities are purchased and sold back during the period at times  $s_3$  and  $s_4$  respectively.



If  $N^K$  denotes the number of securities that are kept on the balance sheet between  $t$  and  $t+1$ , it is clear that  $N_t = N^K + N^S$  and, similarly,  $N_{t+1} = N^K + N^B$ . Now let  $p_t$  represent the value at which securities  $S$  are carried on the balance sheet at time  $t$  and let  $p'_t$  be the corresponding market value. Without loss of generality, assume that all securities are recorded using the same valuation criterion and that the same carrying value applies to each of the securities within  $N^K$ ,  $N^S$  and  $N^B$  ( $p_t^K$ ,  $p_t^S$  and  $p_t^B$  denoting the corresponding carrying values). The outstanding amounts  $S_t$  of the securities holdings satisfy the following equations:

$$S_t = p_t^K \times N^K + p_t^S \times N^S \quad \text{Equation [5.2.1]}$$

$$S_{t+1} = p_{t+1}^K \times N^K + p_{t+1}^B \times N^B \quad \text{Equation [5.2.2]}$$

As discussed in the main text, ignoring the effect of reclassifications and exchange rate adjustments (without loss of generality), price revaluation adjustments  $R_{t+1}$  at time  $t+1$  under direct recording of transactions can be obtained as the difference between the change in outstanding amounts between  $t$  and  $t+1$  and the estimated transactions  $T_{t+1}$ :

$$R_{t+1} = (S_{t+1} - S_t) - T_{t+1} \quad \text{Equation [5.2.3]}$$

A distinction can therefore be made between two cases depending on the method used to record transactions. Suppose first that transactions are derived using the transaction method, then:

$$T_{t+1} = p'_{s_2} \times N^B - p'_{s_1} \times N^S + (p'_{s_4} - p'_{s_3}) \times N^R \quad \text{Equation [5.2.4]}$$

Substituting equations [5.2.1], [5.2.2] and [5.2.4] into equation [5.2.3] yields:

$$R_{t+1} = (p_{t+1}^K - p_t^K) \times N^K + (p_{t+1}^B - p'_{s_2}) \times N^B + (p'_{s_1} - p_t^S) \times N^S + (p'_{s_4} - p'_{s_3}) \times N^R \quad \text{Equation [5.2.5]}$$

The first two terms represent the unrealised gains/losses related to changes in the valuation of, respectively, securities that were held from time  $t$  to  $t+1$  (change in carrying value multiplied by the number of securities) and securities that were bought during the period (carrying value at time  $t+1$  minus cost, multiplied by the number of securities). In turn, the last two terms represent the realised gains/losses related to, respectively, securities held at time  $t$  but sold during the period (selling price minus carrying value at time  $t$ , multiplied by the number of securities) and securities traded (reversed purchases) during the period (selling price minus cost, multiplied by the number of securities).

It therefore follows that price revaluation statistics obtained by residual under direct derivation of transactions using the transaction method are conceptually equivalent to the gains/losses on MFIs' security holdings during the reference period.<sup>96</sup>

If transactions are derived using the balance sheet method, however, the derivation yields different results, given that purchases that are reversed during the period are not taken into account and only the values at which securities are recorded on the balance sheet are relevant for the valuation of sales and purchases. In particular:

$$T_{t+1} = p_{t+1}^B \times N^B - p_t^S \times N^S \quad \text{Equation [5.2.6]}$$

Substituting equations [5.2.1], [5.2.2] and [5.2.6] into equation [5.2.3] yields:

$$R_{t+1} = (p_{t+1}^K - p_t^K) \times N^K \quad \text{Equation [5.2.7]}$$

<sup>96</sup> It should be stressed, however, that gains/losses implied by MFI balance sheet statistics may still differ from gains/losses effectively imputed in the income statement, given that the valuation criteria may differ. For example, in line with the general reporting instructions for MFI balance statistics, many NCBs require credit institutions to value listed securities (i.e. securities quoted on a stock exchange for public trading) classified under IFRS as "held to maturity" and "loans and receivables" at market price for MFI balance sheet purposes, while the income statement follows the general IFRS requirement to value these items at amortised cost.

*Hence, unlike the revaluation adjustments implied by the transaction method, the balance sheet method only reflects the change in the carrying value of securities held throughout the period.*

---

## 5.3 Revaluation adjustments: indirect reporting of transactions through reporting price revaluation adjustments on securities

For the most part, however, MFIs report revaluation adjustments rather than transactions to NCBs. Where transactions in securities are not reported by MFIs, Regulation ECB/2021/2 requires MFIs to instead provide data on price revaluation adjustments, intended to capture the price-related effects on the outstanding amounts of their holdings of securities recorded on the balance sheet. MFIs report monthly revaluation adjustments in accordance with the minimum requirements set out in Table 1A in Part 4 of Annex I of the Regulation and quarterly revaluation adjustments as set out in Table 2A. MFIs must report monthly valuation adjustments for at least the following instrument categories on the assets side: debt securities held (totals and broken down into securities issued by domestic and other euro area MFIs and general government), investment fund shares (broken down into MMF and non-MMF investment fund shares) and equity (totals and broken down into equity issued by domestic and other euro area MFIs and general government). NCBs may request valuation adjustments for more categories, however, and must in any case provide further information on assets from other available sources if there are significant valuation effects on MFI balance sheets not covered in the reporting from MFIs themselves.<sup>97</sup>

However, Regulation ECB/2021/2 does not prescribe how reporting agents should calculate revaluation adjustments on holdings of securities: what matters is that they should be consistent with the valuation applied to securities on the balance sheet. In practice, MFIs have various options when deriving price revaluation adjustments, as discussed in the following section.

### 5.3.1 Price-related gains/losses on holdings versus change in the carrying value of securities

#### **Price-related (realised and unrealised) gains/losses on holdings of securities**

In particular, the adjustments equal the realised gains/losses of the MFI on sales of securities, including purchases reversed during the period (the selling price minus

---

<sup>97</sup> NCBs may also request valuation adjustments on the liabilities side. On this point, Part 4 of Annex I to Regulation ECB/2021/2 states that “no minimum reporting requirement is established for debt securities issued. However, if valuation practices applied by reporting agents to debt securities issued result in changes to their end-period outstanding amounts, NCBs are permitted to collect data relating to such changes. Such data are reported as “other revaluation” adjustments.”

the carrying value at the beginning of the period or, in the case of purchases reversed during the period, minus the purchase price, each multiplied by the corresponding number of securities), plus the unrealised gains/losses on securities that are carried on the balance sheet throughout the period (change in carrying value multiplied by the number of securities) or that were purchased during the period and are still held at the end of the period (carrying value at the end of the reference period minus the purchase price, multiplied by the number of securities). The calculations exclude the effects of changes in exchange rates. This method relies on the availability of detailed data on individual transaction prices and on the value at which securities are carried on the balance sheet.

The price revaluation adjustments obtained under this option are equivalent to the application of the transaction method for the derivation of transactions.

### **Change in the carrying value of securities held throughout the period**

Under this approach, the adjustments equal the changes in the valuation of the securities that are kept on the balance sheet over the reference period multiplied by their number and therefore do not include any sales or purchases that take place during the period. The calculations exclude the effects of changes in exchange rates. This method only requires data on the value at which securities are carried on the balance sheet. The price revaluation adjustments obtained under this option are equivalent to the application of the balance sheet method for the derivation of transactions.

In most cases, MFIs apply the balance sheet method when reporting price revaluation data.<sup>98</sup> As described above, in this case the adjustments will depend only on the method used by the reporting MFI to value securities on its balance sheet. If, for example, it has no transactions in the securities concerned in the relevant month and reports holdings of debt securities at market prices on the balance sheet date, balance sheet outstanding amounts will be fully affected by the change in price. If it reports holdings at historic cost, the change in market prices will have no impact on the balance sheet. If it reports holdings at the lower of market price and historic cost, there may be a valuation effect, depending on where the market price stands in relation to the acquisition price. The revaluation adjustments reported therefore depend not only on the movement in prices between the opening and closing balance sheet dates but also on the valuation method used.

NCBs aggregate the price revaluation adjustments they receive from their reporting agents and transmit them to the ECB, which then calculates transactions as a residual, after taking account of reclassifications and any other non-transactional effects on balance-sheet outstanding amounts, as well as exchange rate changes. When reporting agents follow the transaction method described above, transactions estimated using this approach are consistent with the ESA 2010. In most cases, however, MFIs follow the balance sheet method, meaning that the estimated

---

<sup>98</sup> Reporting agents may – under certain conditions – derive price revaluations by applying the changes in valuation to the number of securities carried on the balance sheet at the beginning or end of the period, whichever is the lower. This is acceptable if it reduces reporting costs. See Example K for further details.



transactions exclude any trades reversed within the reference period and also do not fully reflect valuation changes in securities sold or purchased during the period. As noted earlier, this outcome is not consistent with the ESA 2010, although it may better facilitate monetary analysis.

### Example K

#### Relationship between the derivation of price revaluation adjustments and direct recording of transactions

---

*As mentioned above, Regulation ECB/2021/2 does not state in detail which method should be followed by reporting agents to directly derive revaluation data on holdings of securities. One option is to report price-related (realised and unrealised) gains/losses on holdings of securities, in line with equation [5.2.5] in Example J. This is equivalent to obtaining the adjustments indirectly by recording transactions with the transaction method. This approach is difficult to implement, however, because it relies on the availability of detailed price data on individual transactions and on the value at which securities are carried on the balance sheet. In most cases, reporting agents use equation [5.2.7] to derive price revaluation adjustments, which then match the changes in the carrying value of securities held throughout the period. This is equivalent to deriving transaction data using the balance sheet method. Example G above provides detailed guidance on how revaluation adjustments can be derived directly on the basis of equation [5.2.5] or [5.2.7].*

*Although simpler than equation [5.2.5], the application of equation [5.2.7] can nevertheless be burdensome for reporting agents. It is therefore accepted that if securities of the same type are recorded at market value (or following any other procedure that guarantees the same recording value for all securities), price revaluations may be derived by applying the change in the carrying value to the lower of the two balances at t and t+1:*

$$R_{t+1} = (p_{t+1}^K - p_t^K) \times \min(N_t, N_{t+1}) \quad \text{Equation [5.3.1]}$$

*This clearly represents a deviation from the definition used in the balance sheet method, especially at a time of high turnover, i.e.:  $N^K \leq \min(N_t, N_{t+1})$ . Nevertheless, it is considered acceptable in view of the potential cost savings for reporting agents. Where securities are recorded at historic cost or the lower of purchase or market value, this simplified method cannot always be applied given that the valuation rule could mean that similar securities are recorded at different prices.*

---

## 5.3.2 The case of MMFs

In accordance with Part 3, Section 1 of Annex I to Guideline ECB/2021/11, the calculation of price revaluation adjustments on MMF assets follows the common procedure applicable to all MFIs. On the liabilities side, positive changes in the value of shares/units have traditionally been considered equivalent to the payment (as opposed to the accrual) of interest on deposits, meaning that the counterpart of the

reevaluations on the assets side would not be “money market fund shares/units” but “remaining liabilities”. A decline in the price of MMF shares/units owing to losses on the assets side cannot be compared to interest payments, however. While there has been a relative shift over recent years towards MMFs with variable (as opposed to constant) net asset values, it is rare for MMFs to experience significant changes in the value of their assets and therefore, in practice, also in the value of their shares/units issued.<sup>99</sup>

With regard to the treatment of exchange rate changes in the context of MMF shares/units, MMFs may hold assets denominated in foreign currency whose equivalent amounts in euro may be affected by changes in exchange rates. The change in shares/units on the liabilities side of their balance sheet is attributed to non-resident holdings of these instruments.<sup>100</sup> The effect of exchange rate changes on the outstanding value of MMF shares/units through its effect on assets held by MMFs therefore has no impact on monetary aggregates (outstanding amounts or flows). See Section 7.2.2 for insights into the mathematical allocation of exchange rate adjustments in this special case.

### 5.3.3 Security-by-security reporting

While the direct reporting of transactions is allowed under the MFI balance sheet statistics framework, most reporting agents record transactions indirectly through the direct reporting of revaluation adjustments.<sup>101</sup> Securities data are typically compiled based on an aggregated data collection, although NCBs may collect the required statistical information on securities issued and held by MFIs on a security-by-security basis if the aggregated data can be derived in accordance with the minimum statistical standards specified in Regulation ECB/2021/2.<sup>102</sup> Where this is the case, transactions applying the transaction method can only be derived if the security-by-security reporting covers not only outstanding amounts data but also transactions. Similarly, when the balance sheet method is applied transactions can only be derived if, in addition to the outstanding amounts of securities on a security-by-security basis, reporting agents also transmit for each security its carrying value on the balance sheet. The same principle applies for the calculation of revaluation adjustments. Under Regulation ECB/2021/2, NCBs may grant derogations in respect of the reporting of price revaluations (including complete exemption) to credit institutions who conduct security-by-security reporting, provided that the information reported includes, for each security, its carrying value on the balance sheet, and for securities without an international securities identification number (i.e. non-ISIN)

---

<sup>99</sup> The net asset value (NAV) of an investment fund is the value of its assets minus its liabilities, excluding investment fund shares. MMFs with constant NAVs aim to maintain an unchanging NAV per unit or share. Variable NAV MMFs have no such explicit aim, but the variability of the NAVs is expected to be low.

<sup>100</sup> The allocation of the exchange rate adjustment affecting MMF shares/units to non-resident holdings also reflects the observation that MMFs resident in the euro area that hold foreign currency denominated securities tend to be those set up by non-euro area financial institutions for non-euro area investors.

<sup>101</sup> See the “[Survey of national practices regarding MFI balance sheet statistics](#)”, ECB, November 2015.

<sup>102</sup> For details of the derivation of transactions when the security-by-security method is used, see also Section 8.2 of the [Manual on investment fund statistics](#), ECB, December 2017.

securities, further information on the instrument category, maturity and issuer. Security-by-security reporting and MFI balance sheet statistics are discussed in more detail in Section 8.4.

## 5.4 Revaluation adjustments for loan write-offs/write-downs

Like price revaluations on securities, the (full or partial) removal from the balance sheet of loans that are subject to write-offs or write-downs needs to be taken into account when deriving transactions in loans. In particular, a write-off or write-down of loans has an impact on the reported value of the outstanding amount of loans but is not related to a change in the amount of MFI financing to the economy and is not recorded as a transaction. The adjustment refers to the impact of write-offs/write-downs on the value of loans recorded on the balance sheet, and the data are reported in accordance with the minimum requirements set out in Table 1A in Part 4 of Annex I to Regulation ECB/2021/2, with full sector details for loans to domestic and other euro area residents. Write-downs recognised only when loans are sold or transferred to a third party – e.g. to an FVC as part of a securitisation – are also included where identifiable.

A write-off/write-down should be reported only if the action is reflected in the reported loans outstanding (see Example L). Bad debt loans overdue or otherwise impaired are reported in full on the balance sheet unless they have been written down/off (see also Section 4.3.9). As such, statistically recorded write-offs/write-downs cannot be interpreted as a proxy for developments in non-performing loans, given that the criteria for the associated partial or full loan derecognition are subject to national GAAP. It is irrelevant whether the reporting MFI records write-offs/write-downs continuously or only at intervals, or whether a final court judgement is pending, provided that the national accounting practice permits a reduction in the carrying amount of the loans due to impairment. Under IFRS 9, the gross carrying amount of a financial asset is reduced when an entity has no reasonable expectation of recovering the entire or partial amount outstanding (IFRS 9, Section 5.4.4). AnaCredit reporting also requires write-offs according to applicable accounting standards. The counterpart entry to a write-off/write-down should be in “capital and reserves”. A write-off/write-down as a result of debt forgiveness mutually agreed between two institutional units is a transaction and therefore not reported as a loan revaluation.

While loan data are to be collected under the MFI balance sheet statistical framework at the nominal outstanding amounts and on a gross basis (i.e. without regard to any loan loss provisions made against them), Article 8(3) of Regulation ECB/2021/2 does allow reporting net of provisions due to the need to maintain the historical consistency of national loans series (see also Section 4.3.10). If outstanding amounts are reported net of provisions, the adjustment for loan write-offs/write-downs also reflects the changes in the level of loan loss provisions. For example, if a reporting MFI has already made a loan loss provision against the loan in question, this provision is already reflected in the reported value of the loan (and in the related adjustment); consequently, when the final write-off/write-down takes

place, only the marginal change compared with the value of the provision is to be deducted from the outstanding amounts (or added to them if the provision was too high) and recorded in the related adjustment (see Example M).

### Example L

#### Derivation of write-offs/write-downs for loans reported gross of provisions

Consider the loan portfolio of an MFI vis-à-vis non-financial corporations at time  $t$ . For the sake of simplicity, suppose that all loans are euro-denominated, so that no adjustments for changes in exchange rates need to be taken into account. Between time  $t$  and  $t+1$ , the MFI does not provide any new loans and none of the loans outstanding at time  $t$  are paid back.

Item	Time (t) Outstanding stock	Transactions	Revaluation adjustment	Time (t+1) Outstanding stock
Loan portfolio	100	0	-5	95

The loan portfolio amounts to 100 at time  $t$ . At time  $t+1$ , some of the loans are written down and the loan portfolio falls to 95; the change in outstanding amounts is -5. The MFI then reports a revaluation adjustment of -5; consequently, (using the notation in Example J) transactions at time  $t+1$  can be estimated as:

$$T_{t+1} = -5 - (-5) = 0.$$

Note that where provisions exist against the loan, they should be adjusted as required.

### Example M

#### Derivation of write-offs/write-downs for loans reported net of provisions

The case where loans are reported net of provisions is slightly more complicated.

Item	Time (t) Outstanding stock	Transactions	Revaluation adjustment	Time (t+1) Outstanding stock
Loan portfolio	98	0	-3	95
(Provisions)	(2)			(5)

As in Example L above, the loan portfolio amounts to 100 at time  $t$ , but loan provisions amount to 2; consequently, the on-balance-sheet loans amount to 98. At time  $t+1$ , no loans are written down or written off, but loan provisions increase by 3; thus, loans outstanding decreases to 95 and the change in outstanding amounts is -3. The MFI then has to report a revaluation adjustment of -3, which equals the change in loan loss provisions (with the opposite sign). Hence, transactions at

time t+1 are:

$$T_{t+1} = -3 - (-3) = 0.$$

### Example N

#### Derivation of write-downs when loans are sold or transferred

Suppose a loan of 100 is transferred from the MFI's balance sheet at time t+1. A provision of 20 has already been recorded against the loan. The loan is sold for a value of 70, meaning a write-down/write-off of 30 at the time of sale.

Item	Time (t) Outstanding stock	Transactions	Revaluation adjustment	Time (t+1) Outstanding stock
Loan portfolio	100	70	-30	0
(Provisions)	(20)			(0)

Prior to the loan sale, the (simplified) balance sheet is reported as follows, reflecting the loan and related provision:

Outstanding stock at time (t)			
Assets		Liabilities	
Loan	100	Capital and reserves	100
		o/w equity	80
		o/w profit and loss (P&L)	
		o/w provisions	20
	100		100

At time t+1, the loan is sold for 70, which is received as cash in this simplified example. As mentioned above, the counterpart to write-downs/write-offs is usually in "capital and reserves". However, given that there is already a provision of 20 against the loan, this must be taken into account and only the loss above that which is provisioned is allocated to the P&L account. The effects on both the P&L and provision account are treated as revaluation adjustments given that they do not constitute income or expenses. The balance sheet and associated revaluation adjustments should be reported as follows:

Outstanding stock at time (t+1)			
Assets		Liabilities	
Loan	0	Capital and reserves	70
Cash	70	o/w equity	80
		o/w P&L	-10
		o/w provisions	0
	70		70

Revaluation adjustment at time (t+1)			
Assets		Liabilities	
Loan	-30	Capital and reserves	-30
Cash		o/w equity	
		o/w P&L	-10
		o/w provisions	-20
	-30		-30

*The only transactions evident are a +70 transaction in cash and -70 in loans. Further considerations for the reporting of loans transferred/sold are discussed in Section 4.3.11.*

## 5.5 Reclassification adjustments for changes in the composition of the reporting sector

Changes in the composition of the reporting sector may give rise to the transfer of business across economic sector boundaries. Such transfers do not represent transactions and are therefore treated as an adjustment in “reclassification adjustments”. An institution that joins the reporting sector may transfer business into the sector, whereas an institution leaving the reporting sector may transfer business out of the sector. Example O below shows the implications of the suggested treatment. Where, however, a joining institution starts its business from scratch after joining the reporting sector, this represents a financial transaction that is not removed from statistical data.<sup>103</sup> Similarly, where a leaving institution decreases its activities prior to leaving the reporting sector, this is captured as a transaction in the statistical data.

<sup>103</sup> This criterion applies in borderline cases. For example, the establishment of a new bank that takes over operations previously carried out by a representative office on behalf of a non-resident bank gives rise to a transaction that is not removed when compiling transaction data.

The impact of a transfer of business into/out of the reporting sector on the sector's outstanding assets and liabilities depends on whether the institution is a full or tail reporter. An institution joining the MFI sector as a full reporter will usually report its first data at the end of the month in which it joins or at the end of that quarter. Similarly, the data of a full reporter leaving the reporting sector are removed at the time of its departure. If the first/last assets and liabilities reported are transferred into/out of the reporting sector, an adjustment may be made in the reporting period in which this transfer occurs. Where institutions join or leave as reporters in the reporting tail, the impact on the asset and liability items depends on the grossing-up procedure used.

Most of the information needed to make an adjustment for changes in statistical coverage is usually available within the statistical reporting system. However, it may be necessary for NCBs to collect ad hoc information from institutions entering the reporting sector to determine whether the first reported assets and liabilities have been transferred from outside the reporting sector or built up after entry. Similar information is collected from institutions leaving the reporting sector.

The net effect of the joiners or leavers on the aggregated assets and liabilities of the reporting sector is calculated by aggregating the first assets and liabilities reported by new entrants and the last assets and liabilities reported by leavers and, for each item, taking the difference between the two. This net figure is entered under "reclassification adjustments". In certain circumstances, there may be an effect on counterparty reporting and this effect must also be included in the adjustments, in this case as a change in sector. For instance, if an MFI surrenders its authorisation but continues to operate as an OFI funded through the interbank market, the recorded rise in MFI lending to OFIs requires an adjustment (given that it is a change in the classification of a counterparty sector).

### **Example O**

#### **Derivation of reclassification data when an OFI joins the MFI population**

---

*This example shows the impact of a new institution joining the MFI population. The discussion is limited to the point of joining and does not take into account the activities of the institution after it has joined the MFI population (when operations will be treated as transactions). For the sake of simplicity, it is also assumed that the joining institution does not have cross-positions with the MFI sector (otherwise the change in the MFI population would also lead a change in the classification of counterparties; the impact of such changes is discussed in Example U below).*

*A financial corporation engaged in lending (an OFI) to domestic households is granted a banking licence and therefore joins the MFI population. Suppose that its balance sheet is as follows:*

OFI			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	70
o/w loans to households	100	Capital and reserves	30
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

*From the moment that the OFI joins the MFI population, all its assets and liabilities are included in the aggregated data of the MFI sector, resulting in changes in outstanding amounts, which are recorded as reclassifications:*

MFI sector – amounts outstanding before the join			
Assets		Liabilities	
Loans and deposits	1,000	Loans and deposits	800
o/w loans to households	900	Capital and reserves	200
<b>Total assets</b>	<b>1,000</b>	<b>Total liabilities</b>	<b>1,000</b>

MFI sector – amounts outstanding after the join			
Assets		Liabilities	
Loans and deposits	1,100	Loans and deposits	870
o/w loans to households	1,000	Capital and reserves	230
<b>Total assets</b>	<b>1,100</b>	<b>Total liabilities</b>	<b>1,100</b>

MFI sector – changes in amounts outstanding			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	70
o/w loans to households	100	Capital and reserves	30
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

MFI sector – Reclassifications			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	70
o/w loans to households	100	Capital and reserves	30
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>



## 5.6 Reclassification adjustments for changes in the structure of the MFI sector

Changes in the structure of the MFI sector arise in the context of intragroup reorganisations, mergers, acquisitions and divisions. These operations typically lead to changes in the valuation of financial assets and liabilities; revaluation adjustments are entered to reflect these changes and thus allow transactions to be correctly derived. In addition, the operations often give rise to a transfer of financial assets and liabilities from the balance sheet of one institutional unit to another (change in ownership). Accounting for these asset transfers is not always easy, but the ESA 2010 definition of transactions mentioned above provides a good basis for addressing the various cases. In broad terms, the boundary for treating transfers of assets as transactions is defined by the existence of two separate institutional units acting by mutual agreement. If the transfers occur as a result of the creation or disappearance of an institutional unit, however, they should be treated as reclassifications. See also the ESA 2010 on “Changes in sector classification and institutional unit structure” (6.17-6.20).

### 5.6.1 Intragroup reorganisation – transfer of assets

Suppose, first, that as part of an intragroup reorganisation, two corporations of group undergo restructuring operations and transfers of assets take place. Since these operations usually involve separate institutional units acting by mutual agreement, they represent transactions. Examples P and Q below help to clarify the implications of this suggested treatment in two specific cases: when a financial corporation engaged in lending (classified in the OFI sector) transfers loans to an MFI of the same financial group that is resident in the same territory, and when a foreign MFI subsidiary transfers securities to the parent MFI.

#### Example P

Intragroup reorganisation: an OFI transfers loans to an MFI

*An MFI and a financial corporation engaged in lending (an OFI) to domestic households are resident in the same territory and belong to the same financial group. Suppose that their balance sheets are as follows:*

MFI			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	80
o/w loans to households	80	Capital and reserves	20
Total assets	100	Total liabilities	100

OFI			
Assets		Liabilities	
Loans and deposits	20		
o/w loans to households	20		
		Capital and reserves	20
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

*As part of an intragroup reorganisation, it is decided to transfer part of the loan portfolio from the OFI to the MFI (for a total amount of 10). In exchange for the loans, the OFI then has a claim on the MFI for the corresponding amount. After the operation takes place, the balance sheets are as follows:*

MFI			
Assets		Liabilities	
Loans and deposits	110	Loans and deposits	90
o/w loans to households	90		10
		Capital and reserves	20
<b>Total assets</b>	<b>110</b>	<b>Total liabilities</b>	<b>110</b>

OFI			
Assets		Liabilities	
Loans and deposits	20		
o/w loans to households	10		
o/w deposit with the MFI	10	Capital and reserves	20
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

*The asset transfer and its counterpart are both recorded as transactions. As a result of this operation, loans to households provided by the domestic MFI sector show a positive change of 10.*

### Example Q

**Intragroup reorganisation: a foreign subsidiary transfers securities to the parent MFI**

*An MFI has a foreign subsidiary (also an MFI). For the sake of simplicity, suppose that the subsidiary is fully owned by the parent MFI (the capital of the subsidiary MFI appears under holdings of “equity” on the balance sheet of the parent MFI). The balance sheets of the two MFIs are as follows:*

Domestic MFI			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	80
o/w loans to foreign subsidiary	20		
Holdings of shares	10	Capital and reserves	30
<b>Total assets</b>	<b>110</b>	<b>Total liabilities</b>	<b>110</b>

Foreign subsidiary			
Assets		Liabilities	
Loans and deposits	30	Loans and deposits	40
Holdings of government securities	20	o/w loans from parent MFI	20
		Capital and reserves	10
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

*As part of an intragroup reorganisation, the parent MFI takes over the government securities owned by the subsidiary (for a total amount of 20). In exchange for the securities, the subsidiary's liability to the parent MFI is cancelled. After the operation takes place, the balance sheets are as follows:*

Domestic MFI			
Assets		Liabilities	
Loans and deposits	80	Loans and deposits	80
Holdings of government securities	20	Capital and reserves	30
Holdings of shares	10		
<b>Total assets</b>	<b>110</b>	<b>Total liabilities</b>	<b>110</b>

Foreign subsidiary			
Assets		Liabilities	
Loans and deposits	30	Loans and deposits	20
		Capital and reserves	10
<b>Total assets</b>	<b>30</b>	<b>Total liabilities</b>	<b>30</b>

*The asset transfer and its counterpart are both recorded as transactions. As a result of this operation, holdings of government securities by the domestic MFI sector show a positive change of 20.*

## 5.6.2 Intragroup reorganisation – mergers, acquisitions and divisions

Transfers of assets often take place in the context of (intragroup) reorganisations in relation to mergers, acquisitions and divisions. If the merger or acquisition is cross-border or involves institutional units in different sectors, funds will usually flow across countries/sectors. In such cases, it is crucial to have clear criteria defining when such transfers should be treated as transactions and when they should be treated as reclassifications. In accordance with the principles outlined above, if a merger or acquisition takes place but no corporation ceases to exist, transfers are treated as transactions. This happens, for example, in a subsidiary merger (SNA 2008, paragraph 21.21), i.e. when the acquired corporation becomes a subsidiary of the parent corporation.<sup>104</sup> It is worth noting, though, that if the merger or acquisition takes place within the same national territory, the flows will cancel out and there will be no impact on the national aggregated MFI balance sheet. In the case of restructuring across national boundaries, however, this approach will impact national results in that intragroup transfers of assets will be reflected in the transaction of the national aggregated MFI balance sheet. Data on cross-border loan transfers between euro area MFIs are collected under Regulation ECB/2021/2 (see Section 4.3.11).

If the merger or acquisition leads to the disappearance of one or more institutional units, a distinction is made between transfers taking place before the disappearance of the units, which are treated as transactions, and those taking place at the point in time when the units cease to exist, which are treated as reclassifications. In the latter case, two instances can be distinguished: a merger or acquisition where one corporation ceases to exist and is absorbed by another unit or units – a statutory merger (SNA 2008, paragraph 21.21) – and a merger or acquisition where two or more corporations join to form an entirely new unit – a consolidation (SNA 2008, paragraph 21.21). In both instances, all cross-positions that existed between the merging institutions disappear from the system and reclassification adjustments must be reported accordingly. Corporate divisions are treated symmetrically. These various instances are analysed in detail in the numerical examples below. The information sources used to identify adjustments (when needed) are the final assets and liabilities reported by the old institutions and the first assets and liabilities reported by the new institutions. NCBs identify the outstanding balances between the institutions that have been restructured.

As discussed above, the criterion used to distinguish between flows that represent transactions and those to be recorded as reclassifications relies on the existence of two separate institutional units at the point in time when the transfer takes place. Various cases are analysed in the sections below, each assuming that only two corporations are involved. More complicated cases can be broken down into these underlying operations or treated analogously. A distinction is also made between cases where the operation takes place within the same sector and cases where the corporations involved belong to different sectors (including where one corporation is

---

<sup>104</sup> In addition to being ESA 2010-compliant, this approach has the advantage of guaranteeing consistency with the treatment in other statistical domains, such as balance of payments and government finance statistics.

non-resident). The discussion is limited to mergers and acquisitions, but corporate divisions can be treated symmetrically.

A final point relates to changes in valuation practices that often accompany mergers, acquisitions and divisions. These changes in balance sheet positions are not transactions and must in all cases be reflected in revaluation adjustments. For the sake of simplicity, the description below will not cover these aspects.

### 5.6.2.1 Merger or acquisition in which no corporation ceases to exist

If no corporation involved in the merger or acquisition ceases to exist, there is no change in the reporting population(s). However, restructuring operations often take place in these mergers or acquisitions and the related transfers of assets and liabilities between the units involved need to be treated as transactions. Similar operations take place in the case of disinvestment (e.g. the parent corporation sells a subsidiary) and are to be treated analogously. In brief, these situations are similar in all respects to those described in Section 5.6.1.

#### Example R

##### Merger or acquisition in which no corporation ceases to exist

*Financial corporations A and B have the following balance sheets:*

Corporation A			
Assets		Liabilities	
Cash	30		
Loans and deposits	20	Loans and deposits	10
o/w loans to B	10		
		Capital and reserves	40
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

Corporation B			
Assets		Liabilities	
Cash	20		
		Loans and deposits	30
		o/w loans from A	10
Holdings of shares	30	Capital and reserves	20
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

*To acquire B, A raises new capital and purchases shares in B with the proceeds of that operation. B therefore becomes a subsidiary of A, while remaining a separate institutional unit. This is reflected in an increase in A's capital and reserves,*

counterbalanced by an equivalent increase in its holdings of shares. It is assumed that A purchases the shares in B from third parties who do not belong to the same sector as either A or B. The same assumption applies to the units purchasing the new shares issued by A. These changes are transactions. Following the acquisition, the balance sheets are as follows:

Corporation A			
Assets		Liabilities	
Cash	30		
Loans and deposits	20	Loans and deposits	10
o/w loans to B	10		
Holdings of shares	20	Capital and reserves	60
o/w shares in B	20		
<b>Total assets</b>	<b>70</b>	<b>Total liabilities</b>	<b>70</b>

Corporation B			
Assets		Liabilities	
Cash	20		
		Loans and deposits	30
		o/w loans from A	10
Holdings of shares	30	Capital and reserves	20
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

Some intragroup operations then take place, with the transfer of 20 shares held by B to A in exchange for cash (10) and the cancellation of A's loan claim on B (10). The following transactions take place at this stage (A's capital increase and subsequent purchase of shares in B are not covered here):

Corporation A			
Assets		Liabilities	
Cash	-10		
Loans and deposits	-10	Loans and deposits	0
o/w loans to B	-10		
Holdings of shares	20	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

Corporation B			
Assets		Liabilities	
Cash	10		
		Loans and deposits	-10
		o/w loans from A	-10
Holdings of shares	-20	Capital and reserves	
<b>Total assets</b>	<b>-10</b>	<b>Total liabilities</b>	<b>-10</b>

Hence, all transfers and their counterparts are shown as transactions, including the decrease in cross-positions between the two corporations. There are no reclassifications and the final balance sheets are as follows:

Corporation A			
Assets		Liabilities	
Cash	20		
Loans and deposits	10	Loans and deposits	10
o/w loans to B	0		
Holdings of shares	40	Capital and reserves	60
o/w shares in B	20		
<b>Total assets</b>	<b>70</b>	<b>Total liabilities</b>	<b>70</b>

Corporation B			
Assets		Liabilities	
Cash	30		
		Loans and deposits	20
		o/w loans from A	0
Holdings of shares	10	Capital and reserves	20
<b>Total assets</b>	<b>40</b>	<b>Total liabilities</b>	<b>40</b>

In terms of aggregates for institutional sectors and subsectors, two distinct cases can be identified.

- **Corporations A and B belong to the same sector.** Compared with the position before the acquisition, the total assets and liabilities of the sector increase by 10 as a result of the increase of 20 in A's capital and the corresponding purchase of shares in B, and compared with the intragroup transactions (-10). There are no reclassifications.

Sector of A and B – transactions			
Assets		Liabilities	
Cash	0		
Loans and deposits	-10	Loans and deposits	-10
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	20	Capital and reserves	20
<b>Total assets</b>	<b>10</b>	<b>Total liabilities</b>	<b>10</b>

Sector of A and B – reclassifications			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0	o/w loans by A to B	0
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

- Corporations A and B belong to different sectors.** All transfers and their counterparts are shown as transactions affecting the sectoral aggregates. There are no reclassifications. Compared with the situation before the acquisition, the sectoral balance sheets are affected as follows:

Sector of A – transactions			
Assets		Liabilities	
Cash	-10		
Loans and deposits	-10	Loans and deposits	
o/w loans by A to B	-10		
Holdings of shares	40	Capital and reserves	20
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

Sector of B – transactions			
Assets		Liabilities	
Cash	10		
		Loans and deposits	-10
		o/w loans by A to B	-10
Holdings of shares	-20	Capital and reserves	0
<b>Total assets</b>	<b>-10</b>	<b>Total liabilities</b>	<b>-10</b>



Sector of A – reclassifications			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0		
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

Sector of B – reclassifications			
Assets		Liabilities	
Cash	0		
		Loans and deposits	0
		o/w loans by A to B	0
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

### 5.6.2.2 Merger or acquisition in which one corporation ceases to exist (statutory merger)

When one of the corporations involved in the merger or acquisition ceases to exist, there is a change in the population of the sector to which the absorbed corporation belonged, with the acquiring corporation taking over the (residual) balance sheet of the unit absorbed. This operation leads to reclassification adjustments. If the two corporations belong to the same sector, the adjustment will only relate to the decrease in the cross-positions between the merging institutions (including the shareholding of the acquiring corporation in the absorbed corporation). If they belong to different sectors or territories, the reclassifications will relate to all balance sheet positions existing when the acquired corporation ceases to exist, including the decrease in cross-positions between the merging institutions. See also Section 4.6.4.2 on the treatment of equity holdings in foreign branches in the case of a statutory merger.

All transfers of assets and liabilities between the units involved prior to the disappearance of the acquired corporation are transactions, however, and should be treated along the lines described above. Similar operations take place in the case of disinvestments involving the creation of a new company (e.g. a corporate spin-off) and should be treated analogously.

### Example S

Acquisition in which one corporation ceases to exist.

Corporations A and B are as in Example R above, but after having acquired the shares in B (and increased its equity capital by 20), corporation A decides to wind down B and absorb its business activities.<sup>105</sup> Suppose that prior to the winding-down, the balance sheets of A and B are as follows:

Corporation A			
Assets		Liabilities	
Cash	30		
Loans and deposits	20	Loans and deposits	10
o/w loans to B	10		
Holdings of shares	20	Capital and reserves	60
o/w shares in B	20		
<b>Total assets</b>	<b>70</b>	<b>Total liabilities</b>	<b>70</b>

Corporation B			
Assets		Liabilities	
Cash	20		
		Loans and deposits	30
		o/w loans from A	10
Holdings of shares	30	Capital and reserves	20
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

The cash (20) and the shares (30) owned by B will move to the balance sheet of A, together with B's liabilities to third parties (20), while the cross-positions (the shares in B held by A (20) and the loans from A to B (10), making a total of 30) will disappear from the system. None of these changes are transactions. The net changes on the balance sheets of A and B relating to the winding down of B (the increase in A's capital and its purchase of the shares in B are excluded here) are as follows:

<sup>105</sup> Asset transfers taking place before B is wound down are treated as transactions along the lines of Example R. The assumptions of Example R are also kept here: A purchases shares in B from third parties that do not belong to the same sector as either A or B, and the same applies to the units purchasing the new shares issued by A. This example properly relates to an acquisition in which B's shareholders receive cash in exchange for their shareholdings (transactions). The case of a merger in which B's shareholders receive new shares in A in exchange for their shareholdings is similar: the counterparty for the two offsetting transactions of B's shareholders is corporation A, which is exchanging the new capital for the shares in corporation B.

Corporation A			
Assets		Liabilities	
Cash	20		
Loans and deposits	-10	Loans and deposits	20
o/w loans to B	-10		
Holdings of shares	10	Capital and reserves	0
o/w shares in B	-20		
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

Corporation B			
Assets		Liabilities	
Cash	-20		
		Loans and deposits	-30
		o/w loans from A	-10
Holdings of shares	-30	Capital and reserves	-20
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

After B is wound down, A's balance sheet is as follows:

Corporation A			
Assets		Liabilities	
Cash	50		
Loans and deposits	10	Loans and deposits	30
o/w loans to B	0		
Holdings of shares	30	Capital and reserves	60
<b>Total assets</b>	<b>90</b>	<b>Total liabilities</b>	<b>90</b>

In terms of aggregates for institutional sectors, two distinct cases can be identified.

- Corporations A and B belong to the same sector.** In aggregated terms, reclassifications apply to all balance sheet items where cross-positions exist between A and B at the point in time when B is wound down. Taking into account the increase in A's capital and A's purchase of the shares in B (which are transactions), the following sectoral developments are observed:

Sector of A and B – changes in amounts outstanding			
Assets		Liabilities	
Cash	0		
Loans and deposits	-10	Loans and deposits	-10
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>-10</b>	<b>Total liabilities</b>	<b>-10</b>

Sector of A and B – reclassifications			
Assets		Liabilities	
Cash	0		
Loans and deposits	-10	Loans and deposits	-10
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	-10	Capital and reserves	-20
<b>Total assets</b>	<b>-30</b>	<b>Total liabilities</b>	<b>-30</b>

Sector of A and B – transactions			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0	o/w loans by A to B	0
Holdings of shares	20	Capital and reserves	20
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

- Corporations A and B belong to different sectors.** *In this case, reclassifications apply to all balance sheets items relating to the movement of assets from B to A, and to the cross-positions existing between A and B at the point in time when B is wound down. Taking into account the increase in A's capital and A's purchase of the shares in B (which are transactions), the following sectoral developments are observed:*

Sector of A – changes in amounts outstanding			
Assets		Liabilities	
Cash	20		
Loans and deposits	-10	Loans and deposits	20
o/w loans by A to B	-10		
Holdings of shares	30	Capital and reserves	20
<b>Total assets</b>	<b>40</b>	<b>Total liabilities</b>	<b>40</b>

**Sector of B – changes in amounts outstanding**

Assets		Liabilities	
Cash	-20		
		Loans and deposits	-30
		o/w loans by A to B	-10
Holdings of shares	-30	Capital and reserves	-20
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

**Sector of A – reclassifications**

Assets		Liabilities	
Cash	20		
Loans and deposits	-10	Loans and deposits	20
o/w loans by A to B	-10		
Holdings of shares	10	Capital and reserves	0
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

**Sector of B – reclassifications**

Assets		Liabilities	
Cash	-20		
		Loans and deposits	-30
		o/w loans by A to B	-10
Holdings of shares	-30	Capital and reserves	-20
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

**Sector of A – transactions**

Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0		
Holdings of shares	20	Capital and reserves	20
<b>Total assets</b>	<b>20</b>	<b>Total liabilities</b>	<b>20</b>

Sector of B – transactions			
Assets		Liabilities	
Cash	0	Loans and deposits	0
		o/w loans by A to B	0
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

### 5.6.2.3 Merger in which two corporations form an entirely new corporation (consolidation merger)

Both corporations involved in the merger cease to exist. There is therefore a change in the population(s) of the sector(s) of the merging corporations, with the newly established corporation taking over the balance sheets of the merging units. This operation leads to reclassification adjustments. If the two merging corporations and the new corporation belong to the same sector, the adjustment will only relate to the decrease in the cross-positions between the merging institutions and the disappearance from the system of the shares of the merging institutions. If the two merging corporations belong to the same sector but the new corporation belongs to a different sector, the reclassifications within the sector of the merging units will relate to all their balance sheet positions, including the decreases in cross-positions between the merging institutions, while the reclassifications within the sector of the new corporation will relate only to its balance sheet positions (and not the raising of new capital and the corresponding purchases of the shares in the merging corporations, which represent transactions). Cases where the two merging corporations do not belong to the same sector are treated analogously. Cases where a corporation is split into two new entities are also treated analogously.

#### Example T

Merger in which two corporations form an entirely new corporation.

*Corporations A and B have balance sheets as in Example R above:*

Corporation A			
Assets		Liabilities	
Cash	30	Loans and deposits	10
Loans and deposits	20		
o/w loans to B	10	Capital and reserves	40
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

Corporation B			
Assets		Liabilities	
Cash	20	Loans and deposits	30
		o/w loans from A	10
Holdings of shares	30	Capital and reserves	20
<b>Total assets</b>	<b>50</b>	<b>Total liabilities</b>	<b>50</b>

If A and B merge into a new corporation C,<sup>106</sup> C issues new capital for 60 which is exchanged for the shares in A and B. The shareholders of A and B receive new shares in C (40 and 20 respectively) in exchange for their old shares in A and B. These operations are transactions.

Corporation C			
Assets		Liabilities	
Holdings of shares	60	Capital and reserves	60
o/w shares in A and B	60		
<b>Total assets</b>	<b>60</b>	<b>Total liabilities</b>	<b>60</b>

A and B are then wound down and their assets and liabilities are moved to the balance sheet of C. None of the consequent changes in balance sheet outstanding amounts represent transactions. The net changes on the balance sheets of A and B are as follows:

Corporation A			
Assets		Liabilities	
Cash	-30	Loans and deposits	-10
Loans and deposits	-20		
o/w loans to B	-10		
Holdings of shares	0	Capital and reserves	-40
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

<sup>106</sup> Asset transfers taking place before A and B are wound down are treated as transactions along the lines of Example R. The assumptions of Example R are also kept here: the shareholders of A and B do not belong to the sector of either A or B.

Corporation B			
Assets		Liabilities	
Cash	-20		
		Loans and deposits	-30
		o/w loans from A	-10
Holdings of shares	-30	Capital and reserves	-20
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

The assets and liabilities of A and B (excluding the cross-positions existing between them) are transferred to the balance sheet of C in exchange for the shares in A and B which C had on its balance sheet and which now disappear from the system:

Corporation C			
Assets		Liabilities	
Cash	50		
Loans and deposits	10	Loans and deposits	30
Holdings of shares	30	Capital and reserves	60
<b>Total assets</b>	<b>90</b>	<b>Total liabilities</b>	<b>90</b>

In terms of aggregates for institutional sectors, four distinct cases can be identified.

- **Corporations A and B and the new corporation C belong to the same sector.** In aggregated terms, there are no changes in outstanding amounts, except in balance sheet items where cross-positions existed between A and B. These changes are recorded as reclassifications. Reclassifications will also be entered for the shares of A and B once they disappear from the system:

Sector of A, B and C – changes in amounts outstanding			
Assets		Liabilities	
Cash	0		
Loans and deposits	-10	Loans and deposits	-10
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>-10</b>	<b>Total liabilities</b>	<b>-10</b>



Sector of A, B and C – reclassifications			
Assets		Liabilities	
Cash	0		
Loans and deposits	-10	Loans and deposits	-10
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	-60	Capital and reserves	-60
<b>Total assets</b>	<b>-70</b>	<b>Total liabilities</b>	<b>-70</b>

Sector of A, B and C – transactions			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0	o/w loans by A to B	0
Holdings of shares	60	Capital and reserves	60
<b>Total assets</b>	<b>60</b>	<b>Total liabilities</b>	<b>60</b>

- Corporations A and B belong to the same sector, but C belongs to a different sector.** *The aggregated balance sheet of the sector of A and B shows changes in outstanding amounts that relate to their assets and liabilities at the time when they cease to exist, including decreases in balance sheet items where cross-positions existed between A and B. All these changes are recorded as reclassifications. Similarly, the aggregated balance sheet of the sector of C shows changes relating to the assets and liabilities of the new corporation. In addition, while the issuance of capital by C and its counterparts (the purchases of the capital of A and B) are recorded as transactions, all other operations are recorded as reclassifications:*

Sector of A and B – changes in amounts outstanding			
Assets		Liabilities	
Cash	-50		
Loans and deposits	-20	Loans and deposits	-40
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	-30	Capital and reserves	-60
<b>Total assets</b>	<b>-100</b>	<b>Total liabilities</b>	<b>-100</b>

Sector of C – changes in amounts outstanding			
Assets		Liabilities	
Cash	50		
Loans and deposits	10	Loans and deposits	30
Holdings of shares	30	Capital and reserves	60
<b>Total assets</b>	<b>90</b>	<b>Total liabilities</b>	<b>90</b>

Sector of A and B – reclassifications			
Assets		Liabilities	
Cash	-50		
Loans and deposits	-20	Loans and deposits	-40
o/w loans by A to B	-10	o/w loans by A to B	-10
Holdings of shares	-30	Capital and reserves	-60
<b>Total assets</b>	<b>-100</b>	<b>Total liabilities</b>	<b>-100</b>

Sector of C – reclassifications			
Assets		Liabilities	
Cash	50		
Loans and deposits	10	Loans and deposits	30
Holdings of shares	-30	Capital and reserves	0
<b>Total assets</b>	<b>30</b>	<b>Total liabilities</b>	<b>30</b>

Sector of A and B – transactions			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0	o/w loans by A to B	0
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

Sector of C – transactions			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
Holdings of shares	60	Capital and reserves	60
<b>Total assets</b>	<b>60</b>	<b>Total liabilities</b>	<b>60</b>

- Corporations A and B do not belong to the same sector, while C belongs to the same sector as A.** *The aggregated balance sheet of the sector of B shows changes in outstanding amounts that relate to its assets and liabilities at the time when it ceases to exist, including the cross-positions between A and B. All these changes are recorded as reclassifications. The aggregated balance sheet of the sector of A and C shows changes in outstanding amounts that relate to the assets and liabilities that C inherited from B when it ceased to exist and also reflect the cross-positions that existed between A and B. In addition, while the issuance of capital by C and its counterparts (the purchases of the capital of A and B) are recorded as transactions, all other operations are recorded as reclassifications:*

Sector of A and C – changes in amounts outstanding			
Assets		Liabilities	
Cash	20		
Loans and deposits	-10	Loans and deposits	20
o/w loans by A to B	-10		0
Holdings of shares	30	Capital and reserves	20
<b>Total assets</b>	<b>40</b>	<b>Total liabilities</b>	<b>40</b>

Sector of B – changes in amounts outstanding			
Assets		Liabilities	
Cash	-20		
		Loans and deposits	-30
		o/w loans by A to B	-10
Holdings of shares	-30	Capital and reserves	-20
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

Sector of A and C – reclassifications			
Assets		Liabilities	
Cash	20		
Loans and deposits	-10	Loans and deposits	20
o/w loans by A to B	-10		
Holdings of shares	-30	Capital and reserves	-40
<b>Total assets</b>	<b>-20</b>	<b>Total liabilities</b>	<b>-20</b>

Sector of B – reclassifications			
Assets		Liabilities	
Cash	-20		
		Loans and deposits	-30
		o/w loans by A to B	-10
Holdings of shares	-30	Capital and reserves	-20
<b>Total assets</b>	<b>-50</b>	<b>Total liabilities</b>	<b>-50</b>

Sector of A and C – transactions			
Assets		Liabilities	
Cash	0		
Loans and deposits	0	Loans and deposits	0
o/w loans by A to B	0		
Holdings of shares	60	Capital and reserves	60
<b>Total assets</b>	<b>60</b>	<b>Total liabilities</b>	<b>60</b>

Sector of B – transactions			
Assets		Liabilities	
Cash	0		
		Loans and deposits	0
		o/w loans by A to B	0
Holdings of shares	0	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

- **None of corporations A, B or C belong to the same sector. This case is not covered here but can be described along the same lines.**

## 5.7 Other reclassification adjustments

Other reclassification adjustments comprise any change in the balance sheet of the MFI sector that arises from reclassifications of counterparties and of assets and liabilities, the (partial) correction of reporting errors, the introduction of new statistical concepts or definitions, or euro area enlargement. Each adjustment case is discussed in turn below. A number of cases where reclassification adjustments are not recorded but the operation is instead treated as a transaction are also discussed in Section 5.7.4.

### 5.7.1 Changes in the sector classification, residence of customers, or instrument

Changes in the sector classification or residence of customers give rise to a reclassification of assets/liabilities vis-à-vis these counterparties. Such reclassifications result in a change in the reported outstanding positions in the period in which the change takes place. As this change is a book-entry transfer of business between sectors and instrument classes and does not represent a transaction, an adjustment must be introduced to remove its impact from the statistics. Such changes in classification occur for a number of reasons, for example because a governmental entity (which is not a market producer while in the government sector) is privatised,<sup>107</sup> or because mergers/divisions alter the principal activity of corporations. Example U presents the case of a change in the classification of a counterparty. Other cases have similar consequences for sectoral balance sheets and are therefore analogous.

Instruments may also be reclassified, for example when loans become negotiable and are accordingly regarded as debt securities for statistical purposes. When a Member State adopts the euro, national banknotes and coins that remain in circulation are, by convention, recorded as such for 12 months (remaining in the MFI balance sheet liabilities category “currency in circulation”), after which they are reclassified to “remaining liabilities”. A reclassification adjustment ensures that the resulting drop in the monetary aggregates outstanding is not reflected in their growth rates.

#### **Example U**

Corporation A is reclassified from the OFI sector to the non-financial corporations sector

---

*The aggregated balance sheet of the MFI sector will be affected by this change in classification: all claims and liabilities that MFIs have vis-à-vis A are reclassified as positions with the non-financial corporations sector. Suppose, for instance, that the MFI sector had granted loans to A and that no other balance sheet positions are*

---

<sup>107</sup> While privatisations may mean a change in sector, as here, this is often not the case because corporations that are market producers will be classified as financial or non-financial corporations regardless of who owns them.

affected. The aggregated balance sheet of the MFI sector will then be affected as follows:

MFI sector – outstanding amounts before the change			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	80
o/w loans to OFIs	30		
o/w loans to A	10		
o/w loans to non-financial corporations	50		
		Capital and reserves	20
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

MFI sector – outstanding amounts after the change			
Assets		Liabilities	
Loans and deposits	100	Loans and deposits	80
o/w loans to OFIs	20		
o/w loans to non-financial corporations	60		
o/w loans to A	10	Capital and reserves	20
<b>Total assets</b>	<b>100</b>	<b>Total liabilities</b>	<b>100</b>

As a consequence, the changes in outstanding amounts affecting the “of which” positions under “loans and deposits” must be balanced by reclassifications to allow the correct derivation of financial transactions:

MFI sector – changes in outstanding amounts			
Assets		Liabilities	
Loans and deposits	0	Loans and deposits	0
o/w loans to OFIs	-10		
o/w loans to non-financial corporations	10	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

MFI sector – reclassifications			
Assets		Liabilities	
Loans and deposits	0	Loans and deposits	0
o/w loans to OFIs	-10		
o/w loans to non-financial corporations	10	Capital and reserves	0
<b>Total assets</b>	<b>0</b>	<b>Total liabilities</b>	<b>0</b>

### 5.7.2 Correction of reporting errors

The correction of reporting errors may give rise to an adjustment. Ideally, corrections of the outstanding amounts should be provided for the whole period concerned, entirely removing the error from the data. However, where the error affects historical data and a correction of past data is not made or can only be made for a limited time range, there is a break in the outstanding amounts between the first observation with the corrected figure and the last one containing the incorrect figure. In this case, NCBs identify the size of the break and enter an adjustment under “reclassification adjustments”. Similar practices apply to the implementation of changes in statistical definitions affecting reported data and to corrections for breaks that may be due to the introduction, change or abandonment of grossing-up methods.

### 5.7.3 Enlargement of the euro area as a reclassification adjustment

This section describes the treatment of enlargements of the euro area in MFI balance sheet statistics and monetary statistics as a special type of reclassification.

To date, the euro area has undergone eight enlargements involving nine EU Member States – Greece in 2001, Slovenia in 2007, Cyprus and Malta in 2008, Slovakia in 2009, Estonia in 2011, Latvia in 2014, Lithuania in 2015 and Croatia in 2023. Each accession adds the aggregated and consolidated balance sheets of the MFI sector of the new euro area country to the respective euro area totals.

All MFI balance sheet statistics reflect the actual composition of the euro area at the time to which the data relate. Each enlargement therefore brings a one-off change in the outstanding amounts of the euro area aggregates. For example, enlargement will increase euro area monetary aggregates due to the monetary instruments held by residents of the new euro area country with domestic MFIs and with MFIs resident in other euro area countries. In addition, euro area monetary aggregates will increase due to the monetary instruments held by residents of other euro area countries with MFIs resident in the new euro area country. Among the counterparts of M3, outstanding credit to euro area residents increases in a similar way, and net external assets of euro area MFIs are affected by the changed status of the Member State adopting the euro.

None of these changes in outstanding balance sheet positions and in aggregates derived from them represent transactions. For example, the increase in M3 stock resulting from an enlargement of the euro area is not reflected in a corresponding increase in its growth rate. Rather, the increases in outstanding positions and related aggregates are treated as reclassifications, although, as explained below, new euro area countries are asked not to directly report reclassification adjustments relating to the enlargement. The calculation of flows and growth rates of MFI balance sheet items and monetary aggregates is explained in more detail in Chapter 7.

### **Data requirements for the Member State joining the euro area**

From the reference month in which the enlargement takes place, MFIs in the new euro area country are required to report to their NCB according to the template for euro area countries under Regulation ECB/2021/2. The NCB then compiles the national aggregated MFI balance sheet and transmits it to the ECB. In addition, the NCB is also required to report to the ECB at least three years of back data according to the euro area reporting scheme, i.e. monthly and quarterly MFI aggregated balance sheet statistics, as though the Member State had already been part of the euro area.<sup>108</sup> These historical data are collected to provide euro area aggregates reflecting the new composition for several years before the enlargement (needed for policy analysis and forecasting), to be used alongside other sets of statistics representing the euro area in its latest composition. These data also make it possible for transactions relating to the new euro area country around the time of enlargement to be correctly derived. Accordingly, the new euro area country should not send any reclassification adjustments relating to the change in the composition of the euro area implicit in its joining.

### **Data requirements for the Member States already in the euro area**

In the month (or quarter) in which the enlargement takes place, MFIs in the existing euro area countries are required to reclassify positions vis-à-vis the new euro area country and positions denominated in the national currency of the joiner. In particular:

- (i) all positions vis-à-vis the new euro area country are reclassified from “rest of the world” to “other euro area residents”;
- (ii) all positions denominated in the joiner’s national currency are reclassified from “all other currencies combined” to “euro”.

Each euro area NCB then compiles its national aggregated MFI balance sheet for the enlarged euro area and transmits it to the ECB, taking care to also transmit reclassification adjustments accounting for the change in the outstanding amounts series arising from the enlargement. In addition, for all time series in the monthly

---

<sup>108</sup> No input is generally required from individual MFIs to perform this exercise, given that the underlying raw data are already reported under the template set for EU Member States not participating in monetary union under Regulation ECB/2021/2. Essentially, in addition to recording the time series according to the naming conventions for euro area countries, the NCB must add positions in national currency to the corresponding positions in euro. For testing and data validation purposes, the ECB may also require the NCB to report both as a euro area country and as an EU Member State outside the euro area for three to six months prior to the enlargement.



reporting scheme, the NCBs are also required to report, on request, at least three years of back data (“delta series”) showing, for each time series, the positions vis-à-vis the new euro area country both in euro and in the joiner’s national currency, so that time series can be compiled as though the new euro area country had already been part of the euro area.<sup>109</sup> These historical data will generally make it possible for aggregates for the euro area in its new composition to be derived for several years before the enlargement.<sup>110</sup>

### Special requirements when two or more countries join the euro area

The reporting requirements are more complex if two or more countries join the euro area at the same time. In particular, each joiner should report historical series as though it had already been part of the euro area without taking into account the other joiners, i.e. these historical data must exclude positions vis-à-vis the other new euro area countries. To ensure that the flows are derived correctly at the time of enlargement, this means that each joiner should report reclassification adjustments applying the same rules as those set for Member States already in the euro area, but referring solely to its positions vis-à-vis the other joiners. Similarly, each of the new euro area countries should report delta series (when required by the ECB) vis-à-vis the other new joiners to enable the ECB to derive historical euro area aggregates reflecting the new composition.

#### 5.7.4 Cases not regarded as reclassifications: debt assumption, debt forgiveness, asset transfers and investment policy change

Some operations that might be regarded as reclassifications are, in fact, treated as transactions. One such example is debt assumption, where one entity takes the place of another as debtor, as a government may do for a publicly owned corporation in a privatisation or for some other entity in the event of a rescue. Under the ESA 2010, debt assumption is treated as a capital transfer (i.e. as a transaction), and this approach is reflected in MFI balance sheet statistics. For example, where a government takes over the debt represented by bank loans to a public corporation in the non-financial corporation sector, the operation is treated in MFI balance sheet statistics as a repayment of loans by non-financial corporations and an extension of MFI credit to general government. It does not give rise to a reclassification adjustment.

Debt forgiveness is also treated as a transaction (capital transfer), as stated in Section 5.4, whereas a write-off or write-down of loans is not a transaction given that it is a unilateral action by the creditor.

---

<sup>109</sup> Whether or not the ECB requires these positions may depend on their significance for euro area aggregates.

<sup>110</sup> The enlargement also has an impact on reporting in accordance with Tables 3 and 4 of Part 3 of Annex I to Regulation ECB/2021/2. In particular, series that have the new euro area country as a geographical counterparty become mandatory in Table 3, while series originally denominated in the national currency of the new euro area country cease to be reported in Table 4. In addition, positions in the national currency of the new euro area country must be removed from the moving composition currency aggregate “EU currencies other than euro” in Table 4.

Convertible bonds (or debt swaps), usually classified as fixed interest rate debt securities, may, at the option of the issuer (or holder), be converted into the equity of the issuer, at which point they are classified as equity securities. Transactions should be recorded at the value of the new instrument at the time of conversion, in line with the ESA 2010 (6.25). Where the value of the original instrument is written down at the time of conversion, it is recorded as a revaluation adjustment (see also Section 4.6.4.1).

Another example is the transfer of assets (usually impaired) from a reporting MFI to an entity established for the purposes of winding down the asset portfolio and to allow the balance sheet to be split between the MFI's ongoing business and the "bad bank" or defeasance structure. This transfer usually meets the ESA 2010 definition of a transaction as "an economic flow that is an interaction between institutional units by mutual agreement". However, see also Section 4.3.11 on the reporting of loan transfers.

Another case that does not usually give rise to a reclassification adjustment is a change in the investment policy of an investment fund that leads to it being classified as an MMF (or alternatively, a change in the investment policy of an MMF that leads to it being dropped from the list of MFIs). Given that any change in investment policy must be agreed by investors, if they retain their holdings, they are deemed to have made a conscious decision to switch their portfolios from one sector (MMFs) to another (investment funds other than MMFs), and there is no reclassification adjustment. An NCB may deviate from this treatment and report a reclassification adjustment only if it learns that investors were unaware of the policy change or were otherwise unable to react to it. Where there is no change in investment policy but an MMF is reclassified owing to a change in the applicable supervisory definitions, a reclassification adjustment should be made.

## 5.8 Exchange rate adjustments

Movements in exchange rates against the euro between end-of-period reporting dates give rise to changes in the value of foreign currency assets and liabilities when expressed in euro. As these changes represent holding gains/losses and not financial transactions, the valuation effects need to be identified so that they can be excluded from transactions.

In contrast to price changes, reporting MFIs do not provide exchange rate adjustments – their price adjustments in respect of foreign currency items on the balance sheet exclude exchange rate effects. Instead, they convert assets and liabilities denominated in foreign currencies into euro using market exchange rates (see Section 3.3).

The monthly MFI balance sheet reporting distinguishes only between positions denominated in euro and positions in (all) foreign currencies. The quarterly reporting based on Table 4 in Part 3 of Annex I to Regulation ECB/2021/2 includes breakdowns of loans denominated in each EU Member State currency and also

breakdowns of loans, deposits, debt securities held and debt securities issued denominated in GBP, USD, JPY, CHF and all remaining currencies combined. The ECB uses these quarterly data to calculate a standard adjustment to the currency composition of main categories of MFI assets and liabilities. Where only summary information is available (e.g. the foreign currency component of an instrument class but not of its constituent parts, i.e. a limited sectoral breakdown of foreign currency assets and liabilities of MFIs), the ECB spreads the pattern of currencies in the category across its components, estimating the effect of currency changes on the current balance sheet compared with that of the previous month.

Section 7.2.2 explains in more detail the ECB methodology for deriving exchange rate adjustments. This estimation procedure is acceptable because only a small proportion of MFI balance sheet items are denominated in currencies other than euro. If the share of foreign currency denominated instruments is significant, and NCBs have access to more disaggregated and/or monthly information to compile more accurate adjustments, NCBs may transmit these adjustments to the ECB.

## 6 Procedures for reporting data to the ECB

This chapter covers the reporting of MFI balance sheet aggregates by NCBs to the ECB. NCBs also have specific reporting procedures for the reporting of statistical data by MFI reporting agents to the NCB.

### 6.1 Timeliness of reporting and dissemination

Monthly data positions are reported to the ECB by close of business on the 15th working day following the end of the month to which the data relate, while quarterly data are reported by close of business on the 28th working day following the end of the quarter to which the data relate.<sup>111</sup> NCBs arrange to receive data from reporting institutions in time to meet these deadlines.

Euro area aggregates, including the monthly monetary aggregates drawn from the MFI balance sheet, are first published in a press release on the 19th working day following the month to which they relate.<sup>112</sup> In addition to monthly statistics, the ECB also publishes euro area aggregates based on the quarterly requirements of Regulation ECB/2021/2. These data are released with a one-month lag compared with monthly data, e.g. data for the first quarter are released together with monthly data for April. The release calendar for MFI balance sheet statistics in the euro area is published on the ECB's website for the following year.<sup>113</sup>

In accordance with Article 35 of Guideline ECB/2021/11, NCBs are not allowed to publish national contributions to the euro area monetary aggregates or counterparts before the ECB publishes the euro area data. Additionally, NCBs must publish data that are the same as the data that contributed to the most recent publication of euro area aggregates by the ECB. Individual components of the monetary aggregates and of their counterparts are also covered by this embargo.

### 6.2 Grossing-up of MFI balance sheet items

NCBs may grant certain derogations to MFIs in accordance with Article 9 of Regulation ECB/2021/2, as explained in Section 2.7.1. Where NCBs grant

---

<sup>111</sup> The number of working days is defined taking into account public holidays in individual euro area countries. Broadly speaking, a calendar day is considered to be a non-working day for the definition of the calendar for reporting to the ECB if it is a holiday in at least three euro area countries. By September of each year, the ECB communicates to NCBs a reporting calendar for the following year (Article 32 of Guideline ECB/2021/11).

<sup>112</sup> See the [press releases](#) on the ECB's website. The release date may be adjusted where the 19th working day coincides with a monetary policy meeting of the Governing Council of the ECB.

<sup>113</sup> See the [release calendar](#) for monetary developments in the euro area on the ECB's website.

derogations to MFIs, they must gross up the data so that monthly and quarterly aggregates transmitted to the ECB are representative of the entire MFI population.

The procedures used by NCBs for grossing-up data must fulfil the minimum standards set in Article 8(2) of Guideline ECB/2021/11. In summary:

- Where derogations are granted to small MFIs (“tail institutions”), missing breakdowns are to be estimated by applying ratios based on a subset of the actual reporting population considered to be more representative of the “tail”. The criteria for this subset are dependent on the contribution of the “tail” to both the national and the euro area aggregate MFI balance sheet. For the purpose of making estimations, the NCB may divide the “tail” and the subset of the actual reporting population by type of MFI (e.g. distinguishing credit institutions from MMFs).
- Where derogations are granted to small MFIs (“tail institutions”) that are MMFs, and the combined total assets of the MMFs granted derogations exceeds 30% of the national MMF sector, NCBs must gross up the statistical information for MMFs separately from deposit-taking corporations. If the statistical information collected from MMFs is sufficiently representative of the missing MMF data, it may be used for the purposes of grossing up the MMF. If, on the other hand, the statistical information collected from MMFs is not sufficiently representative of the missing MMF data, or if derogations have been applied to the entire MMF population, NCBs must, at least once a year, estimate a balance sheet for the MMF sector from alternative sources of information and use it as the basis for grossing up.
- Where breakdowns are available, but with a longer delay or at a lower frequency, reported data are carried forward into the missing periods by repeating the data when the results have proved to be adequate, or applying appropriate statistical estimation techniques to take account of trends in the data or seasonal patterns.
- NCBs may use data obtained from supervisory authorities to derive any necessary ratios or other intermediate calculations for grossing up when a reliable link can be established between the statistical series to be grossed up and such data.

NCBs are required to inform the ECB of any significant changes in their grossing-up procedures; this is important given that such changes may result in breaks in the time series. In addition, when new data become available, the assumptions used for grossing up may change and past data may need to be revised to improve the quality of the estimates.

## 6.3 Rounding policy and data transmission

NCBs report MFI balance sheet data to the ECB in millions of euro.<sup>114</sup> Amounts are rounded to the nearest million. Exact half millions are rounded up.

Statistics are reported as missing when the specific balance sheet item relates to instruments that do not exist in the reference area (e.g. owing to legal restrictions) or which exist but for which the data are not collected (e.g. for non-mandatory items) and not estimated. Where the balance sheet item covers instruments that exist in the reference area and for which data are collected (or estimated) but the corresponding amounts outstanding are less than €0.5 million, the reporting country should report “0” (and not a missing value).

NCBs must report an observation status value attached to each exchanged observation. Missing values are reported with observation status flag “M” when they relate to instruments that do not exist in the reference area and “L” when the data exist but are not collected (and not estimated). When data are not reported as missing, the observation status flags are “A” for normal values, “E” for estimated values and “P” for provisional values (the latter attribute is often used for the last/most recent observation and is usually replaced by an “A” in the subsequent transmission). If an observation is qualified by two characteristics, the more important is reported. For example, if an observation is both a provisional value and the result of an estimate, priority is given to the estimate characteristic and the flag “E” is used.

NCBs transmit data on MFI balance sheet statistics to the ECB using special data exchange arrangements applying the Statistical Data and Metadata eXchange (SDMX) standard<sup>115</sup>. The data exchanges use the SDMX-ML 2.1 format, including data (numeric values) and/or attributes (metadata explaining the data).

To exchange statistical messages, the data are structured according to precise “key families” (i.e. data structure definitions) consisting of statistical concepts and code lists that allow the data content to be described adequately and unambiguously. Each dataset must conform to a known key family data structure definition. This defines the structure of the series keys, i.e. the set of their dimensions in terms of concepts and associated code lists, and their relationship with the relevant attributes. In the SDMX-ML messages, statistical concepts can be used either as dimensions (in composing the keys identifying the time series) or as attributes (providing information about the data). Coded dimensions and attributes take their values from predefined code lists.

The ECB disseminates MFI balance sheet statistics using the same data exchange standards.

---

<sup>114</sup> Non-euro area EU Member States report MFI balance sheet data in millions of national currency, however.

<sup>115</sup> SDMX is an initiative to promote internationally agreed standards for the exchange of statistical data and is sponsored by several institutions (ECB, Eurostat, IMF, BIS, OECD, UN, World Bank). See the [SDMX website](#) for more details.

## 6.4 Revisions policy

Statistical series may be subject to revision, as specified in Article 10 of Guideline ECB/2021/11. High-frequency data may be revised in the light of later more complete or more correct information, while methodological improvements may, from time to time, require earlier data to be revised. The ECB's policy is to announce revision cycles in advance, provide full documentation on revisions, keep their size and pattern under review and, as far as possible, revise earlier data where this can be done at reasonable cost.

In general, two types of revision to national aggregates for MFI balance sheet data are possible: (i) ordinary revisions, referring to the period immediately preceding the most recent one; and (ii) exceptional revisions, referring to previous dates or periods.

Ordinary revisions are part of the normal routine. Exceptional revisions are generally less common and normally due to the correction of mistakes, reclassifications and improved reporting procedures, etc. The principles to which the revisions policy should conform are as follows:

- In transmitting revised data, NCBs must take into consideration the established timeliness of regular reporting so as not to clash with the regular production period. Exceptional revisions may be processed with ordinary revisions, or the ECB may request that they are transmitted outside the regular production cycle (for further details, see below).
- Any significant revisions (not due to grossing-up or to minor routine corrections) should be accompanied by an explanatory note. Exceptional revisions should always be notified to the ECB in advance and accompanied by an explanatory note.
- Exceptional revisions to monthly data should be submitted with the quarterly returns. Where the current national reporting scheme does not permit revised quarterly data to be reported together with monthly revisions referring to the same end-of-quarter month, NCBs must ensure that consistency between monthly and quarterly data is maintained as far as possible.<sup>116</sup> This practice is required to ensure a good balance between the quality of monetary statistics and their stability and to enhance consistency between monthly and quarterly returns.
- In relation to data used for the reserve base statistics and reserve requirements, revisions made after the maintenance period has commenced may not lead to revisions being made to the statistics on the reserve base and on the reserve requirements.
- Revisions to MMF data should be consistent with the corresponding end-of-quarter data for the MFI sector. Where revisions result in changes to the data

---

<sup>116</sup> For this purpose, estimates can be derived for the quarterly breakdowns corresponding to the revised monthly series, at least for the more significant aggregates, which are then replaced by actual quarterly data as soon these are available.

for the corresponding other MFI reference period, revisions should also be transmitted to correct this data.

Where exceptional and ordinary revisions and updates are reported in the same data file, all data are processed simultaneously. If exceptional revisions are reported separately during the production period, the ECB may decide to postpone the processing and storage of the exceptional revisions until after the production period to avoid delays in regular data processing and in the production of euro area aggregates. If, however, incoming exceptional revisions would significantly affect the data at euro area level or correct notable mistakes, these revisions may also be accepted during the production period.

Finally, the ECB has formalised quality monitoring for statistics by requiring periodic reports on revisions. Such reports are published regularly for monetary and financial statistics. In publishing statistics and revising data after publication, the ECB coordinates its actions with the NCBs and internally across different areas of statistics where necessary. The aim is to present the most up-to-date information while maintaining consistency across statistics and over time as far as possible.<sup>117</sup>

---

<sup>117</sup> See for example the euro area monetary and financial statistics data quality report, available on the [ECB's website](#).



## 7 Compilation of euro area statistics

### 7.1 Derivation of the euro area aggregated and consolidated balance sheet

The main source of information for euro area monetary statistics (monetary aggregates and counterparts of M3) is the MFI balance sheet, aggregated across the euro area and then consolidated (inter-MFI positions cancelled out). Supplementary information is also taken into account concerning monetary liabilities of central government and POGIs, as well as holdings of certain monetary instruments by non-residents of the euro area. The ECB compiles monetary statistics for the euro area as outstanding amounts (stocks) and as transactions, with the aim of capturing financial transactions between the MFI sector and other economic sectors during the reference period. Financial transactions are calculated by adjusting the difference between end-of-month outstanding amounts for the effect of “non-transaction-related” factors that do not involve a flow of financing between sectors (i.e. reclassification adjustments, exchange rate changes, price revaluations and loan write-offs/write-downs; see Chapter 5 and Section 7.2).

As discussed in Chapter 6, all monthly MFI balance sheet information, including required data on “reclassification adjustments” and “revaluation adjustments”, must be submitted by NCBs to the ECB by the 15th working day after the end of the calendar month to which the data relate. NCBs also report data on monetary assets and liabilities of central government and POGIs. In addition, ECB compilers receive information concerning the ECB’s own balance sheet and obtain certain estimates of the geographical breakdowns of the holders of negotiable instruments issued by MFIs from other sources (see Section 7.1.4).

#### 7.1.1 The euro area aggregated MFI balance sheet

The euro area aggregated MFI balance sheet consists of the aggregated balance sheets of the Eurosystem and of the MFI sector excluding the Eurosystem (“other MFIs”). The aggregated balance sheet of the Eurosystem is obtained by aggregating the national balance sheets of all NCBs in the euro area and the ECB, item by item. Similarly, the national balance sheets of all MFIs excluding the NCBs, for all countries participating in the euro area, are aggregated by summing them up. The format of the NCB/ECB balance sheet is identical to that of the other MFIs, with the exception of three additional balance sheet items specific to central banks (“gold”,<sup>118</sup> “receivables from the IMF” and “counterparts of SDRs”). The two aggregated balance sheets, one for the Eurosystem and one for the other euro area MFIs, are compiled on a gross basis (i.e. without netting out inter-MFI positions) and include all

---

<sup>118</sup> As noted in Section 4.2, gold held by a central bank is normally classified as monetary gold and is a financial asset, whereas gold held by anyone else (including other MFIs) is treated statistically as a commodity and thus as a non-financial asset and is included in “non-financial assets”.

MFI assets and liabilities vis-à-vis the sectors identified within the balance sheet structure, including the MFI sector itself. They are published by the ECB each month.

**Table 5**  
Derivation of the aggregated balance sheet of the euro area MFI sector

Derivation of the aggregated balance sheet of the Eurosystem	Derivation of the aggregated balance sheet of MFIs other than the Eurosystem
Outstanding amounts (transactions) for each balance sheet item of the NCB in country 1	Outstanding amounts (transactions) for each balance sheet item of "other MFIs" in country 1
+	+
.....	.....
+	+
Outstanding amounts (transactions) for each balance sheet item of the NCB in country n	Outstanding amounts (transactions) for each balance sheet item of "other MFIs" in country n
+	=
Outstanding amounts (transactions) for each balance sheet item of the ECB	Aggregated outstanding amounts (transactions) for each balance sheet item of <b>euro area MFIs other than the Eurosystem</b>
=	
Aggregated outstanding amounts (transactions) for each balance sheet item of the <b>Eurosystem</b>	
<b>Derivation of the aggregated balance sheet of the MFI sector</b>	
Aggregated outstanding amounts (transactions) for each balance sheet item of the Eurosystem	
+	
Aggregated outstanding amounts (transactions) for each balance sheet item of euro area MFIs other than the Eurosystem	
=	
Aggregated outstanding amounts (transactions) for each balance sheet item of the euro area MFI sector	

The aggregated balance sheets of the Eurosystem and of other MFIs are then aggregated by adding them together, item by item, to form the aggregated balance sheet of the euro area MFI sector as a whole, which provides the basis for derivation of the consolidated balance sheet, as described in the next section. The same procedure is adopted for amounts outstanding and for transactions.

### 7.1.2 The euro area consolidated MFI balance sheet

The starting point for derivation of the consolidated balance sheet is the aggregated balance sheet of the MFI sector as a whole. The consolidated balance sheet of the euro area MFI sector provides statistical information on the sector's assets and liabilities vis-à-vis residents of the euro area outside the MFI sector (i.e. general government and all other euro area residents) and vis-à-vis non-residents of the euro area; it is obtained by netting the inter-MFI positions within the euro area. The netting of inter-MFI positions is not confined to deposits and loans but covers all balance sheet items where counterparty information makes it possible for the amount of the MFI liability held within the MFI sector to be determined. For example, in the case of currency issued, the amounts held within the MFI sector are netted out. By convention, the remainder, which may be held by the euro area money-holding

sector,<sup>119</sup> by euro area central government or by residents of the rest of the world, is allocated fully to the euro area money-holding sector and therefore included in the monetary aggregates. Similar difficulties also arise for shares/units issued by MMFs and debt securities issued by MFIs with an original maturity of up to two years (both of which are monetary instruments included in M3). Inter-MFI positions are netted and estimated holdings by non-residents of the euro area are excluded from M3 (see also Section 7.1.3). Positions are also netted for repos and reverse repos conducted through euro area CCPs (see also Section 4.4.4). Investigations of the largest euro area CCPs by the ECB confirm that counterparties involved in repo/reverse repo transactions via CCPs are mainly euro area MFIs or non-residents of the euro area, i.e. the cash lenders/borrowers are not part of the euro area money-holding sector. Repos with euro area CCPs are therefore excluded from M3, while reverse repos with euro area CCPs are excluded from the M3 counterpart position “credit to euro area residents”.<sup>120</sup>

In the case of debt securities issued by MFIs with an original maturity of over two years, no further estimations are made. After inter-MFI holdings have been netted out, the remainder is assumed to be held in the euro area and is allocated to the counterpart “longer-term financial liabilities” (see below). The same applies to the remainder of capital and reserves after holdings by other MFIs have been deducted from shares issued by MFIs.

The diagram below outlines the process leading from national submissions to the consolidated balance sheet of the euro area MFI sector and to the euro area monetary aggregates.

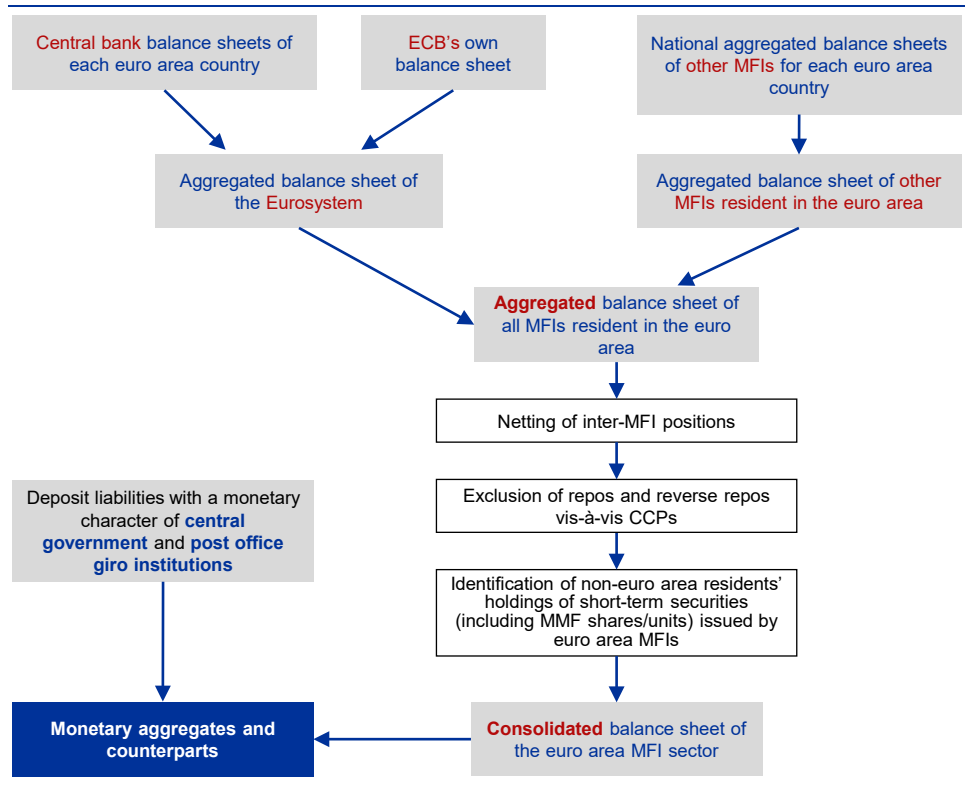
---

<sup>119</sup> The money-holding sector refers to euro area residents excluding MFIs and central government. See Section 7.1.3.1.

<sup>120</sup> This adjustment of the monetary and credit aggregates for repo and reverse repo positions with CCPs was incorporated from the reference period June 2010. See also “[The adjustment of monetary statistics for repurchase agreement transactions with central counterparties](#)”, Box 3, *Monthly Bulletin*, ECB, September 2012, p. 28.

**Figure 5**

Derivation of the consolidated balance sheet of the euro area MFI sector



### 7.1.3 From the euro area consolidated balance sheet to monetary aggregates and counterparts

#### 7.1.3.1 Monetary aggregates

For euro area monetary statistics, the **money-holding sector** comprises all non-MFIs resident in the euro area except central government, i.e. households, non-financial corporations, financial corporations that are not MFIs, state government, local government and social security funds. Central government is considered to be a **money-neutral sector**; consequently, central government holdings of monetary assets issued by MFIs (the deposits that central government holds with MFIs and central government holdings of other monetary instruments issued by MFIs) are not counted as holdings of the money-holding sector. However, central government liabilities with a monetary character are included in monetary aggregates.

The liabilities side of the consolidated balance sheet therefore provides the basis for the calculation of monetary aggregates. The liability breakdowns of the MFI sector allow different degrees of moneyiness to be distinguished, and monetary aggregates are derived by adding to these monetary liabilities certain short-term deposit liabilities of central government (national savings accounts and Treasury accounts)

and of POGIs held by the money-holding sector that have similar characteristics to short-term bank deposits.<sup>121</sup>

A monetary aggregate can be defined as the sum of currency in circulation plus the outstanding amounts of certain financial instruments that have a high degree of moneyiness, or liquidity in a broad sense. The Eurosystem has defined a narrow (M1), an intermediate (M2) and a broad aggregate (M3). These aggregates differ with respect to the degree of moneyiness of the financial instruments included.

The table below shows the definitions of the euro area monetary aggregates comprising liabilities issued by the MFI sector and by entities in the central government sector and certain POGIs in the euro area. These aggregates include only positions of the euro area money-holding sector held with MFIs resident in the euro area. Holdings by euro area residents of liquid assets denominated in foreign currency may be close substitutes for euro-denominated assets, and the monetary aggregates include these if they represent liabilities issued by MFIs resident in the euro area.

**Table 6**  
Definition of euro area monetary aggregates

Liabilities <sup>122</sup>	M1	M2	M3
Currency in circulation	x	x	x
Overnight deposits	x	x	x
Deposits with an agreed maturity of up to 2 years		x	x
Deposits redeemable at notice of up to 3 months		x	x
Repurchase agreements			x
MMF shares/units			x
Debt securities issued by MFIs with a maturity of up to 2 years			x

**M1 (narrow money)** comprises currency in circulation (banknotes and coins) and balances that can immediately be converted into currency or used for cashless payments (overnight deposits).

**M2 (intermediate money)** comprises M1 plus deposits with original maturities of up to two years and deposits redeemable at notice of up to three months. Depending on their degree of moneyiness, such deposits can be converted into components of narrow money; in some cases, however, there may be restrictions, such as the need for advance notification, delays, penalties or fees. The definition of M2 reflects the particular interest in analysing and monitoring a monetary aggregate that includes a wide range of other deposits in addition to currency and overnight deposits.

<sup>121</sup> These corrections for the short-term deposit liabilities of central government and certain POGIs (classified as non-financial corporations, S.11 – see Article 1(2) of Regulation ECB/2013/39) are significant for only a few euro area countries. In most euro area countries, POGIs have MFI status and, as such, their deposit liabilities are already included in NCBs' returns as part of the national aggregated balance sheet of other MFIs.

<sup>122</sup> Liabilities of the money-issuing sector and central government and certain post office liabilities with a monetary character held by the money-holding sector.

**M3 (broad money)** comprises M2 plus marketable instruments issued by the MFI sector. Certain money market instruments, in particular MMF shares/units and repurchase agreements, are included in this aggregate. M3 also includes bonds issued by MFIs with an original maturity of up to two years. A high degree of liquidity and price certainty make these instruments close substitutes for deposits. Their inclusion means that M3 is less affected by substitution between various liquid asset categories than narrower definitions of money and is therefore more stable.

Longer-term liabilities of MFIs are excluded from the definition of M3 given that they are regarded more as portfolio instruments than as a means of carrying out transactions. Nevertheless, they may be regarded as substitutes for some of the components of M3, at least as they approach redemption.

### 7.1.3.2 Counterparts of monetary aggregates

The consolidated balance sheet also provides the basis for regular analysis of the **counterparts of M3**, i.e. all items other than M3 on the consolidated balance sheet (on both the assets and the liabilities sides) rearranged to “explain” (in the statistical sense) changes in broad money in an analytically useful way.

The relationship between M3 and its counterparts rests on an accounting identity. Using the balance sheet identity, the monetary aggregate M3 can be presented in terms of other components of the MFI balance sheet as per the following figures.

**Table 7**  
Schematic consolidated balance sheet of euro area MFIs

Assets	Liabilities
Credit to euro area residents	M3 <sup>123</sup>
External assets	Longer-term financial liabilities
Other assets (including non-financial assets)	External liabilities
	Other liabilities (including MFI deposits placed by central government)

**Table 8**  
M3 and counterparts

$M3 \equiv \text{credit to euro area residents} + \text{net external assets} - \text{longer-term financial liabilities} + \text{other counterparts (net)}$	Equation [7.1.1]
--	------------------

**Credit** is defined as loans granted to non-MFI euro area residents plus MFI holdings of securities issued by non-MFI euro area residents. Since securities can be seen as an alternative source of funds to loans, this definition provides fuller information on the amount of financing supplied to the economy by the MFI sector than a narrow definition comprising only loans. It is worth noting that unlike the widely used concept

<sup>123</sup> M3 liabilities of MFIs only, i.e. excluding deposits of a monetary character of POGIs and of central government.

of credit as loans and debt securities (based on the concept of a creditor-debtor relationship), credit in the context of monetary statistics also includes equities and non-MMF investment fund shares/units.

**Net external assets** are defined as external assets held by euro area MFIs minus external liabilities of MFIs. External assets are holdings of cash in currencies other than euro, holdings of securities issued by non-residents of the euro area, loans to non-residents of the euro area (including banks), gold and gold receivables (monetary gold) and receivables from the IMF (including SDRs) held by the Eurosystem. External liabilities are deposits held by non-residents of the euro area with euro area MFIs (including any “loans” made by non-residents of the euro area to euro area MFIs, which, by convention, are recorded on the MFI balance sheet as deposits), holdings by non-residents of the euro area of MMF shares/units and of debt securities with a maturity of up to two years issued by MFIs in the euro area, as well as “counterparts of SDRs” held by the Eurosystem. External assets and liabilities may be denominated in euro or in foreign currency, the key factor is that they represent claims on or liabilities to non-residents of the euro area.<sup>124</sup>

**Longer-term financial liabilities** are deposits placed by the money-holding sector and held by euro area MFIs. They are deposits with an agreed maturity of over two years, deposits redeemable at notice of over three months, debt securities issued by euro area MFIs with an original maturity of over two years (including, for practical reasons, holdings of such instruments by non-residents of the euro area, which should be more properly regarded as external liabilities, but for which no estimates are currently made), and the capital and reserves of the MFI sector.

**Holdings against central government** include deposits placed with MFIs by euro area central governments, as well as MMF shares/units and MFI debt securities of up to two years held by central government and POGIs (which have been netted from M3).

The item **other counterparts (net)** is a net asset position comprising all remaining items on the consolidated balance sheet. It can be broken down into:

- non-financial assets of MFIs, e.g. buildings and commodities;
- remaining assets minus remaining liabilities, which include a variety of items such as financial derivative positions, amounts receivable/payable in respect of suspense and transit items, accrued interest receivable/payable on loans and deposits, dividends to be received/paid, amounts receivable/payable not related to the main MFI business, the asset counterpart to coins legally issued by central government and net amounts payable in respect of the future settlement of transactions in securities (see also Section 4.10);
- reverse repos minus repos, where the agreements are with euro area CCPs;

---

<sup>124</sup> See “[The external dimension of monetary analysis](#)”, *Monthly Bulletin*, ECB, August 2008, p. 71.

- a notional entry to balance the short-term deposit liabilities of central government and POGs that are included in M3;
- the “excess of inter-MFI liabilities” (entered with a negative sign), which is the residual resulting from the netting of reported inter-MFI liabilities and assets.

In the presentation of the counterparts of M3, the items “other counterparts (net)” and “holdings against central government” (entered with a negative sign) are combined and referred to as **remaining counterparts**.

Movements in individual counterparts of M3 often relate to changes in M3. For example, suppose that an MFI grants a loan for 100 to a non-financial corporation, which keeps the money on its current account to meet future payments. This will translate into an increase of 100 in M3:

**Table 9**

Assets		Liabilities	
Credit to euro area residents	+100	M3	+100
External assets	-	External liabilities	-
Other assets	-	Other liabilities	-

Changes in M3 counterparts may not be reflected in changes in M3, however. Suppose, for instance, that euro area residents are granted a loan by a euro area MFI for 100, but then use the borrowed funds to buy foreign assets (e.g. US government bonds, or the dollars needed to buy them in the US market) from euro area MFIs. Given that these foreign assets represent external assets of euro area MFIs, the increase in the item “credit to euro area residents” is matched by a decrease in MFI net external assets – the observed changes in counterparts are connected and offsetting, meaning that there is no impact on M3:

**Table 10**

Assets		Liabilities	
Credit to euro area residents	+100	M3	-
External assets	-100	External liabilities	-
Other assets	-	Other liabilities	-

The measures of growth of euro area monetary aggregates and counterparts are always based on transaction data and therefore exclude changes in balance sheet amounts arising from revaluations, reclassifications and any other non-transactional influences. The methods used to calculate transactions and measures of growth are explained in Section 7.3.



## 7.1.4 National contributions to euro area money stock and counterparts and their relationship to national aggregates

### National monetary aggregates before adoption of the euro

Before a Member State joined the euro area, its money stock will have comprised national currency in circulation (excluding holdings by MFIs), holdings by residents of certain types of deposit with resident MFIs and – though of negligible importance in some countries – holdings by residents of certain liquid marketable claims on resident MFIs. Monetary aggregates and their counterparts could be readily measured from balance sheet data supplied by the NCB and other resident MFIs.

### National counterparts of national broad money (M3) before adoption of the euro

The main counterparts are domestic credit and net foreign assets (the “external” counterpart). Before the country joined the euro area, in national monetary statistics these items were MFI (including NCB) lending to residents in all forms (including the acquisition of securities) and lending in all forms to non-residents less all liabilities to non-residents.

### Euro area M3 and counterparts

As explained above, broad money (M3) for the euro area as a whole consists of euro banknotes and coins in circulation outside the euro area MFI sector, deposits held by euro area residents (other than MFIs and central government) with MFIs anywhere in the euro area and euro area residents’ holdings of certain liquid marketable securities issued by MFIs anywhere in the euro area, including shares/units issued by MMFs.

In euro area statistics, the equivalent of the “domestic credit” counterpart of M3 is lending in all forms (including through the acquisition of securities) by MFIs in the euro area (including the Eurosystem) to euro area residents other than MFIs, whether they are domestic residents or residents of other euro area countries. The “external” counterpart consists of euro area MFIs’ net claims on non-residents of the euro area.

### National contributions to euro area M3 and counterparts

The national contributions to euro area M3 are not the same as national monetary data before the country joined the euro area. Before the country joined the euro area, national monetary aggregates comprised instruments issued by domestic MFIs and held by the domestic money-holding sector. The concept of residency changes for national contributions to euro area aggregates. For each euro area country, the national contribution to euro area aggregates relates to the monetary instruments issued by MFIs resident in the country and held by the money-holding sector throughout the euro area (i.e. by residents of the same country and residents of all other euro area countries). Similarly, the national contributions to counterparts of M3 reflect a euro area rather than a national residency perspective.

For various reasons, it is not possible to calculate how much of the euro area money stock is held by residents of an individual euro area country. Instead, NCBs provide to the ECB, and may publish, their country's national contribution to euro area monetary statistics based on resident MFIs' balance sheets, including information on reclassifications and valuation changes, to enable transactions to be calculated. Similarly, they may publish the national contribution to at least the "credit to euro area residents" counterpart of euro area M3.

In conceptual terms, there is no fundamental difference between compiling a monetary aggregate and its counterparts for a single country or for the euro area. In practice, however, certain issues do need to be considered. The first concerns the accounting practice for currency in circulation. The second concerns the identification of holders (domestic, residents of other euro area countries or the rest of the world) of negotiable debt instruments (including shares/units of MMFs) issued by MFIs in individual euro area countries.

### **National contributions to the banknotes and coins component of euro area monetary aggregates**

Before adoption of the euro, the amount of currency issued by an NCB, minus amounts held by resident MFIs, was, in most cases, a good measure of the national currency in circulation with resident money-holding sectors (although in Germany, significant amounts of Deutsche Mark were known to be held by non-residents). In the euro area, under the banknote allocation key, the share of each NCB in the total issue of banknotes by the Eurosystem is deemed to be that central bank's share in the paid-up capital of the ECB, adjusted for the notional 8% of the total issue that is attributed to the ECB itself. The accounting practice takes this form because euro banknotes are a liability not of the central bank that happens to issue them but of the Eurosystem as a whole. The banknote allocation key determines the amount recorded as banknotes issued within "currency in circulation" on the liabilities side of the NCB's balance sheet, both in the NCB's (usually weekly) financial statement and in its monthly MFI balance sheet reporting (Part 1 of Annex II to Guideline ECB/2021/11). An individual NCB may issue more or less than this amount depending on demand, with the excess or shortfall appearing on the NCB's balance sheet as a liability to or claim on the Eurosystem under "remaining liabilities" or "remaining assets" (see also Section 4.10).

The numerical example below (which ignores the currency issue of other Eurosystem central banks and the 8% notionally allocated to the ECB) helps to explain the accounting practice.

#### **Example V**

##### **Determining euro banknotes issued**

---

*Consider two NCBs, NCB A and NCB B, and suppose that at time  $t$  their balance sheets have a very simple structure, with no currency in issue and balances on the current accounts of commercial banks matched by holdings of gold:*

NCB A			
Assets		Liabilities	
		Currency	-
Gold	200	Commercial bank current accounts	200
Remaining assets	-	Remaining liabilities	-

NCB B			
Assets		Liabilities	
		Currency	-
Gold	300	Commercial bank current accounts	300
Remaining assets	-	Remaining liabilities	-

Now suppose that the two NCBs have equal shares in the capital of the ECB and that the banknote allocation key attributes a banknote issue of 100 to each of them. NCB A actually issues 80, while NCB B issues 120. Deposits of commercial banks with NCB A fall by 80 as they buy the banknotes from the NCB, but on its balance sheet the NCB records an increase of 100 (the banknote allocation key amount) in its liabilities in the form of currency. Its liabilities have therefore increased by 20 (net). Conversely, NCB B, which also records an increase of 100 in liabilities in the form of currency, sees its liabilities to resident commercial banks fall by 120 – an overall decrease of 20 in its liabilities. Assets have not changed in either NCB. NCB A's liability in respect of the 200 banknotes issued in total is indeed 100, i.e. the amount of the banknote allocation, and not the 80 which it happens to have issued. Accordingly, NCB A enters 20 as a claim on the Eurosystem (under "remaining assets") to maintain equilibrium on its balance sheet. Similarly, NCB B's true liability in respect of the 200 banknotes issued in total is 100 and not 120, so NCB B enters 20 as a liability to the Eurosystem (under "remaining liabilities") to maintain equilibrium on its balance sheet. At time  $t+1$ , the two balance sheets will have the following structure:

NCB A			
Assets		Liabilities	
		Currency	100
Gold	200	Commercial bank current accounts	120
Remaining assets	20	Remaining liabilities	-

NCB B			
Assets		Liabilities	
		Currency	100
Gold	300	Commercial bank current accounts	180
Remaining assets	-	Remaining liabilities	20

Aggregated across the Eurosystem (including the notional 8% of the issue attributed to the ECB), the banknote issue is therefore correct and intra-Eurosystem positions cancel out. The consequence is that in the national data submitted by NCBs to the ECB, the item “currency in circulation” is a notional amount and does not measure the amount actually put into circulation by the NCB. The amount of euro currency in the hands of residents of the euro area country concerned may be different again, given that large amounts of euro banknotes may be brought into the country by tourists and other visitors, taken out in the course of visits abroad or cross the border in the form of remittances, with no direct way of measuring any of these flows.

In contrast to banknotes, which are a liability of the Eurosystem, in most euro area countries the legal issuer of euro coins is the central government rather than the central bank. However, euro coins in circulation are part of monetary aggregates and are consequently always included, by convention, under the liability category “currency in circulation” on the central bank balance sheet (see also Section 4.2.2). As with banknotes, aggregation across the Eurosystem gives the correct amount of euro coins issued.

A euro area country’s contribution to the change in the banknote and coin component of the euro area consolidated balance sheet and monetary aggregates is the NCB’s recorded currency in circulation minus holdings of euro banknotes and coins (“vault cash”) reported by other MFIs resident in that country.<sup>125</sup> The national contribution in this category may be negative, given that it is conceivable that resident MFIs may report larger holdings of currency than the NCB’s share in the total amount issued. Although highly unlikely, this scenario illustrates the fundamental difference at national level between the accounting practice for banknotes and coins before and after adoption of the euro.

### National contributions to the bank deposits component of euro area monetary aggregates

National contributions to the bank deposits component of euro area M3 come directly from the balance sheets of resident MFIs. Note, however, that the domestic resident share of this contribution is not the full share of the country’s residents in the deposit component of euro area M3, since they may also hold deposits with MFIs elsewhere

<sup>125</sup> Note that this is one reason why “banknotes and coins” differs from the “currency in circulation” component of monetary aggregates. The former measures banknotes and coins put into circulation by the Eurosystem, while the latter measures circulation outside the MFI sector – i.e. excluding vault cash held by banks as part of their day-to-day business. Other reasons for differences between the two statistics relate to the treatment of collector coins and legacy currency once a new member joins the euro area. See Section 4.2 for further information.

in the euro area (country-by-country information on such cross-border holdings is available under the quarterly reporting requirements of Regulation ECB/2021/2).

National contributions to the components of euro area M3 overnight deposits, deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months therefore comprise the corresponding deposits denominated in euro and in currencies other than euro placed by the euro area money-holding sector with MFIs (i.e. the NCB and all other MFIs) and central government (and possibly also POGIs) in the euro area country concerned. The series for each euro area country is constructed by aggregating the amounts deposited with resident MFIs and central government (and POGIs, where applicable) by the euro area money-holding sector.

National contributions in the form of repos comprise claims of the euro area money-holding sector on domestic MFIs (including NCBs) related to repos denominated in euro and in currencies other than euro.<sup>126</sup> Based on the assumption that repos and reverse repos conducted through euro area CCPs are mostly transactions made by euro area MFIs and non-residents of the euro area, which are not part of the money-holding sector, a euro area country's national contribution to the repo component excludes repos with euro area CCPs (see also Section 7.1.2).

#### **National contributions to the negotiable monetary instruments component of euro area monetary aggregates**

The national share of the negotiable monetary instruments component of euro area M3 (debt securities issued with a maturity of up to two years and MMF shares/units) bears some resemblance to the share of currency in circulation, in that the holders of such paper and their residency are difficult to identify accurately. However, estimates of non-resident holdings are made where actual data are not available. The estimated holdings of non-residents of the euro area are therefore excluded from M3. In addition, the holdings by resident MFIs and central government of negotiable instruments issued in all euro area countries are deducted to derive the national contributions to the corresponding euro area aggregates.

Holdings by the euro area money-holding sector of debt securities with an original maturity of up to two years and of shares/units issued by MMFs form part of euro area M3 provided that the instruments are issued by MFIs resident in the euro area. Such holdings by residents of an individual euro area country (such as their holdings of banknotes and coins) are not directly observable through the MFI reporting sector. MFIs issue the instruments in the first place, but since such instruments may frequently be traded in secondary markets, the initial holder will often not be the current holder. However, Guideline ECB/2021/11 requests a geographical breakdown of the holders into domestic, other euro area countries and rest of the world so that holdings by non-euro area residents can be excluded from M3. Where

---

<sup>126</sup> Central governments and POGIs do not report series for repos and reverse repos.

the data available to the NCBs are not deemed reliable, the ECB makes estimates based on data from other sources.<sup>127</sup>

Since MFIs in some euro area countries rarely issue such instruments but may hold instruments issued by MFIs in other euro area countries, the national contribution to this component of M3 may be negative. The approach adopted shows once again that the compilation procedures provide only national contributions to the euro area aggregates and that these cannot be used as proxies for the national share of holdings of euro area M3 instruments.

To summarise the above, instead of national monetary aggregates, Eurosystem NCBs typically publish the contribution of resident MFIs (including the NCB itself) to the euro area aggregates. This comprises:

- (i) the notional issue of euro currency by the NCB according to the banknote allocation key, and the NCB's issue of euro coins, less holdings of euro banknotes and coins reported by resident MFIs;
- (ii) deposits of the kind included in euro area monetary aggregates held by domestic residents and by residents of other euro area countries with resident MFIs, including repos<sup>128</sup> but excluding any deposits held by central governments and MFIs (since such deposits are excluded from the ECB's monetary aggregates);
- (iii) any marketable instruments of the kind included in euro area M3 issued by resident MFIs, less estimated holdings by non-residents of the euro area and less holdings by (resident) central governments and by resident MFIs of such instruments issued by MFIs resident anywhere in the euro area.

### **National contributions to the credit counterpart of euro area M3**

The national contributions to the credit counterpart in euro area monetary statistics are readily obtained from MFI balance sheet data, which show resident MFIs' loans to euro area residents other than MFIs and MFIs' acquisition of securities in all forms issued by euro area residents other than MFIs. National contributions to credit to general government and credit to other euro area residents (also called credit to the private sector in monetary statistics) are therefore obtained as the total amount of loans provided by domestic MFIs to (i) general government anywhere in the euro area, and (ii) other euro area residents,<sup>129</sup> and of holdings by domestic MFIs of securities in all forms issued by euro area residents in these categories.

---

<sup>127</sup> For Germany, Ireland and the Netherlands data are only available on total debt securities issued, with no data on non-residents' holdings. For these countries, the ECB derives non-residents' holdings using monthly data from external data providers. For more details, see Box 1, "[Adjustment of M3 for holdings of negotiable instruments by non-residents of the euro area](#)", *Monthly Bulletin*, ECB, November 2001, pp. 10-13.

<sup>128</sup> Excluding repos conducted through euro area CCPs.

<sup>129</sup> In other words, financial corporations other than MFIs, non-financial corporations and households. See Section 3.5 on sector of counterparty.

### **National contributions to the external counterpart of euro area M3**

In national monetary statistics, the external counterpart of M3 comprises net external assets (claims in all forms on non-domestic residents minus liabilities to non-domestic residents). National contributions to the external counterpart in euro area monetary statistics are resident MFIs' claims on non-residents of the euro area minus liabilities to non-euro residents. Resident MFIs' claims on non-residents of the euro area are readily available, given that reporting MFIs will know the residence status of their debtors. They can also identify deposit liabilities to non-residents of the euro area. It is much harder for them to identify the holders of negotiable instruments that they have issued (certificates of deposit, bank bonds, etc.); hence, it is also harder for the NCBs to calculate net claims of resident MFIs on non-residents of the euro area. NCBs and the ECB estimate non-resident holdings of these instruments, at least partly, as discussed above.

For national contributions to the external counterpart in euro area monetary statistics, external assets of the NCBs and other MFIs comprise their loans to non-residents of the euro area, their holdings of MMF and non-MMF investment fund shares/units, debt securities and equities issued by non-residents of the euro area, and their holdings of cash denominated in currencies other than euro. In addition, gold and gold receivables and receivables from the IMF are included from the NCB balance sheet.

External liabilities of the NCBs and other MFIs comprise deposits placed with them by non-residents of the euro area and holdings by non-residents of the euro area of MMF shares/units and debt securities with a maturity of up to two years issued by resident MFIs. Since no data are available on whether resident holders of debt securities with an original maturity of over two years issued by resident MFIs are residents or non-residents of the euro area, such instruments are not included in external liabilities (see also Section 8.3). In addition, the counterpart of SDRs is included from the NCB balance sheet.

Section 8.3 on the monetary presentation of the balance of payments describes how the external counterpart of euro area M3 relates to developments in the euro area balance of payments.

### **National contributions to the longer-term financial liabilities counterpart of euro area M3**

Longer-term financial liabilities comprise deposits with an agreed maturity of over two years, deposits redeemable at notice over three months, debt securities with an original maturity of over two years and consolidated capital and reserves.

National contributions for the various types of longer-term deposit are the total amounts placed with resident MFIs by the euro area money-holding sector. MFI balance sheet data allow the series to be constructed by aggregating the amounts deposited by the euro area money-holding sector with domestic MFIs.

National contributions for debt securities with a maturity of over two years, in euro and in currencies other than euro, are the total issuance of longer-term debt

securities by domestic MFIs, net of their holdings of such debt securities issued by MFIs resident in the euro area as a whole. In contrast to debt securities with an original maturity of up to two years, no information is currently available on holdings of longer-term instruments by non-residents of the euro area; consequently, the amounts are included in this category rather than in external liabilities where they more properly belong (see Section 8.3).

National contributions for capital and reserves comprise resident MFIs' total liabilities in the form of capital and reserves, net of their holdings of shares issued by MFIs resident in the euro area as a whole.

Negative national contributions are possible for debt securities and, although highly unlikely, for capital and reserves.

## 7.2 Financial transactions

### 7.2.1 Derivation of financial transactions

The ESA 2010 defines a transaction as “an economic flow that is an interaction between institutional units by mutual agreement or an action within an institutional unit that it is useful to treat as a transaction, often because the unit is acting in two different capacities”. Financial transactions comprise the net acquisition of financial assets or the net incurrence of liabilities for each type of financial instrument during a reporting period.<sup>130</sup> Financial transactions covering each balance sheet item specified in Regulation ECB/2021/2 are calculated on a net basis, i.e. there is no requirement to identify gross financial transactions or turnover. In line with international statistical standards, transactions are calculated by taking, for each asset and liability item, the difference between stock positions at end-of-period reporting dates and then removing the effect of developments that are not the result of transactions, i.e. other changes. Other changes are grouped into two main categories: reclassification adjustments and revaluation adjustments.<sup>131</sup> Although the Regulation requires data to enable transactions to be derived, it actually deviates, to some extent, from the ESA 2010 concept of financial transactions (see Section 3.8.1 and Chapter 5).

NCBs report reclassification adjustments and revaluation adjustments (flow adjustments) to the ECB so that these non-transaction effects can be removed when calculating transactions. The revaluation adjustments reported by NCBs consist of write-offs/write-downs of loans and revaluation adjustments owing to price changes.

---

<sup>130</sup> This is in accordance with the ESA 2010 and other international statistical standards.

<sup>131</sup> The definition and classification of *other changes* is largely consistent with the ESA 2010. *Reclassification adjustments* are broadly equivalent to “other changes in the volume of assets and liabilities” (K.1-K.6), whereas *revaluation adjustments* largely correspond to “nominal holding gains and losses” (K.7). One important deviation in MFI balance sheet statistics concerns the inclusion of loan write-offs within “revaluations”, whereas in the ESA 2010 (and in the balance of payments and international investment position) they are regarded as “changes in volume” (6.14 (b) in the ESA 2010). Consistency with the ESA is easily achieved, however, because write-offs/write-downs is the only entry in the column *revaluation adjustments* for the item “loans”. See also Sections 5.4 and 4.3.10.



Revaluation adjustments owing to exchange rate changes are calculated by the ECB. In some countries, MFIs report transactions directly to the NCB using one of the methods described in Section 5.2, in which case revaluation adjustments are compiled by the NCB as a residual.

**Definition of financial transactions in MFI balance sheet statistics:**

$$T_t = (L_t - L_{t-1}) - C_t - V_t - E_t \quad \text{Equation [7.2.1]}$$

where

- $T_t$  = Transactions in period t
- $L_t$  = Outstanding amounts at the end of period t
- $C_t$  = Reclassification adjustment in period t
- $V_t$  = Revaluation adjustment in period t
- $E_t$  = Exchange rate adjustment in period t

## 7.2.2 Revaluation adjustments due to exchange rate changes

For the purposes of submitting statistical data to the ECB, the NCBs ensure that asset and liability positions denominated in foreign currencies are converted into euro using the market exchange rates prevailing on the date to which the data relate (see also Section 3.3).

**Revaluation adjustments due to exchange rate changes (or exchange rate adjustments)** comprise changes in the euro value of balance sheet items denominated in currencies other than euro arising from movements in exchange rates (i.e. from changes in the value of the foreign currency against the euro) between reporting dates. These changes represent holding gains/losses and are not financial transactions.

As indicated in Annex I to Guideline ECB/2021/11, the ECB removes the effect of exchange rate movements against the euro using a standardised method of adjustment for all relevant items, unless exchange rate adjustments are provided by NCBs (i.e. in cases where more detailed information is available at national level, thus leading to better estimations). In particular, the adjustment is calculated for all items except those for which no breakdown by currency of denomination is available.<sup>132</sup> This means that, on the assets side, holdings of shares and other equity, MMF shares/units, non-financial assets and remaining assets do not undergo exchange rate adjustment. On the liabilities side, capital and reserves are not adjusted for changes in exchange rates, while remaining liabilities are used as a balancing item and, as such, are allocated any discrepancy between the total

<sup>132</sup> For some items, currency information is not available at the same level of detail with regard to the sector, maturity or area of counterparty. Adjustments can be estimated using standard assumptions, however, as explained later in this section.

adjustment of assets and the total adjustment of liabilities. These adjustments have been made since reference month September 1997 and are calculated monthly for balance sheet items originally denominated in GBP, USD, JPY and CHF. No exchange rate adjustment is made for balances in other currencies. NCBs calculate revaluation adjustments due to exchange rate changes for their “receivables from the IMF” position denominated in SDRs and transmit these to the ECB within the revaluation adjustment series, or within the exchange rate adjustment series if the NCB regularly transmits these. The same applies to the “counterpart of SDRs” position under liabilities. All exchange rate changes are calculated against the euro.

### 7.2.2.1 Derivation of the exchange rate adjustment

As mentioned above, instruments denominated in currencies other than euro are reported in euro, converted at the exchange rate prevailing on the balance sheet date. Derivation of the exchange rate adjustment for such instruments can, in principle, be divided into three steps.

#### Step 1: Conversion of outstanding amounts into foreign currency

In the first step, the outstanding amounts are converted back into the original currency of denomination. In other words, outstanding amounts at the end of the previous and current reporting periods are converted using the exchange rate prevailing at the time.

The process is as follows:

$$L_{t,FC}^* = \frac{L_{t,FC}}{e_{t,FC}} \quad \text{Equation [7.2.2]}$$

$$L_{t-1,FC}^* = \frac{L_{t-1,FC}}{e_{t-1,FC}} \quad \text{Equation [7.2.3]}$$

where

$t - 1$  = End of previous reporting period

$t$  = End of current reporting period

$L_{t,FC}$  = Outstanding amount at time  $t$  expressed in euro, FC being the original currency of denomination

$L_{t,FC}^*$  = Outstanding amount at time  $t$  converted to the original currency of denomination FC

$e_{t,FC}$  = Nominal euro/FC exchange rate at time  $t$

#### Step 2: Computation of the initial differences and reconversion into euro

In the second step, the differences in the outstanding amounts denominated in foreign currency at time  $t$  and  $t-1$  (as derived in Step 1) are computed and those differences are converted into euro using the average value of the daily exchange

rates during the reporting period. Using the average rate for this conversion assumes that the transactions were evenly spread over the period.

The process is as follows:

$$\overline{e}_{t,FC} \cdot \Delta L_{t,FC}^* = \overline{e}_{t,FC} \cdot (L_{t,FC}^* - L_{t-1,FC}^*) \quad \text{Equation [7.2.4]}$$

where

$\overline{e}_{t,FC}$  = Average of daily nominal exchange rate during the period from t-1 to t

$\Delta$  = First difference operator

### Step 3: Computation of the exchange rate adjustment for each currency

Finally, the third step involves computing the exchange rate adjustment as the difference between the change in outstanding amounts as reported to the ECB in euro and the change in outstanding amounts converted into euro as calculated in Step 2. Rearranging the terms in this last step (see calculations below) offers an additional interpretation of the exchange rate adjustment, which can be seen as the percentage deviation of the period average exchange rate from the end of period rate multiplied by the corresponding outstanding amounts, minus the same calculation performed at the end of the previous period.

The process is as follows:

$$E_{t,FC} = \Delta L_{t,FC} - \overline{e}_{t,FC} \cdot \Delta L_{t,FC}^* \quad \text{Equation [7.2.5]}$$

or, equivalently, equation [7.2.5] can be rearranged with substitutions from equations [7.2.2], [7.2.3] and [7.2.4] as follows:

$$E_{t,FC} = - \left[ \left( \frac{\overline{e}_{t,FC} - e_{t,FC}}{e_{t,FC}} \right) \cdot L_{t,FC} - \left( \frac{\overline{e}_{t,FC} - e_{t-1,FC}}{e_{t-1,FC}} \right) \cdot L_{t-1,FC} \right] \quad \text{Equation [7.2.6]}$$

where

$E_{t,FC}$  = Exchange rate adjustment at time t

### Total adjustment

In MFI balance sheet statistics, the procedure described above is applied to all eligible items and separately for balances in GBP, USD, JPY and CHF. The final adjustment is thus obtained as the sum of adjustments for each currency, the formula being as follows:

$$E_t = \sum_{FC} E_{t,FC}, \text{ for } FC \in \{GBP, USD, CHF, JPY\} \quad \text{Equation [7.2.7]}$$

## 7.2.2.2 Nominal exchange rates

The nominal exchange rates used in the conversions are the ECB reference exchange rates (see also Section 3.3).

### 7.2.2.3 Outstanding amounts by currency

The current MFI balance sheet reporting scheme limits the availability of some of the breakdowns needed to compute the exchange rate adjustment. In particular, it is not possible to identify monthly outstanding amounts for each of the four individual currencies, since these breakdowns are only reported to the ECB quarterly and with a longer delay than for monthly series. In line with Regulation ECB/2021/2, the currency breakdowns reported monthly distinguish only between euro positions and positions denominated in all other currencies combined.<sup>133</sup> The quarterly reporting scheme also includes a less detailed instrument and counterparty breakdown than the monthly series.<sup>134</sup> In practice, this means that currency breakdowns for some items, such as detailed maturity and counterparty sector breakdowns, are not available in either monthly or quarterly reporting data.

To overcome these limitations and calculate the exchange rate adjustments for those items to which the method described above cannot be directly applied (e.g. because of missing currency breakdowns in the reporting scheme), the ECB makes the following assumptions.

#### Assumption 1

The ratio of each balance sheet item denominated in GBP, USD, JPY or CHF to the total amount of the same item denominated in all foreign currencies combined is stable during each quarter. This assumption allows the ECB to estimate the intra-quarter development of outstanding amounts denominated in each of the four currencies, starting from the end-of-quarter positions in the four currencies and the monthly outstanding amounts of positions in all foreign currencies. The respective currency's share in all foreign currencies calculated from the latest available quarterly currency breakdowns is carried forward (assumed to remain constant) for the following three months until new quarterly data become available.

#### Assumption 1: Using quarterly currency information

$$L_{t,FC} = L_{t,non-EUR}^{T1} \cdot \left( \frac{L_{q,FC}^A}{L_{q,non-EUR}^{T1}} \right) \quad \text{Equation [7.2.8]}$$

where

$t$  = End of month

$q$  = End of preceding quarter

$FC$  = Foreign currency

<sup>133</sup> Monthly data requirements are included in Table 1 in Part 2 of Annex I to Regulation ECB/2021/2.

<sup>134</sup> Quarterly data requirements related to currency breakdowns are included in Table 4 in Part 3 of Annex I to Regulation ECB/2021/2.

$T1, T4$  = Tables 1 and 4 of Regulation ECB/2021/2

## Assumption 2

For each balance sheet item, the distribution of outstanding amounts across different currencies does not vary significantly between maturities and counterparty subsectors. Using this (admittedly bold) assumption, the ECB calculates the exchange rate adjustments for sectoral or maturity breakdowns for which no currency information is available in the quarterly reporting scheme by distributing on a proportional basis the adjustment computed for the closest aggregated item for which currency information is available.

### Assumption 2: Allocation of the exchange rate adjustment to items without currency information

Suppose that currency information is available in the quarterly reporting scheme for a certain aggregated item (for which the exchange rate adjustment can therefore be derived, as discussed above) but not for its constituent sub-items A and B. The exchange rate adjustment for these sub-items is then derived as:

$$E_t^{ItemA} = E_t^{AGGREGATE} \cdot \frac{L_t^{ItemA}}{L_t^{AGGREGATE}} \quad \text{Equation [7.2.9]}$$

$$E_t^{ItemB} = E_t^{AGGREGATE} \cdot \frac{L_t^{ItemB}}{L_t^{AGGREGATE}} \quad \text{Equation [7.2.10]}$$

where  $L_t^{AGGREGATE} = L_t^{ItemA} + L_t^{ItemB}$

### Adjustment of series for which no monthly currency split is available

The current monthly reporting scheme includes some series for which only total currency data (euro and foreign currency combined) are collected monthly. This, in turn, means that Assumption 1 is no longer sufficient for estimating an exchange rate adjustment for these items. In practice, the adjustment is calculated based on the further assumption that the shares of euro and non-euro-denominated positions in the total are also stable within the quarter. Using this assumption to modify equation [7.2.8], the first term on the right-hand side and the ratio's denominator are replaced by the item including all currencies combined.

### Adjustment of series relating to money market fund shares/units issued

One special case regarding items for which no currency split is available from the monthly balance sheet is the issuance of MMF shares/units. The ECB does not collect any currency information on this item, given that variations in the value of the shares/units owing to exchange rate movements depend on the currency

denomination of the assets in which the fund invests rather than on the currency of issuance of the shares/units. As discussed in Section 5.3.2, the adjustment here is based on the proportion of non-euro-denominated assets held by the MMFs in their total assets (as reported in the quarterly MMF balance sheet statistics).<sup>135</sup> For each of the four currencies concerned, a fictional series of non-euro-denominated outstanding amounts of MMF shares/units issued is derived using a modified version of equation [7.2.8]. In particular, the ratio in parentheses is derived on the basis of the currency split of the aggregated total assets of MMFs in the country concerned. The adjustment is then calculated in the standard way. Finally, the adjustment so derived is allocated to the non-resident holdings of MMF shares/units issued (based on the assumption that non-euro-denominated funds are held by non-residents of the euro area), thus insulating the monetary aggregates from the estimated exchange rate adjustment.

### 7.3 Index of notional stocks and growth rates

As explained earlier, the outstanding amounts at the end of each period reflect not only the cumulative effect of financial transactions but also instrument reclassifications and other breaks in series, changes in exchange rates, price fluctuations and loan write-offs/write-downs. However, most analyses of monetary and credit developments require data that exclude such non-transaction-related changes, especially when computing growth rates.

One way of computing growth rates that isolates changes in outstanding amounts arising purely from transactions is by means of a chain index series of notional stocks. A chain index series is an index series obtained by applying a recursive multiplicative equation. There are several ways to calculate this but, for the purposes of MFI balance sheet statistics and other financial statistics, the ECB uses the chain calculation below to define the index of notional stocks.

#### **Recursive definition of the index of notional stocks in MFI balance sheet statistics:**

$$I_t = I_{t-1} \cdot \left(1 + \frac{T_t}{L_{t-1}}\right) \quad \text{Equation [7.3.1]}$$

with the chain calculation starting from a base period, setting the index at 100.<sup>136</sup>

where

$I_t$  = Index of notional stocks at the end of period t

$T_t$  = Transactions in period t

$L_t$  = Outstanding amounts at the end of period t

<sup>135</sup> MMF statistics, which are a subset of MFI balance sheet statistics, are collected under a different reporting scheme in accordance with Guideline ECB/2021/11 (see Section 7.6.1).

<sup>136</sup> Changes in the base period do not affect growth rates, only the level of the index.

The index of notional stocks in equation [7.3.1] is dimensionless, so the level of the index for any period depends only on the base period chosen for the chain calculation, the corresponding initial level and the month-on-month growth rates. Consequently, it does not represent any particular value actually observed for the corresponding series at that or any other point in time.<sup>137</sup>

The rate of change of the index is a measure of growth in outstanding amounts that excludes the effect of non-transactions. Growth rates over any time span can be derived using the equations below.

**Definition of the growth rate based on the index of notional stocks in MFI balance sheet statistics:**

Annual growth rate (monthly data)

$$a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \cdot 100 \quad \text{Equation [7.3.2]}$$

Month-on-month growth rate (monthly data)

$$m_t = \left( \frac{I_t}{I_{t-1}} - 1 \right) \cdot 100 \quad \text{Equation [7.3.3]}$$

Growth rate over time span s

$$g_{t,s} = \left( \frac{I_t}{I_{t-s}} - 1 \right) \cdot 100 \quad \text{Equation [7.3.4]}$$

where

$I_t$  = Index of notional stocks at the end of period t

It is also helpful to combine equations [7.3.1] and [7.3.4] when solving the recursion in equation [7.3.1]. In particular, this operation yields an equivalent recursive equation for a growth rate that depends directly on the outstanding amounts and financial transactions series.

**Definition of the growth rate as function of outstanding amounts and transactions:**

Growth rate over time span s

$$g_{t,s} = \left[ \prod_{j=0}^{s-1} \left( 1 + \frac{T_{t-j}}{L_{t-j-1}} \right) \right] \cdot 100 \quad \text{Equation [7.3.5]}$$

---

<sup>137</sup> A notional stocks series that excludes the effect of non-transactions but preserves the dimension of the original stocks series may nonetheless be computed. For instance, choosing a level for the base period equal to the value of the respective balance sheet item would yield such a series. As a rule, however, the ECB does not publish such notional stocks series for the purposes of MFI balance sheet statistics, given that they would only show the amount of the original balance sheet items at the base date and the divergence from actual outstanding amounts would grow over time. To avoid confusion, only actual stocks (unadjusted for the effects of non-transactions) and the corresponding indices of notional stocks – equation [7.3.1] – are published.

### 7.3.1 Euro area enlargement, MFI balance sheets and euro area monetary aggregates (outstanding amounts, transactions and growth rates)

This section describes the treatment of euro area enlargements in MFI balance sheet statistics and monetary statistics (see also Sections 5.7.3 and 7.8).

For MFI balance sheet statistics, euro area series refer, at each point in time, to the changing composition of the euro area. In other words, they represent the aggregate of all EU Member States that had adopted the euro at the time to which the statistics relate. Outstanding amounts and transactions for the euro area for the last month before enlargement will therefore be compiled from the MFI balance sheet of the euro area in its pre-enlargement composition. Outstanding amounts and transactions for the euro area for the first month after enlargement and for subsequent months will be compiled from the MFI balance sheet of the euro area in its post-enlargement composition. This procedure means that there is a shift in the level of euro area outstanding amounts at the time of enlargement. This break in the series should be considered as a statistical reclassification, however, and should therefore affect neither the flow nor the growth rate of the various components of the euro area (aggregated or consolidated) balance sheet or of the monetary statistics derived from them.

#### 7.3.1.1 Calculation of the euro area flow at the time of enlargement

The following example illustrates the impact of a new country joining the euro area on the calculation of euro area transactions in MFI balance sheet statistics. Although the example refers to the euro area enlargement involving Croatia in January 2023, it can be easily generalised.

Using the same notation introduced in Section 7.1, the euro area flow for January 2023 (the time of enlargement) can be defined as a special case of equation [7.2.1].

##### **Euro area financial transactions at the time of enlargement:**

$$T_{Jan23}^{Eur20} = (L_{Jan23}^{Eur20} - L_{Dec22}^{Eur19}) - C_{Jan23}^{Eur20} - V_{Jan23}^{Eur20} - E_{Jan23}^{Eur20} \quad \text{Equation [7.3.6]}$$

Two features make this flow a special case. First, the difference in outstanding amounts refers to a different composition of the euro area across the respective periods and therefore includes a level shift that has to be accounted for. In turn, the reclassification term  $C_{Jan23}^{Eur20}$  should include two components:

- (i) an enlargement-related component to correct the level shift;
- (ii) other adjustments occurring in the period and unrelated to the euro area enlargement (including in Croatia).

In particular, the enlargement-related component (i) of  $C_{Jan23}^{Eur20}$  can be decomposed into three main parts: (i)(a) Croatian MFIs' outstanding amounts, (i)(b) positions of



MFIs resident in the former euro area 19 vis-à-vis Croatian counterparties (these positions should be reclassified from “rest of the world” to “other euro area” counterparties – reclassification by area), and (i)(c) positions of MFIs resident in the former euro area 19 denominated in Croatia’s former national currency (the kuna). The latter is only relevant for a subset of items on the MFI balance sheet (these items should be reclassified from being denominated in “all other currencies combined” to being denominated in “euro” – reclassification by currency). The enlargement-related components of the reclassification adjustment should relate to balance sheet positions at end-December 2022 (i.e. the previous month).

This decomposition of the euro area reclassification term at the time of enlargement explains why the data requirements set out in Section 5.7.3 are needed. The existing euro area countries are required to send the reclassification adjustments under points (i)(b) and (i)(c) for the reference period in which the enlargement takes place. The Member States joining the euro area should not transmit reclassifications for outstanding amounts (point (i)(a) above), however, given that these are made available indirectly by transmitting historical MFI balance sheet data.

### 7.3.1.2 Calculation of the euro area index of notional stocks at the time of enlargement

To compute the index of notional stocks, a further correction is needed to ensure that the calculation is not distorted by the level shift at the time of enlargement. Using equation [7.3.1] to compute the chain index value at the time of enlargement would produce a mismatch in the updating factor in brackets between the numerator, which refers to the new composition of the euro area, and the denominator, which refers to the pre-enlargement composition of the euro area. This would also distort the growth rate, given that this is derived from the percentage change in the chain index. To ensure the correct calculation of the updating factor in the chain index at the time of enlargement, the ECB introduces a denominator correction.

#### Denominator correction at the time of enlargement:

$$I_{Jan23} = I_{Dec22} \cdot \left( 1 + \frac{T_{Jan23}^{Euro20}}{L_{Dec22}^{Euro19} + L_{Dec22}^*} \right) \quad \text{Equation [7.3.7]}$$

$I_t$  = Index of notional stocks at the end of period t

$T_t$  = Transactions in period t

$L_t$  = Outstanding amounts at the end of period t

$L_t^*$  = Denominator correction for period t

The denominator correction corresponds to the enlargement-related level shift in the euro area aggregate. The denominator on the right-hand side of equation [7.3.7] can therefore be interpreted as a “notional” outstanding amount for the euro area as if it already included Croatia in December 2022.

Finally, the method applied in the construction of the notional index series around the time of enlargement means that the resulting euro area growth rates after enlargement reflect the gradual contribution of the new member's growth rate to euro area growth. For instance, the euro area annual growth rate in the first month after enlargement results in an (implicit) approximate weight of 1/12th for the new member's contribution. This weight then increases to 2/12ths in the second month after enlargement and so on up to 12/12ths.<sup>138</sup>

See Sections 7.5 and 8.1 for the treatment of enlargement in the context of seasonal adjustment and the Eurosystem's minimum reserves requirement respectively.

## 7.4 Adjusted loans

This section presents the adjusted loans series that include an adjustment for sales and securitisation of loans derecognised from the balance sheet and for the impact of notional cash pooling positions resulting from cash management services provided by certain banks to corporate groups.<sup>139</sup> The ECB uses these adjusted series as the headline series for credit developments, given that they provide a better view of lending to the real economy by euro area MFIs.

### 7.4.1 Adjustment for loan sales and securitisation

Securitisation, as defined in Section 4.3.11.1, involves the conversion of assets into marketable securities through the transfer of credit risk and the creation of liquid instruments from normally illiquid loans. This is why the practice became an important element of some banks' business models up to 2007. With the onset of the financial crisis, however, most securitisation activity in the euro area was related to the need to create collateral for central bank borrowing. Instead of being placed with investors, the instruments resulting from the securitisation transactions were "retained" by banks. Loan disposals also take place in the context of banks restructuring their balance sheets, often by selling non-performing or impaired loans.

From a statistical perspective, securitisation and other loan transfers resulting in a change in the reported outstanding amounts on MFI balance sheets impede proper analysis of lending to the real economy, given that they affect outstanding loans reported by MFIs while the actual amount of financing received by the real economy remains unchanged.

---

<sup>138</sup> The description presented is an approximation, in that the implicit "weights" may not be exactly 1/12th, 2/12ths, etc., owing to the non-linearities implied by the chain index multiplicative form (see equations [7.3.4] and [7.3.5]). For most practical purposes, however, the approximation provides a fair depiction of the "smoothness" implied by the procedure. Note that for growth rates calculated over time span  $s$ , the same concept applies but  $n/12$  is substituted by  $n/s$ . For example, if  $s$  is one month (i.e. to calculate the month-on-month growth rate), the weight of the new member is fully incorporated into the euro area growth rate in the first month after enlargement.

<sup>139</sup> The ECB has been publishing loans series adjusted for sales and securitisation since December 2008. These were replaced in July 2016 by adjusted loans series that also include an adjustment for the impact of notional cash pooling.

The adjustment for loan sales and securitisation takes into account the (net) impact of loan transfers at the time they take place, as well as ongoing developments in derecognised loans (i.e. repayments of principal by borrowers) where those data are available. Besides providing a more complete and accurate picture of lending to the real economy originated by euro area banks, this also ensures the comparability of statistics between countries that may have differing practices with regard to loan derecognition.

Adjusting loans for sales and securitisation utilises data collected on the following three components:

- (i) Impact of loan transfers on MFI balance sheets: these loan transfers are defined as acquisitions minus disposals of loans that have an impact on loans reported on MFI balance sheets. This definition covers all loans derecognised during the period, whether or not the outstanding amounts and repayments of those transferred loans are captured on an ongoing basis (see the components below).
- (ii) Outstanding amounts of derecognised loans: data on these are collected from euro area MFIs under Regulation ECB/2021/2 where the loans are still serviced by the MFIs. Some NCBs also provide available data for loans not serviced by MFIs (e.g. where the servicing of loans is performed by another part of the banking group). Overall, this ensures almost complete coverage of securitised loans that are derecognised, along with potential coverage of certain other volumes of non-securitised derecognised loans.
- (iii) Transactions in derecognised loans excluding loan transfers: data on these transactions basically correspond to the principal repayments of derecognised loans. These transactions are derived from outstanding amounts and adjustments of serviced loans in a similar way to loans on MFI balance sheets (see Section 7.2) based on information reported in accordance with Regulation ECB/2021/2 and Guideline ECB/2021/11. If NCBs also provide available outstanding amounts for loans not serviced by MFIs (see point (ii)), the NCBs must also transmit the corresponding transaction amounts directly.

NCBs and the ECB have compiled historical data on loans adjusted for sales and securitisation to provide long and consistent statistical series on loans to the euro area private sector, households and non-financial corporations (usually going as far back as 2003).

#### 7.4.2 Adjustment for notional cash pooling

Cash pooling is a liquidity management service provided by some banks that allows corporates to externalise intragroup cash management. This can be a cheaper and more efficient way to manage cash than making inter-company loans between group entities. There are several types of cash pooling agreements that may be used for

this purpose (see also Sections 4.3.7 and 4.4.7), but the most relevant, in terms of the impact on MFI balance sheets, is notional cash pooling.

In notional cash pooling, all accounts maintain a separate legal status and the participating entities are the direct counterparties of the bank. The pooling is performed by the bank, which provides liquidity to those counterparties in need by means of overdrafts, generally on the condition that the “pool” is in surplus overall. As such, from an economic point of view, these loans do not constitute a genuine provision of additional financing to the economy provided by the MFI sector.

In line with Regulation ECB/2021/2, notional cash pool positions must be reported on a gross basis and not netted against any other assets or liabilities. Consequently, notional cash pooling can lead to the cash pool participants building up positions in overnight deposits and short-term loans vis-à-vis MFIs. These positions can be large and often show sharp reversals, for instance when corporate groups decide to balance out positions in the pool.

Besides their limited informational value when analysing credit to the euro area private sector, notional cash pooling introduces volatility to month-on-month loan transactions and annual growth rates. As a result, in July 2016 the ECB began adjusting its headline loan series<sup>140</sup> by excluding notional cash pooling positions as follows:

- (i) the outstanding amounts of loans that relate to notional cash pooling positions are subtracted from total loans on the balance sheet;
- (ii) the transactions in loans relating to notional cash pooling are subtracted from total transactions in on-balance-sheet loans.

The adjustment for cash pooling has been incorporated into the adjusted loans series since the reference period December 2014 based on available data. At first, this related only to MFIs in the Netherlands, which had, by far, the most substantial volumes of notional cash pool positions in the euro area. However, since January 2022 the adjustment for cash pooling has covered the whole euro area due to the implementation of reporting requirements on notional cash pooling in Regulation ECB/2021/2. The activities are highly concentrated in certain countries and credit institutions, meaning that this adjustment is not relevant for some countries, either because there are no such positions or because the amounts are so negligible that derogations from the Regulation requirements may be granted by NCBs.

### 7.4.3 Derivation of the adjusted loans series

The adjusted loans are derived using the components specified above for the adjustments for loan sales and securitisation and for notional cash pooling. The equations for the derivation of their outstanding amounts and transactions are provided below:

---

<sup>140</sup> The headline loans series previously only included an adjustment for loan sales and securitisation.

### Adjusted loans:

Outstanding amounts

$$L_t^{Adj} = L_t^{MFI} + L_t^{DR} - L_t^{NCP} \quad \text{Equation [7.4.1]}$$

Transactions

$$T_t^{Adj} = T_t^{MFI} - N_t + T_t^{DR} - L_t^{NCP} \quad \text{Equation [7.4.2]}$$

where

$L_t^{Adj}$  = Outstanding amounts of adjusted loans at the end of period t

$L_t^{MFI}$  = Outstanding amounts of loans on MFI balance sheets (unadjusted) at the end of period t

$L_t^{DR}$  = Outstanding amounts of derecognised loans at the end of period t

$L_t^{NCP}$  = Outstanding amounts of notional cash pooling loans on MFI balance sheets at the end of period t

$T_t^{Adj}$  = Transactions in adjusted loans in period t

$T_t^{MFI}$  = Transactions in loans on MFI balance sheets (unadjusted) in period t

$N_t$  = Net transfers of loans off MFI balance sheets with derecognition (acquisitions minus disposals) in period t

$T_t^{DR}$  = Transactions in derecognised loans excluding loan transfers (i.e. repayments of derecognised loans) in period t

$T_t^{NCP}$  = Transactions in notional cash pooling loans in period t

## 7.5 Seasonal and calendar adjustment of MFI balance sheet statistics

The seasonal and calendar adjustment of time series involves estimating and removing fluctuations that occur in broadly similar recurrent patterns over the year (e.g. M1 is higher than average in December owing to the effect of Christmas bonuses and expenditure) or that are related to end-of-month calendar effects (e.g. end-of-month currency in circulation is higher on average when measured on a Friday, given that customers may withdraw additional cash for the weekend).

The main aim of these adjustments is to provide series from which short-term developments can be better interpreted by cleaning out easily foreseeable patterns that are assumed to be mostly devoid of economic information. In MFI balance sheet statistics, seasonal and calendar adjustments are carried out on the basis of X-12 ARIMA/X-13 ARIMA algorithm,<sup>141</sup> which consists of two stages. The first stage

<sup>141</sup> ARIMA stands for autoregressive integrated moving average.

estimates the time series on the basis of a user-defined ARIMA model with regressors (“RegARIMA”) and delivers a pre-adjusted time series from which calendar effects and possible outliers have been removed. The second stage of the algorithm (referred to as the X-11 part) performs the seasonal adjustment of the pre-adjusted series.<sup>142</sup>

## 7.5.1 Coverage of seasonal and calendar adjustment

The ECB currently publishes seasonally adjusted outstanding amounts, transactions and growth rates of the main euro area monetary aggregates and their counterparts. No seasonally adjusted series on national contributions to euro area aggregates are currently published, with the exception of seasonally adjusted data on loans to euro area households and non-financial corporations for a number of countries that are provided by the respective NCBs.

Euro area series can be adjusted directly or indirectly. A direct seasonal adjustment is obtained by applying the X-12 ARIMA/X-13 ARIMA algorithm directly to the non-adjusted time series. The adjustment is performed on a measure of the outstanding amounts corrected for non-transaction effects (e.g. index of notional stocks or cumulated flows). Seasonally adjusted series for outstanding amounts, transactions and growth rates are then derived on the basis of this output. By contrast, an indirect seasonal adjustment is obtained as a linear combination of other directly adjusted series, as illustrated by equation [7.5.2] below. In all cases, the seasonal adjustment is carried out at the level of euro area series and not through the seasonal adjustment and aggregation of national contributions to euro area aggregates. The main reason for this approach is that euro area monetary aggregates refer to the consolidated balance sheet of the euro area MFI sector as a whole. This means, for instance, that the levels of national contributions may turn negative (e.g. if a country’s MFI sector holds more debt securities issued by euro area MFIs than it has issued itself). The identification of seasonal patterns in national contributions may also be affected by the volatility of the series (e.g. for small countries or for those countries where intra-euro area cross-border positions play a significant role). Finally, the length of national contributions for series referring to new euro area countries may be insufficient to produce reliable results.

### Direct and indirect adjustment in MFI balance sheet statistics:

Outstanding amounts and financial transactions

Let  $Y_t$  and  $Z_t$  represent the breakdowns of variable  $X_t$ , where  $X_t^{NSA} = Y_t^{NSA} + Z_t^{NSA}$

The direct seasonal adjustment is not additive

$$X_t^{SA(direct)} \neq Y_t^{SA(direct)} + Z_t^{SA(direct)} \quad \text{Equation [7.5.1]}$$

<sup>142</sup> For more information on the X-12 ARIMA/X-13 ARIMA algorithm, see the documentation for [JDemetra+](#), the seasonal adjustment software officially recommended to the members of the European Statistical System (ESS) and the European System of Central Banks implementing the two leading seasonal adjustment methods TRAMO/SEATS+ and X-12ARIMA/X-13ARIMA-SEATS.

The indirect seasonal adjustment is additive

$$X_t^{SA(indirect)} = Y_t^{SA(direct)} + Z_t^{SA(direct)} \quad \text{Equation [7.5.2]}$$

In MFI balance sheet statistics, the main reason for applying the indirect adjustment is to preserve additivity between seasonally adjusted aggregates and components and, in general terms, to comply with the balance sheet constraints in the adjusted format. Since direct seasonal adjustment is a non-linear operation on the data, it is not additive. Consequently, if a direct seasonal adjustment were to be applied to each aggregate and its components, the former would not equal the sum of the latter, as shown by equation [7.5.1].

The following criteria are used when choosing the series that are to be adjusted directly and those that are to be derived indirectly:

- (i) Regularity of the seasonal pattern: series with a regular seasonal pattern are more appropriate for direct adjustment than series with a volatile seasonal pattern.
- (ii) Stability of the weight of the component in the total: when the shares of the components change significantly over time and their seasonal patterns differ, direct adjustment of the aggregate is not suitable and direct adjustment of the components is preferable. When the shares of the components change over time but there is a high degree of substitutability between them, however, direct adjustment of the aggregate is preferable (and one of the components is consequently derived indirectly as a residual).
- (iii) Length of the series: for short series, a higher level of aggregation of the series to adjust is preferable, given that a seasonal pattern undistorted by outliers will then be better captured.

Seasonally adjusted values for the following euro area aggregates are available in the context of MFI balance sheet statistics:

- monetary aggregates and selected components and counterparts;
- sectoral breakdowns of MFI loans and deposits in M3;
- adjusted loans to euro area households and non-financial corporations (including national data provided by NCBs for several countries).<sup>143</sup>

A detailed overview of the available time series, including start dates, the methods applied (direct or indirect adjustment) and whether an adjustment for trading days effect is applied (see next section for more details), can be found on the ECB's website.<sup>144</sup>

<sup>143</sup> These national seasonally adjusted data comprise outstanding amounts and transactions from 2003 onwards and are adjusted for loan sales and securitisation (for data up to 2010, adjustment for sales and securitisation was carried out on a best-efforts basis using available information).

<sup>144</sup> See the [list](#) of seasonally adjusted monetary statistics.

## 7.5.2 First stage: RegARIMA modelling, outlier identification and calendar adjustment

The first stage of the algorithm models the time series on the basis of a user-defined RegARIMA model. This also entails the identification of, and correction for, outliers and, where specified, calendar effects. The rationale behind this pre-adjustment is that the quality and stability of the seasonal adjustment estimates carried out in the next stage are much improved if they are based on a series that already takes special developments into account. The RegARIMA model is also used to extend the series using forecasts and backcasts, allowing symmetric moving averages to be used in the second stage.

An outlier can be defined as a significant development observed in the evolution of a time series that is not believed to represent a change in the seasonal behaviour of the series, such as a one-off effect or a break in the series trend. For this reason, it is desirable that the series to be adjusted is corrected for such occurrences before the seasonal pattern is estimated. This avoids potential spillovers from the outliers (which are assumed to be non-seasonal events) into the estimated seasonal component. Once the second stage (seasonal adjustment) has been completed, the effect of the outliers removed in the first stage is added back in, i.e. the final adjusted series is adjusted for calendar and seasonal effects but not for the effect of outliers. For the purposes of outlier identification, the ECB corrects for additive outliers, transitory changes and level shifts prior to seasonal adjustment.

A subset of series is also adjusted for calendar effects arising from the reference periods ending on different specific weekdays (i.e. trading days effect) or from the Easter holiday.

## 7.5.3 Second stage: seasonal adjustment

The second stage of the algorithm is the decomposition of the pre-adjusted series into its (i) trend, (ii) seasonal, and (iii) irregular components. The first step involves identifying and removing the trend by means of a user-defined filter. The seasonal component is then calculated as a seasonal moving average of the de-trended series with a user-defined filter length.<sup>145</sup> The residual part of the series after identification of the trend and seasonal components is the irregular component, which is mainly a residual containing non-seasonal and non-calendar short-term variations. The series decomposition can be either additive or multiplicative.

### Decomposition of time series X:

Additive decomposition

$$X_t = Trend_t + Seasonal_t + Irregular_t \quad \text{Equation [7.5.3]}$$

---

<sup>145</sup> In general, the longer the moving average, the more stable the seasonal component over time and the smaller the impact of new data on its estimation.



## Multiplicative decomposition

$$X_t = Trend_t \cdot Seasonal_t \cdot Irregular_t \quad \text{Equation [7.5.4]}$$

The multiplicative decomposition is used by the ECB for all series in MFI balance sheet statistics apart from net external assets, for which the additive decomposition is used.<sup>146</sup>

The seasonal factors are the output of the seasonal adjustment process. They represent, for any given item, the transformations (additive or multiplicative) to be applied to the non-adjusted series to obtain its adjusted counterpart. In the case of a multiplicative decomposition, the seasonal factors are dimensionless. The ECB obtains multiplicative factors by running the seasonal adjustment on a measure of notional stocks, such as the index of notional stocks as in equation [7.3.1]. The same set of factors thereby obtained is then used to obtain seasonally adjusted outstanding amounts and seasonally adjusted transactions, as described in equations [7.5.5] and [7.5.6] below. In the case of additive adjustment, the ECB uses the cumulated sum of flows as input for the seasonal adjustment process.

The additive (multiplicative) seasonal factor time series also has the property that its moving sum (product) over any one-year time span is approximately equal to zero (one). This property of seasonal factors implies that the annual flows are approximately equal for adjusted and non-adjusted series.<sup>147</sup>

### Multiplicative adjustment in MFI balance sheet statistics:

#### Outstanding amounts

$$L_t^{SA} = \frac{L_t^{NSA}}{\pi_t} \quad \text{Equation [7.5.5]}$$

#### Financial transactions

$$T_t^{SA} = \Delta L_t^{SA} - \frac{\Delta L_t^{NSA} - T_t^{NSA}}{\pi_t} \quad \text{Equation [7.5.6]}$$

### Additive adjustment in MFI balance sheet statistics:

#### Outstanding amounts

$$L_t^{SA} = L_t^{NSA} - \sigma_t \quad \text{Equation [7.5.7]}$$

#### Financial transactions

$$T_t^{SA} = \Delta L_t^{SA} - (\Delta L_t^{NSA} - T_t^{NSA}) \quad \text{Equation [7.5.8]}$$

## LEGEND

$L_t^{SA}$  = Outstanding amounts at the end of period t, seasonally adjusted

<sup>146</sup> Multiplicative decomposition is not appropriate for series that may assume negative values, such as net external assets.

<sup>147</sup> Differences between adjusted and non-adjusted annual flows may also be due to calendar adjustments, the impact of which is assumed not to cancel out over one calendar year.

$L_t^{NSA}$	= Outstanding amounts at the end of period t, non-seasonally adjusted
$T_t^{SA}$	= Transactions in period t, seasonally adjusted
$T_t^{NSA}$	= Transactions in period t, non-seasonally adjusted
$\sigma_t$	= Additive seasonal factor
$\pi_t$	= Multiplicative seasonal factor
$\Delta$	= First difference operator

#### 7.5.4 Derivation of seasonal factors and revisions policy

The RegARIMA modelling and the estimation of the seasonal factors are performed by the ECB on an annual basis using information available at the time that the models are run. This approach, which preserves the stability of the seasonally adjusted figures, yields time series that include 12 months of projected seasonal adjustment factors, which are then used for the following year. The ECB checks each month that the newly available information does not require significant revisions to the estimated seasonal patterns. If significant differences are detected (e.g. in the event of major historical revisions), the seasonal factors are updated outside the scheduled yearly review.

## 7.6 Compilation of balance sheet statistics for MMFs and deposit-taking corporations except central banks

The MFI sector comprises central banks (S.121), deposit-taking corporations except central banks (S.122) and MMFs (S.123). To complement balance sheet statistics for the entire MFI sector, the ECB compiles and publishes separate balance sheets for MMFs and deposit-taking corporations except central banks for the euro area in aggregate, as well as data for individual euro area countries.

The ECB compilation involves:

- MMF balance sheet data transmitted by euro area NCBs, covering outstanding amounts, reclassifications and revaluation adjustments (where available),<sup>148</sup> in line with the requirements of Guideline ECB/2021/11;
- Aggregated balance sheets of other MFIs (i.e. MFIs excluding the Eurosystem) from which the MMF balance sheet data are subtracted to derive, for each country, balance sheet data for deposit-taking corporations except central banks.

<sup>148</sup> Article 9 of Regulation ECB/2021/2 permits NCBs to grant derogations in respect of the reporting of revaluation adjustments by MMFs, see Section 5.3.3 for further details.

Data on deposit-taking corporations except central banks are particularly relevant for the compilation of macroprudential indicators, for the ECB's annual banking structure report and for the European Commission's need for data on financial services activity given that they provide information on credit institutions resident in the euro area (only a very small number of non-credit institutions are included). Analysis of the euro area MMF balance sheet also reveals portfolio shifts and changes in the investment policy of MMFs on the assets side and, in conjunction with other investment fund statistics, enables analysis of the investment fund industry as a whole.

### 7.6.1 MMF balance sheet statistics

MMFs can, in simple terms, be defined as CIUs that invest in high-quality money market instruments that should provide a return in line with interest rates on money market instruments.<sup>149</sup> As such, MMFs are part of the money-issuing sector. The shares/units issued by MMFs are therefore included in the aggregated and consolidated balance sheet of the MFI sector and contribute to the broad monetary aggregate M3. MMF balance sheet statistics cover the assets and liabilities of MMFs resident in the euro area and are reported by MMFs to NCBs in accordance with Regulation ECB/2021/2. Article 9(4) of Regulation ECB/2021/2 permits NCBs to grant derogations to MMFs, allowing them to report under Regulation ECB/2013/38 concerning investment funds, subject to certain conditions, including the provision of monthly data in accordance with the timeliness requirements set out in Regulation ECB/2021/2.

The reporting population comprises MMFs resident in the euro area, including those managed from outside the euro area. Conversely, the statistics do not cover MMFs established in offshore locations outside the euro area even if the management companies of these MMFs are resident in the euro area. The list of MMFs forming the reporting population is available within the list of MFIs published on the [ECB's website](#). In accordance with Article 5 of Guideline ECB/2021/11, NCBs send the nationally aggregated statistics on MMFs to the ECB, which derives aggregate results for the euro area.

The issuance of MMF shares/units is reported to the ECB monthly and the breakdown of MMF assets and liabilities is reported to the ECB quarterly. In addition to amounts outstanding, the data contain transaction adjustments (i.e. price revaluations and reclassifications) during the reference period, based on which transactions are derived at the ECB.<sup>150</sup> In the case of MMF shares/units issued, the transactions provide an approximation of MMFs' net sales of shares/units to investors during the reference period.

---

<sup>149</sup> See Section 2.1.3 for the full ECB definition of MMFs.

<sup>150</sup> See Sections 5.2 and 5.3 for the derivation of transactions.

### 7.6.1.1 Publication

The ECB publishes monthly statistical data on the shares/units issued by MMFs as part of the MFI sector balance sheet about four weeks after the reference month. Statistical data for MMF shares/units included in the monthly MFI balance sheet statistics published are consistent with the data presented in the press release on euro area investment fund statistics. For the purposes of the consolidated MFI balance sheet and M3, however, the MMF shares/units issued are presented net of any holdings by the MFI sector (including by MMFs themselves). By contrast, data are presented without consolidation in the statistical press release on investment funds and MMFs.

With the exception of MMF shares/units issued, all MMF statistics are published quarterly around six weeks after the reference date, at the same time as quarterly data on investment funds. The ECB publishes MMF balance sheet statistics for the euro area in aggregate, along with data for individual euro area countries with less detailed information.<sup>151</sup> The data are available as of the first quarter of 2006 onwards (earlier data are available for certain individual countries) and refer to outstanding amounts, transactions and annual growth rates.

### 7.6.1.2 MMF balance sheet asset and liability categories

All balance sheet positions and transactions are shown on an aggregated basis, i.e. positions between MMFs are not netted out. The definitions of asset and liability items are the same as those used in MFI statistics (Chapter 4 provides information on the instrument categories). An outline of the MMF balance sheet is presented below:

**Table 11**

Assets	Liabilities
Loans	<b>MMF shares/units issued</b> (by far the largest item on the liabilities side of the MMF balance sheet, representing the value of investors' holdings – this is the only item available monthly)
Debt securities held	Deposits
Equity	Remaining liabilities
Non-MMF investment fund shares/units	
MMF shares/units	
Remaining assets	

A number of additional breakdowns are available for asset and liability items for the euro area aggregates (also summarised in the table below):

- (i) Counterparties are split into euro area residents and non-residents of the euro area. For example, holdings of securities are broken down according to the residency of the issuer. On the liabilities side, the

<sup>151</sup> A less detailed balance sheet is published for some countries.

breakdown of MMF shares/units issued shows the residency of the holders of the shares/units, i.e. the investors in the MMFs (this information is also available monthly).

- (ii) A sector breakdown of counterparties resident in the euro area, further broken down into MFIs (including MMFs), general government, financial corporations other than MFIs and insurance corporations and pension funds (ICPFs), ICPF, non-financial corporations and households (including non-profit institutions serving households). This full breakdown is available for the issuers of debt securities held. A split into MFIs, general government and other euro area residents is available for loans and holdings of non-MMF investment funds and equities. On the liabilities side, a limited sector breakdown (identifying holdings of shares/units by the money-holding sector) is available monthly.
- (iii) A breakdown by original maturity of MMFs' holdings of debt securities issued by euro area MFIs divided into three maturity bands: up to one year, over one year and up to two years, and over two years. MMFs' holdings of debt securities issued by euro area residents other than MFIs are broken down into two maturity bands: up to one year and over one year.
- (iv) A breakdown of the denomination of debt securities held into euro and other currencies (i.e. CHF, GBP, JPY and USD). This breakdown is available for securities issued by non-residents of the euro area, euro area MFIs and other euro area residents, without a further breakdown by sector of issuer.

**Table 12**  
Data availability for euro area MMFs

	Further breakdowns				
	Total	Geographical	Sectoral	Maturity	Currency
<b>Assets</b>					
Loans	Q	Q	Q		
Debt securities held	Q	Q	Q	Q	Q
Non-MMF investment fund shares/units	Q	Q	Q		
Equities	Q	Q	Q		
MMF shares/units	Q	Q			
Remaining assets	Q				
<b>Liabilities</b>					
MMF shares/units issued	Q and M	Q and M			
Deposits	Q	Q			
Remaining liabilities	Q				

Note: Q stands for quarterly, M stands for monthly.

## 7.6.2 Deposit-taking corporations except central banks balance sheet statistics

The aggregated balance sheet of deposit-taking corporations except central banks is compiled by the ECB as the difference between the MFI aggregated balance sheet excluding the Eurosystem and the MMF aggregated balance sheet. These deposit-taking corporations are almost all credit institutions – a small number of deposit-taking corporations other than credit institutions are included, but these are negligible in terms of total assets (at the end of 2014 they represented 0.4% of the MFI sector excluding the Eurosystem in terms of total assets).<sup>152</sup>

Deposit-taking corporations except central banks balance sheet data are derived quarterly and published with the regular quarterly MFI balance sheet data and the MMF balance sheet data, i.e. with a one-month lag compared with the monthly data release. For example, data on the second quarter are released with the July data in late-August.

The published aggregated balance sheet for deposit-taking corporations except central banks has the same asset/liability structure as the MFI balance sheet, with the exception of those breakdowns not directly computable as a difference due to less detailed breakdowns in the quarterly MMF balance sheet. Data on items where MMFs do little or no business, e.g. loans granted to or deposits taken from non-MFI sectors, coincide with the corresponding items of the aggregated MFI balance sheet excluding the Eurosystem. Data are published as amounts outstanding, transactions and growth rates.

## 7.7 Estimated loans to non-financial corporations by economic activity

NCBs transmit quarterly data on outstanding amounts of MFI loans to non-financial corporations by economic activity (NACE classifications) on a best-efforts basis, as explained in Section 4.3.8. Based on the data provided by NCBs, the ECB compiles euro area aggregates, as follows:

- missing breakdowns for individual NACE classifications at country-level are estimated using available data;
- for each NACE classification, the amounts are scaled up (or down) to ensure that the total for the country is consistent with the total loans to non-financial corporations as reported under Regulation ECB/2021/2.

The ECB publishes quarterly estimates of the outstanding amounts of loans to non-financial corporations by economic activity for the euro area as a whole. These data are available as of the first quarter of 2003. Breakdowns are available for ten

---

<sup>152</sup> Figures from the “[Survey of national practices regarding MFI balance sheet statistics](#)”, ECB, November 2015.

categories consisting of individual or grouped NACE classifications, as shown in Table 13.

**Table 13**

Breakdowns of loans to non-financial corporations by economic activity published by the ECB

Sections	Description
<b>A</b>	Agriculture, forestry and fishing
<b>B</b>	Mining and quarrying
<b>C</b>	Manufacturing
<b>D + E</b>	D. Electricity, gas, steam and air conditioning supply + E. Water supply, sewerage, waste management and remediation activities
<b>F</b>	Construction
<b>G</b>	Wholesale and retail trade; repair of motor vehicles and motorcycles
<b>H + J</b>	H. Transport and storage + J. Information and communication
<b>L + M + N</b>	L. Real estate activities + M. Professional, scientific and technical activities + N. Administrative and support service activities
<b>I</b>	Accommodation and food service activities
<b>Z</b>	All remaining activities (P. Education; Q. Human health and social work activities; R. Arts, entertainment and recreation; S. Other service activities; T. Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use; U. Activities of extraterritorial organisations and bodies)

Notes: These statistics do not cover NACE Rev. 2 classification K (Financial and insurance activities) and classification O (Public administration and defence; Compulsory social security). For both classifications, it is assumed that the corresponding institutional sectors are predominantly part of the financial corporations sector and the general government sector, rather than the non-financial corporations sector.

## 7.8 MFI balance sheet statistics for non-euro area countries

The ECB's legal framework does not impose any obligations for the reporting of MFI balance sheet statistics on non-euro area EU Member States. However, as indicated in recital 20 of Guideline ECB/2021/11, Article 5 of the [Statute of the ESCB](#), together with Article 4(3) of the [Treaty on European Union](#) – both of which apply to euro area and non-euro area countries – establish an obligation for non-euro area EU Member States to design and implement at national level all the measures that they consider appropriate to collect the statistical information needed to fulfil the ECB's statistical reporting requirements and to ensure timely statistical preparations for their adoption of the euro.

Non-euro area NCBs compile and report MFI balance sheet statistics to the ECB according to a reporting scheme that is adapted from the euro area requirements. The main differences relate to the geographical and currency breakdowns of the various items. The geographical breakdowns include a split between domestic counterparties and counterparties resident in the euro area (with the same level of detail as for domestic positions) and those in the rest of the world. The currency breakdowns include positions in the domestic currency, as well as in euro and currencies other than euro. These positions are identified separately for all relevant items on the balance sheet.

Data on outstanding amounts, revaluation and reclassification adjustments are reported to the ECB in the national currency of each individual country and then converted by the ECB into euro using the exchange rates prevailing on the date to which the data relate (see also Section 3.3). As in euro area countries, financial transactions are then calculated by adjusting the difference between end-of-month outstanding amounts for the effect of “non-transaction-related” factors, which include revaluation, reclassification and exchange rate adjustments (see Chapter 5 and Section 7.2). The ECB derives financial transactions directly using the series converted into euro. In particular, exchange rate adjustments are derived separately for balances denominated in national currencies and in currencies other than euro using the methodology discussed in Section 7.2.2.<sup>153</sup> Growth rates are then computed using the method set out in Section 7.3.

The ECB publishes the monthly aggregated MFI balance sheet of each non-euro area EU Member State on its website with a delay of about 40 calendar days after the reference month. The results are only published in euro.

Once the European Council has approved a Member State joining the euro area, work begins to ensure timely transmission of high-quality MFI balance sheet data for inclusion in the euro area aggregates. The NCB of a country which is adopting the euro is required to provide historical data for a period of at least three years before adoption as if they had already been part of the euro area during that period (Article 31 of Guideline ECB/2021/11). These data are particularly relevant at the time of joining the euro area, given that they allow longer enlarged euro area series to be calculated for monetary analysis and forecasting. The ECB publishes the historical data following the enlargement; this replaces the data that had been previously reported by the NCB using the reporting scheme for non-euro area countries.

As indicated in Sections 5.7.3 and 7.3.1, certain additional information is needed from the new euro area country and from all existing euro area countries at the time of the euro area enlargement in order to derive transactions and growth rates for the euro area for the first month after the enlargement and thereby prevent the step change in balance sheet levels from distorting growth rates.

---

<sup>153</sup> For positions in national currency, the ECB derives exchange rate adjustments using a simplified version of equation [7.2.2], with  $E_{t,FC} = -(e_{t-1,FC} - e_{t,FC}) \cdot L_{t-1,FC} / e_{t-1,FC}$ . This is equivalent to ignoring exchange rate revaluations that affect those amounts that are outstanding at  $t$  but were not outstanding at  $t-1$  (i.e.  $L_{t,FC} - L_{t-1,FC}$ ).



## 8 Linkages between MFI balance sheet statistics and other domains

### 8.1 MFI balance sheet statistics for the purposes of minimum reserves

#### 8.1.1 The Eurosystem's minimum reserve requirements

Under Article 19(1) of the Statute of the ESCB, the ECB may require credit institutions established in participating Member States to hold minimum reserves on accounts with the Eurosystem for monetary policy purposes. Union legislation (Council Regulation (EC) No 2531/98<sup>154</sup>) establishes the framework for the Eurosystem's regime of minimum reserves. The details of the scheme are set out in the MRR Regulation.

The main aims of the Eurosystem's minimum reserve system are to stabilise money market interest rates and potentially create (or enlarge) a structural liquidity shortage. Holdings of required reserves are remunerated according to Article 9 of the MRR Regulation. As explained below, the reserve requirement of each institution is determined in relation to elements of its balance sheet. The system enables institutions to make use of averaging provisions to stabilise interest rates. Compliance with the reserve requirement is therefore determined on the basis of an institution's average daily reserve holdings over the maintenance period of approximately six weeks.<sup>155</sup>

The following sections aim to illustrate the linkages between the MRR Regulation and the reporting requirements of Regulation ECB/2021/2 and should not be interpreted as providing guidance on the minimum reserve system.

#### 8.1.2 The maintenance period

Each maintenance period begins on the settlement day (usually a Wednesday) of the first main refinancing operation following the meeting of the Governing Council at which assessment of the monetary policy stance is pre-scheduled. The ECB publishes a calendar<sup>156</sup> of reserve maintenance periods at least three months before the start of each year.

---

<sup>154</sup> Council Regulation (EC) No 2531/98 of 23 November 1998 concerning the application of minimum reserves by the European Central Bank (OJ L 318, 27.11.1998, p. 1).

<sup>155</sup> Reserve maintenance periods were extended from four to six weeks in 2015 following the [Governing Council decision](#) of July 2014 to change its monetary policy meetings from a four-weekly to a six-weekly cycle.

<sup>156</sup> See the [indicative calendar of reserve maintenance periods](#).

### 8.1.3 Coverage

The obligation to hold minimum reserves applies to credit institutions resident in the euro area, including branches of institutions that have their head offices outside the euro area. Non-euro area branches of credit institutions resident in the euro area are not covered by the requirement.

The requirement does not apply to institutions whose authorisation has been withdrawn or renounced, or which become subject to winding-up procedures, from the start of the relevant maintenance period. The ECB may also exempt institutions subject to reorganisation measures, institutions subject to the freezing of funds or to a decision of the ECB's Governing Council suspending or excluding their access to open market operations or the Eurosystem's standing facilities, institutions prohibited from exercising active banking functions in competition with other credit institutions, and institutions authorised to pursue special-purpose functions only or obliged to earmark deposits for regional and/or international development assistance.

The ECB publishes a list of credit institutions subject to the Eurosystem's minimum reserve requirements, and of those that are exempt, on its [website](#) each month.

### 8.1.4 The reserve base

An institution's reserve base is defined in relation to elements of its balance sheet, and each credit institution subject to minimum reserve requirements uses the statistical information on its reserve base collected under Regulation ECB/2021/2 (Article 12).

The reserve base, as defined in Article 5 of the MRR Regulation, comprises the liability categories "deposits" and "debt securities issued", denominated in both euro and foreign currency, including such liabilities to a branch or head office outside the euro area. Liabilities owed to the ECB or an NCB in the Eurosystem, or to any institution which is itself obliged to hold minimum reserves under the Eurosystem's regime (including the EIB<sup>157</sup>), are excluded from the reserve base. To exclude such liabilities from the reserve base, the issuing credit institution must show the actual amount of these instruments held by other institutions subject to the Eurosystem's minimum reserve requirements. This may be difficult for debt securities issued (with an original maturity of up to two years), given that these instruments can also be traded on the secondary market. In the absence of firm information, issuers may apply to this balance sheet item a "standardised deduction coefficient" established by the ECB's Governing Council.

The standardised deduction coefficient was set at 10% in 1999 and increased to 30% one year later. It was subsequently reviewed annually and kept unchanged. In 2010 it was decided to freeze the standardised deduction coefficient at 30%. A review would only be submitted to the Governing Council if new statistical evidence

---

<sup>157</sup> Although the EIB is treated for all statistical purposes as resident outside the euro area, it is subject to minimum reserve requirements – see also Section 3.5.1.

suggested that the ratio between the holdings of euro area credit institutions and of the Eurosystem in debt securities with original maturity of up to and including two years and the total amount of those instruments issued by euro area credit institutions (the “macro ratio”) deviates significantly from the current standardised deduction.

Following a review of the standardised deduction coefficient in 2016, the Governing Council decided on 21 July 2016 to lower it from 30% to 15% with effect from the maintenance period starting on 14 December 2016.

The components of the reserve base and the calculation of minimum reserves, as outlined in Articles 5 and 6 of the MRR Regulation, are summarised below.

**Table 14**  
Reserve base and reserve ratios

<b>A. Liabilities included in the reserve base and to which a positive reserve ratio is applied</b>
<b>Deposits</b>
• Overnight deposits
• Deposits with an agreed maturity of up to and including two years
• Deposits redeemable at notice of up to and including two years
<b>Debt securities issued</b>
• Debt securities with an original maturity of up to and including two years
<b>B. Liabilities included in the reserve base and to which a zero reserve ratio is applied</b>
<b>Deposits</b>
• Deposits with an agreed maturity of over two years
• Deposits redeemable at notice of over two years
• Repos
<b>Debt securities issued</b>
• Debt securities with an original maturity of over two years
<b>C. Liabilities excluded from the reserve base</b>
• Liabilities owed to other institutions subject to the Eurosystem’s minimum reserve requirements
• Liabilities owed to the Eurosystem

The amount of minimum reserves to be held by each institution in respect of a particular maintenance period is calculated by applying the reserve ratios to each relevant item of the reserve base for that period, then deducting €100,000 (the lump-sum allowance) from the calculated reserve requirement.

The reserve ratios are specified in the MRR Regulation and then determined by the ECB, subject to a maximum limit specified in Regulation (EC) No 2531/98. The ECB may change the reserve ratios at any time. Changes are announced in advance of the first maintenance period in which the change is effective.

### 8.1.5 Calculation and notification of minimum reserves

For institutions subject to full reporting requirements under Regulation ECB/2021/2, the reserve base is calculated using the credit institution's end-of-month balance sheet of two months prior to the month within which the maintenance period starts (e.g. the requirement for the maintenance period starting on 21 December 2022 is calculated using the balance sheet for the end of October 2022). However, if the credit institution is a "tail institution" – i.e. it has been granted a derogation from the statistical reporting requirements as a small MFI or non-MFI credit institution in accordance with Regulation ECB/2021/2 – then the reserve base is calculated using end-of-quarter balance sheet data instead.<sup>158</sup> The end-of-quarter balance sheet data is used for two consecutive maintenance periods, beginning with the maintenance period starting in the third month after the end of a quarter (e.g. the requirement for the maintenance period starting on 21 December 2022 and ending on 8 February 2023 is calculated using the balance sheet for the end of September 2022). A calendar indicating the maintenance periods and respective balance sheet reference periods for the forthcoming year is published by the ECB and the NCBs at least three months before the start of the year.

The NCB decides whether the credit institutions or the NCB itself is to make the calculation of the minimum reserve requirements. Either way, the other party must be notified of the amount at least three working days before the start of the maintenance period. Any objections must be lodged at the latest on the working day preceding the start of the maintenance period. The amount cannot subsequently be revised, except where a credit institution becomes exempted from its obligation to hold minimum reserves, in accordance with Article 4 of the MRR Regulation. Final figures on the reserve base are then reported to the ECB both for the compilation of the euro area reserve requirement and for statistical purposes. Aggregated data are published on the ECB's website and through the ECB's Market Information Dissemination (MID) system.<sup>159</sup>

### 8.1.6 Holding of reserves and aggregated reporting of reserve bases

Each institution must hold its minimum reserves in a reserve account (or accounts) with the NCB of the Member State in which it is established. An institution with establishments in more than one Member State is required to hold minimum reserves with the NCB of each Member State in which it has an establishment based on its reserve base in that Member State. If an institution has no head office in a Member State in which it conducts business as a credit institution, it must designate a principal branch to be responsible for fulfilling the aggregate minimum reserve requirements of all the institution's establishments in that Member State.

---

<sup>158</sup> As a minimum, NCBs may require tail institutions to report the information on the reserve base outlined in Table 1 in Part 1 of Annex III to Regulation ECB/2021/2.

<sup>159</sup> MID is a system that through which the ECB publishes information and data that is structured and suitable for automatic processing by public users.

An institution's daily reserve holding is calculated as the end-of-day balance on its reserve account, excluding funds subject to any legal, contractual, regulatory or other restriction that would prevent the institution from liquidating, transferring, assigning or disposing of such funds during the relevant maintenance period (Article 3(1)(d) of the MRR Regulation). In order to be compliant, the institution must hold at least the required amount on average over the maintenance period. A shortfall in holdings may give rise to sanctions under the MRR Regulation (as distinct from sanctions for breaches of Regulation ECB/2021/2, see Chapter 10).

Under the MRR Regulation, institutions may apply to the NCB in the Member State in which they are resident for permission to hold all their minimum reserves indirectly through an intermediary. This option is restricted to the following cases:

- (i) The institutions are structured in such a way that part of the administration (e.g. treasury management) is normally carried out by the intermediary. The intermediary must be resident in the same Member State and itself be subject to minimum reserve requirements. Networks of savings banks and cooperative banks may centralise their reserve holdings in this way, for example.
- (ii) The institutions are part of a banking group, consisting of a parent company and its subsidiaries, which are reporting statistical data on a consolidated basis in accordance with Article 6(1) of Regulation ECB/2021/2. Where this is the case, the parent company may act as the intermediary for the subsidiaries. In order to qualify for the reporting of statistical data on a consolidated basis, the parent and subsidiaries must all be MFIs resident in the same Member State.

With respect to case (ii) above, when the application is made to the NCB to hold reserves through the parent company acting as intermediary, the parent company may also apply for permission to report the reserve base and the reserve base of the institutions in that group on an aggregated basis. Where this is permitted, the reserve base does not have to be reported in accordance with Regulation ECB/2021/2 for each individual member of the group, and only one lump-sum allowance is granted to the group. For the institutions referred to in case (i) above, the intermediary may not apply for permission to report the reserve base on an aggregated basis under the current MRR Regulation, however permissions granted under the previous Regulation remain in effect.

### 8.1.7 Mergers between institutions subject to minimum reserves

Where a merger takes place between institutions subject to minimum reserves, Article 12 of the MRR Regulation sets out the provisions relating to the fulfilment of reserve requirements for the period in which the merger took place, and to the application of lump-sum allowances. Broadly speaking, merging institutions may each benefit from the lump-sum allowance in the maintenance period in which the merger takes place, but the merged institution is only granted one allowance in subsequent periods. (Where there is a division of a credit institution, each of its

components benefits from a lump-sum allowance in the maintenance period in which the division takes place.)

A link must be established between the calculation of minimum reserve requirements for the acquiring institution after the merger and the reporting of reserve bases for the relevant reference periods under Regulation ECB/2021/2. Part 2 of Annex III to the Regulation therefore sets out special rules for the calculation of reserve bases after a merger that ensure that the necessary statistical information on reserve bases is available. In particular, these rules take into account whether or not the acquiring institution and/or acquired institution(s) are tail institutions, given that this determines the relevant reference period on which the reserve bases should be calculated (see Section 8.1.4).

### 8.1.8 Minimum reserve requirements and euro area enlargement

When a Member State enters the euro area, its resident credit institutions become subject to the Eurosystem's minimum reserve regime. They may exclude from their reserve base any liabilities which would otherwise contribute to the reserve base that are owed to other institutions subject to the regime, whether domestic or resident elsewhere in the euro area. The reserve base of credit institutions resident elsewhere in the euro area will also be reduced at the time of enlargement where any liabilities otherwise subject to the requirement are owed to credit institutions resident in the Member State adopting the euro.

For example, the maintenance period coinciding with Croatia's adoption of the euro ran from 21 December 2022 to 7 February 2023. Credit institutions' reserve bases for that period were calculated from their balance sheets for end-October 2022. Since credit institutions resident in Croatia were required to hold minimum reserves from the date of enlargement, a reserve base was calculated from their balance sheets for the end of October to determine the amount of minimum reserves to be maintained for the transitional maintenance period 1 January 2023 to 7 February 2023. Credit institutions in other euro area countries were permitted to exclude from their reserve base for the whole of the 21 December 2022 to 7 February 2023 maintenance period any liabilities to credit institutions resident in Croatia. Balance sheets for end-December 2022 were then used to calculate the reserve bases for Croatian and all other euro area credit institutions for the first full maintenance period following enlargement, running from 8 February to 21 March 2023.

In principle, a euro area enlargement could result in a change to the macro ratio which, as described in Section 8.1.4, is monitored by the Eurosystem in order to determine if the standardised deduction coefficient should be reviewed. To date, no changes to the standardised deduction coefficient have been triggered by a euro area enlargement.

## 8.2 MFI balance sheet statistics as an input to financial accounts

The integrated quarterly euro area accounts have been compiled jointly by Eurostat and the ECB since June 2007. The accounts provide an exhaustive record of economic and financial transactions for each main institutional sector in the euro area. The non-financial accounts cover production, the generation, distribution and use of income (for consumption or saving) and the acquisition of non-financial assets (covering capital formation, i.e. the acquisition of produced non-financial assets such as buildings and machinery and the acquisition of non-produced non-financial assets such as land and mineral reserves). The last balancing item or bottom line of the non-financial accounts is net lending or net borrowing. The financial accounts record transactions in financial instruments, representing the decisions of economic agents on how to invest surpluses (net lending) or finance shortfalls (net borrowing) arising from the non-financial accounts. The financial accounts also include balance sheets recording the outstanding amounts of financial assets and liabilities, as well as accounts reconciling financial transactions in the relevant period with the change in balance sheets between the beginning and end of the period in terms of “other” (i.e. non-transactional) changes arising from price and exchange rate changes, reclassifications and certain other items that are not treated as transactions but do affect balance sheets.

The legal basis for the accounts is a combination of Union and ECB legislation set out in Annex B to Regulation (EU) No 549/2013 on the European system of national and regional accounts, also referred to as the ESA 2010 transmission programme. The transmission programme requires Member States to provide Eurostat with quarterly non-financial accounts and annual financial accounts for resident institutional sectors and for the rest of the world (viewed from the national perspective). Under Guideline ECB/2013/24<sup>160</sup>, euro area countries must provide the ECB with quarterly national financial accounts and financial balance sheets for resident institutional sectors and subsectors and for the rest of the world (also viewed from the national perspective).<sup>161</sup>

MFIs are the dominant financial intermediaries in all euro area countries, and the monthly and quarterly returns provide sectoral breakdowns of their counterparties for most instrument categories. MFI balance sheet data provide much of the transaction and balance sheet information that national compilers transmit to the ECB in their financial accounts. In this respect, MFI balance sheet data collected by NCBs and reported to the ECB as described above are directly relevant to the compilation of financial accounts. At the euro area level, the MFI data transmitted by NCBs are used directly as a “building block” in the compilation of euro area financial accounts aggregates. This ensures maximum consistency with main indicators such as monetary and credit aggregates.

---

<sup>160</sup> [Guideline of the European Central Bank of 25 July 2013 on the statistical reporting requirements of the European Central Bank in the field of quarterly financial accounts \(recast\) \(ECB/2013/24\) \(OJ L 2, 7.1.2014, p.34\).](#)

<sup>161</sup> All non-participating Member States submit similar information on a voluntary basis.

The raw data collected for other areas of euro area statistics also provide sources for the financial accounts, including, in particular, balance of payments/international investment position statistics, data on investment funds and other (non-monetary) financial intermediaries, notably FVCs, ICPFs, as well as securities issues and securities holdings statistics. Non-MFI credit institutions balance sheet statistics collected by NCBs under Regulation ECB/2021/2 can also contribute to financial accounts data for other (non-monetary) financial intermediaries.

Although timely, frequent, high quality and designed for the production of euro area aggregates, MFI balance sheet data often cannot be used “as they are” for euro area institutional sector accounts. The main reason for this is that the data differ in limited but important ways from the ESA 2010 definitions and accounting principles that underlie the institutional sector accounts.

The key departures from the ESA 2010 definitions and concepts in MFI balance sheet statistics are the treatment of interest accruing on deposits and loans and the valuation of securities (both of these issues are mentioned in earlier sections of this Manual, see for instance Chapter 4), and the difficulty of linking certain MFI balance sheet statistics with the relevant ESA 2010 financial asset categories. For example, Regulation ECB/2021/2 requires accrued interest to be recorded under “remaining assets” or “remaining liabilities”, in line with the preferred treatment for monetary analysis purposes, and not in the relevant instrument category as preferred in the ESA 2010.<sup>162</sup> MFI balance sheet statistics also allow discretion in the valuation of securities so that accounting information can be used for statistical purposes, whereas the ESA 2010 requires market prices to be used for both transactions and positions.<sup>163</sup> The MFI balance sheet items “remaining assets” and “remaining liabilities” do not coincide with the ESA 2010 instrument category “other accounts receivable/payable” (in addition to accrued interest, they also include business in financial derivatives and frequently other items that the ESA 2010 would record elsewhere or not at all).

Bringing together information from different sources may require national and ECB compilers to make certain choices. For example, MFI balance sheets may show amounts for deposits from and loans to other financial subsectors that differ from supposedly mirror data on the assets and liabilities of those subsectors. Similarly, the government financial accounts data provided under Union law might not be fully consistent with the MFI data on business with government entities. National compilers will choose what they consider to be the more reliable source, making compensatory adjustments to the counterpart data as necessary, although they may be constrained in doing so, for example by a requirement to give priority to the government accounts source.

While much of the financial accounts data prepared by national compilers as described above will be based on MFI balance sheet and other data submitted to the ECB for other statistical purposes, differences may arise for the reasons explained.

---

<sup>162</sup> A similar point relates to the accrual of interest on debt securities where Regulation ECB/2021/2 gives reporting agents some discretion to follow national accounting principles.

<sup>163</sup> See Chapter 4 for further details.



The ECB is also subject to certain constraints with regard to the euro area financial accounts aggregates, such as the need for the entire non-financial and financial accounts of the financial corporation, general government and rest of the world sectors to be in balance vertically and for the various instrument categories to be in balance horizontally. All these consistency requirements may result in further deviations from the data originally transmitted by the NCBs for the purposes of MFI balance sheet statistics.

The reconciliation process for the euro area accounts is described sequentially for the sake of clarity. In practice, much of it takes place simultaneously in an iterative process.

- Any discrepancy (usually small) between general government non-financial and financial accounts is eliminated (effectively using the general government integrated accounts as published for the euro area).
- Consistency with key monetary statistics is achieved by substituting the latest euro area aggregated MFI deposits and loans data (as published by the ECB) for total MFI deposits and loans submitted by national compilers.<sup>164</sup> An equivalent adjustment is made in deposits and loans for the counterparty sectors. The difference usually evident in the overall MFI balance sheet between reported claims on and liabilities to MFIs in the euro area (“excess of inter-MFI liabilities over inter-MFI assets” in the consolidated MFI balance sheet) is resolved by taking the assets side (loans) as correct and allocating the discrepancy to the remaining sectors in the horizontal reconciliation of loans and deposits.
- The rest of the world accounts submitted by the national compilers are replaced by euro area balance of payments/international investment position data (the rest of the world column is a requirement under Guideline ECB/2013/24 for the dissemination of national financial accounts. As it contains no split for cross-border transactions between positions within and outside the euro area, it cannot be used directly to compile euro area accounts). In the process, acknowledged discrepancies in cross-border transactions and positions within the euro area result in horizontal discrepancies that need to be resolved.<sup>165</sup>
- The financial accounts are then balanced horizontally, while the financial corporation and rest of the world sectors are balanced vertically at the same time. To keep consistency between financial accounts and balance of payments, all the adjustments to reduce the vertical imbalance of rest of the world sector are performed across the two domains.

One final point relating to the use of MFI balance sheet data in the financial accounts concerns the balance sheet and transaction methods for reporting transactions.

---

<sup>164</sup> This requirement for consistency with published monetary statistics results in a degree of departure from the ESA 2010 owing to the treatment of interest accruing on deposits and loans.

<sup>165</sup> Since bilateral data on cross-border transactions within the euro area reveal large discrepancies, the sum of resident sectors’ transactions mirroring rest of the world transactions as recorded in national data cannot be correct. Some adjustments to resident sectors’ transactions in the balancing process are therefore unavoidable.

Chapter 5 explains that the two methods have different implications for the analysis of monetary aggregates and their counterparts. They also have different consequences for the financial accounts. In particular, the transaction method is more appropriate for financial accounts purposes, though not necessarily the most helpful for monetary analysis. The example below is based on Example H in Section 5.2.4 and further illustrates this point.

### Example W

#### Interpreting revaluation adjustments for the financial accounts

---

*Suppose that, within the reference period, MFIs buy corporate bonds from households for 100 and sell them back to households for 105. Under both the methods, M3 must fall by the net amount of the transactions (5), as households reduce cash or deposits by 5. The two methods produce different results with regard to the counterparts of M3, however. As the bonds do not appear on the end-of-month MFI balance sheet, under the balance sheet method no transactions are recorded and the fall in M3 is matched by an increase in capital and reserves. It follows, therefore, that if unaltered MFI balance sheet data are used as an input for the financial accounts, no transaction is recorded even though M3 has fallen by 5, presumably matched by an entry in “capital and reserves” on the liabilities side of the MFI balance sheet. What should appear as a transaction will probably be recorded under valuation or other changes. The transaction method, meanwhile, records a net sale of 5 of corporate bonds (a withdrawal of domestic credit by the MFI sector), matching the fall of 5 in M3. This is indeed correct, though it should be noted that the corporate sector will have experienced no withdrawal of credit.*

---

## 8.3 Monetary presentation of the euro area balance of payments

The monetary presentation is a tool for assessing the impact on monetary developments of external transactions involving resident non-MFIs, which are recorded in the current, capital and financial accounts of the balance of payments. It uses the fact that changes in the net external assets of the MFI sector (the external counterpart of M3, see Section 7.1) are reflected in the balance of payments, with some qualification, as the mirror image of external transactions by non-MFIs in the euro area.<sup>166</sup> Such external financial transactions have had a major impact on euro area monetary dynamics since the launch of the euro.

If we leave out certain details which matter in practice but obscure the main picture, the monetary presentation relies on two identities. The first identity is derived directly from the structure of the consolidated MFI balance sheet, as described in Section 7.1. In particular, equation [7.1.1] can be rewritten as follows:

---

<sup>166</sup> See “[Revisiting the monetary presentation of the euro area balance of payments](#)”, *Occasional Paper Series*, No 238, ECB, February 2020.

**Table 15**

<b>Net external assets (of MFIs) = M3 - credit to euro area residents + longer-term financial liabilities - other counterparts (net)</b>	Equation [8.3.1]
--	------------------

The second identity is derived from the fact that the balance of payments is based on a double-entry principle, meaning that the sum of all reported transactions is, by definition, zero. In other words, breaking down the balance of payments into its main components yields the following:

**Table 16**

<b>Current and capital account balance = External financial transactions of residents</b>	Equation [8.3.2]
<b>where</b>	
<b>External financial transactions of residents = External financial transactions of resident MFIs + external financial transactions of resident non-MFIs</b>	Equation [8.3.3]

In particular, the external financial transactions of resident units can be broken down by type of investment (direct, portfolio and “other” investment, as well as transactions in official reserve assets by the central bank) and, to some extent, by underlying financial instrument. Since changes in MFI net external assets in monetary statistics should, in principle, match the external financial transactions of MFIs as recorded in the balance of payments, substituting equations [8.3.3] and [8.3.2] for equation [8.3.1] yields the monetary presentation of the balance of payments.

**Table 17**

<b>Monetary presentation of the balance of payments</b>	
<b>Current and capital account balance - external financial transactions of resident non-MFIs</b> <b>= Δ M3 - Δ credit to euro area residents</b> <b>+ Δ longer-term financial liabilities - Δ other counterparts (net)</b> <b>(= Δ net external assets (of MFIs))</b> <b>where Δ is used in this context to denote flows in the corresponding aggregate</b> <b>This identity can also be expressed as:</b> <b>Δ M3 = Current and capital account balance - external financial transactions of resident non-MFIs</b> <b>+ Δ credit to euro area residents - Δ longer-term financial liabilities + Δ other counterparts (net)</b>	Equation [8.3.4]

As shown in the equation above, the change in the net external assets of the MFI sector is the mirror image of the financial transactions of non-MFIs with non-residents of the euro area (on a net basis) and the current and capital account balance. The foreign transactions of MFIs and the resulting change in their net external asset position can therefore be linked to the external transactions of the non-MFI sector. Accordingly, it can be said, for example, that a rise of €X billion in M3 was associated with a rise of €Y billion in domestic credit and a positive contribution of €Z billion from external transactions (i.e. an increase of €Z billion in MFI net external assets). This increase in MFI net external assets is also recorded in the balance of payments, and the counterpart transactions of this €Z billion may be in a current account surplus and/or in transactions in direct/portfolio/other investment

by non-MFI sectors, and so on. See the ECB Occasional Paper “[Revisiting the monetary presentation of the euro area balance of payments](#)” for detailed examples showing how the linkage between monetary aggregates and the balance of payments may arise.

In practice, neither the change in MFI net external assets in the monetary statistics nor their external financial transactions as recorded in the balance of payments provide a comprehensive statement of the change in MFIs’ external assets and liabilities. Some external assets and liabilities of MFIs cannot be distinguished from other MFI balance sheet categories, and not all balance of payments (B.o.p.) categories distinguish between transactions of MFIs and those of other resident sectors. While the heading in the monetary presentation is “B.o.p. items mirroring net transactions by MFIs”<sup>167</sup>, the table does not pretend that either the external counterpart of M3 or external transactions of MFIs as identified in the balance of payments are a complete representation of transactions in the assets and liabilities of MFIs with non-residents. The figures are approximate and some qualifications should therefore be made.

Foreign holdings of long-term bonds (i.e. with an original maturity of over two years) and equity issued by euro area MFIs are not recorded as external liabilities in MFI balance sheet statistics. This is because financial intermediation chains often do not allow the MFIs issuing securities to identify who their final holders are. By contrast, estimates of foreign holdings of long-term bonds and equity issued by euro area MFIs are available in the balance of payments (those for portfolio investment are based on the information on holdings of securities reported by other resident sectors); B.o.p. compilers collect information for all euro area resident sectors and are therefore able to deduct the total holdings of euro area residents from the total securities issued by euro area MFIs.

1. Foreign holdings of money market fund shares and debt securities with an original maturity of less than two years are collected on the basis of information provided by MFIs, in most cases relating to the first known purchaser. By contrast, the balance of payments identifies the securities held by non-residents following the above-mentioned residual approach. These two approaches may arrive at different results.
2. Another point applies to MFIs’ assets and liabilities arising from financial derivatives contracts with non-residents, which are recorded under remaining assets/liabilities in MFI balance sheet statistics. These transactions are currently derived from outstanding amounts without accurate information on revaluation flows and have therefore not been included under net external assets. The balance of payments, meanwhile, shows the net figure for MFIs and all other resident sectors.
3. Valuation and other accounting practices give rise to discrepancies between transactions in the external counterpart of M3 and transactions in MFIs’ external assets and liabilities as recorded in the euro area balance of payments. In

---

<sup>167</sup> See the [ECB Data Portal](#), under publications, for balance of payments and other external statistics.

certain cases, the balance of payments financial account is based on direct recording of transactions, while for MFI balance sheet purposes the recording practices vary between countries, as discussed earlier. The discrepancy between the external counterpart of M3 and the related entries in the balance of payments arising from differences in valuation is likely to have diminished with the growing use of security-by-security reporting supported by a single comprehensive securities database, but it is unlikely to ever be eliminated completely.

4. Although a somewhat different point, the treatment of errors and omissions in the balance of payments should also be mentioned. The monetary presentation attributes errors and omissions to the external transactions of non-MFIs. This is not because the recorded external transactions of MFIs are deemed to be correct, meaning that all errors and omissions in the balance of payments are attributed to non-MFI transactions. Instead, it is because the monetary presentation seeks to identify balance of payments items corresponding to the external counterpart of M3 and therefore allocates errors and omissions to the other sectors.

These qualifications are explained in more detail in the ECB Occasional Paper referred to above. However, they do not seriously diminish the value of linking monetary and balance of payments developments in this way.

## 8.4 MFI balance sheet statistics and security-by-security reporting

Security-by-security reporting is referred to in several ECB regulations aimed at reporting agents, including Regulation ECB/2012/24<sup>168</sup>, Regulation ECB/2013/38 and Regulation ECB/2013/40. It is also referred to in ECB guidelines aimed at NCBs, such as Guideline ECB/2011/23 on the statistical reporting requirements of the ECB in the field of external statistics for balance of payments and international investment position statistics.<sup>169</sup> For the purposes of MFI balance sheet statistics, Article 5(3) of Regulation ECB/2021/2 allows for reporting on a security-by-security basis, provided that the minimum statistical standards specified in Annex IV of the Regulation are met.

In line with the requirements of both Regulation ECB/2021/2 and Regulation ECB/2012/24, NCBs may combine the reporting requirements to reduce the reporting burden on credit institutions. Similarly, Article 9(6)(c) further provides that derogations may be granted in respect of the reporting of price revaluations of securities, including the granting of a full exemption from any such reporting, to MFIs and non-MFI credit institutions that report monthly outstanding amounts of securities

---

<sup>168</sup> Regulation (EU) No 1011/2012 of the European Central Bank of 17 October 2012 concerning statistics on holdings of securities (ECB/2012/24) (OJ L 305, 1.11.2012, p.6).

<sup>169</sup> Guideline of the European Central Bank of 9 December 2011 on the statistical reporting requirements of the European Central Bank in the field of external statistics (recast) (ECB/2011/23) (OJ L 65, 3.3.2012, p. 1)

on a security-by-security basis. MMFs may also be allowed to report in line with Regulation ECB/2013/38 as a means of reducing their reporting burden.

On the liabilities side, MFIs may report the unique security identifier (usually the ISIN code) under security-by-security reporting together with certain additional reference data, such as amount outstanding, type of instrument or coupon-related information. On the assets side, the sole information required under security-by-security reporting is the unique security identifier and the amount held. The NCB typically runs this information against a detailed and comprehensive securities database containing reference information on the features of the security relevant to MFI balance sheet (and all other) reporting requirements. With security-by-security reporting and applying this process, NCB compilers can ensure that instrument, residence and sector classifications on the issuance side are available. To ensure harmonisation of the reference information, the securities database used for this purpose (potentially in conjunction with national systems) is the Centralised Securities Database (CSDB) developed by the ESCB and managed and maintained by the ECB. The CSDB is a multi-source system that contains security-by-security reference information and prices on debt securities, equity securities and investment fund shares/units, as well as all ratings provided by the ECB-recognised rating agencies. It covers all securities relevant for ESCB statistics, including securities issued by EU residents, securities that may be held by EU residents and securities denominated in euro (worldwide). Although the CSDB is updated continuously, the need to check and validate the information means that the version accessible to statistical compilers is updated on a monthly basis.

Securities holdings statistics (SHS)<sup>170</sup> are collected on the basis of Regulation ECB/2012/24 and Guideline ECB/2013/7<sup>171</sup>. The data collection comprises quarterly security-by-security data on holdings of debt securities, equity securities and investment fund shares/units, broken down by the residency and ESA 2010 sector of the holder, and (where applicable) the holdings of banking groups. The security-by-security data are then combined with CSDB data on the security issuers (e.g. residency and ESA 2010 sector) and reference information on the security (e.g. type of instrument and quantitative information, such as total outstanding amounts, coupons or dividends). Data are stored in the Securities Holdings Statistics Database (SHSDB), which comprises the two modules: SHS by Sector (SHSS) and SHS by Group (SHSG).

- SHSS data, collected since the fourth quarter of 2013, covers information on holdings of securities by euro area investors and holdings of euro area securities by non-euro area investors. Data are collected directly from MFIs, investment funds, FVCs and insurance corporations in accordance with the statistical host approach, while holdings by other investors are reported by custodians.

---

<sup>170</sup> For a more detailed description of SHS, see the article entitled “[Who holds what? New information on securities holdings](#)”, *Economic Bulletin*, Issue 2, ECB, 2015.

<sup>171</sup> Guideline of the European Central Bank of 22 March 2013 concerning statistics on holdings of securities (ECB/2013/7) (OJ L 125, 7.5.2013, p. 17).

- SHSG data, collected since the fourth quarter of 2013, initially covered information on holdings of securities by the 26 largest banking groups in the euro area. As of the third quarter of 2018 the coverage was extended to information on holdings of securities by banking groups in the euro area that are relevant to the stability and functioning of the financial system, in particular those under the direct supervision of the ECB. Data are collected in accordance with the home approach and reported by the group head, individually identifying all its entities (holder-by-holder information).

A summary of the main differences between SHS in their current form and MFI balance sheet statistics can be found below:

- **Valuation:** For SHS purposes, nominal and/or market values are collected and the CSDB information on prices is used to calculate those valuations that are not reported directly. For SHSG only, the accounting values are collected, together with the accounting standard of the reporting entity. The preference for MFI balance sheet statistics is to use current market values, or a close equivalent. It is possible, however, for MFIs to report using accounting values, and these may differ from market values.
- **Reporting population:** SHSS reporting data are collected from MFIs, investment funds, FVCs, insurance corporations and custodians. For SHSG reporting, only the head offices of banking groups are obliged to report. By contrast, the reporting population for MFI balance sheet statistics consists of all MFIs, as outlined in Section 2.1.
- **Scope:** SHS data cover holdings of debt securities, listed shares and investment fund shares/units, with and without ISIN codes. Reporting of holdings of securities without ISIN codes is mandatory for SHSG, while for SHSS they are only collected by certain NCBs on a voluntary basis. A number of accounting and risk-related attributes are reported for SHSG. MFI balance sheet statistics cover all holdings of securities, with and without ISIN codes, and also include unlisted and other equity that are outside the scope of SHS.
- **Own holdings of securities:** Securities held by the issuer itself are reported on a gross basis in SHS. This is contrary to the practice for MFI balance sheet statistics, which instead requires issuers' holdings of their own securities to be reported on a net basis (see Section 4.5.1.8).
- **Timeliness:** Although SHS are compiled quarterly, some NCBs collect monthly SHSS data in order to derive flows on the basis of monthly positions. NCBs report quarterly MFI balance sheet statistics to the ECB 28 working days after the end of the reference period, while SHSS data are submitted to the ECB 70 days after the end of the reference period and SHSG data 55 days after the end of the reference period. If NCBs do not collect MFI balance sheet data from reporting agents on a security-by-security basis, the separate SHS data collection can be used for cross-checking with aggregates.

- **Home/host approach to reporting:** MFI balance sheet statistics are collected on a solo reporting basis at MFI level. The residency of each MFI (as opposed to the residency of the group lead) is the criterion for determining the NCB to which data will be reported (host approach). The same approach is followed for SHSS reporting by MFIs, IFs, FVCs, insurance corporations and custodians of their holdings, and in custodians' reporting of their clients' holdings. Conversely, SHSG follows the home approach, with all data reported by the head office to the relevant NCB at legal entity level for each of the subsidiaries and branches worldwide.
- **Reporting:** For both SHSS reporting and MFI balance sheet statistics, data are reported to the relevant NCB. For SHSG reporting, certain banking groups report data directly to the ECB rather than to the relevant NCB.

## 8.5 Other projects relating to the reporting of MFIs

A significant project is that of the **AnaCredit datasets**. AnaCredit comprises loan-by-loan data on credit granted by financial institutions in euro area countries. Data collection commenced in September 2018 in accordance with the AnaCredit Regulation, which focuses on the collection of granular credit data on credits granted by credit institutions to legal entities on a solo basis. There are some overlaps in the data collected, making it possible to conduct certain bank-level plausibility checks between loan aggregates reported pursuant to Regulation ECB/2021/2 and the loan-level data reported pursuant to the AnaCredit Regulation.<sup>172</sup> There are also relevant differences between AnaCredit and MFI balance sheet statistics collections, for example:

- **Reporting population:** The MFI balance sheet statistics reporting population consists of all MFIs (central banks, deposit-taking corporations except central banks and MMFs) resident in the euro area. Data are also collected under Regulation ECB/2021/2 from non-MFI credit institutions. The AnaCredit reporting population only covers credit institutions, i.e. including those that are MFIs and non-MFI credit institutions. MFIs other than credit institutions are not covered by AnaCredit.
- **Scope:** AnaCredit focuses on credit granted to legal entities. As a result, it includes no data on the household sector.
- **Threshold:** Instruments are reported to AnaCredit if the debtor's commitment amount is equal to or exceeds a threshold of €25,000.
- **Timeliness:** Monthly MFI balance sheet data are reported to the ECB 15 working days after the end of the reference period, whereas monthly AnaCredit data are available 30 working days after the end of the reference period. With regard to quarterly data, MFI balance sheet statistics are reported

<sup>172</sup> For more information, see the document "AnaCredit plausibility checks" in the [Statistics section](#) of the ECB's website.



to the ECB 28 working days after the end of the reference period, while quarterly AnaCredit data (the accounting dataset) are submitted 15 days after the submission dates for supervisory data laid down in the Implementing Technical Standards<sup>173</sup> (12 May, 11 August, 11 November and 11 February).

- **Home/host approach to reporting:** MFI balance sheet statistics typically involve solo reporting at MFI level. The residency of each MFI (as opposed to the residency of the group lead) is the criterion for determining the NCB to which data will be reported. This is known as the host approach. AnaCredit follows both a home and host approach with credit institutions (head office) in reporting Member States reporting to their home NCB their own exposures and the exposures of observed agents, i.e. any foreign branches whether or not they are resident in reporting Member States.<sup>174</sup> This is known as the home approach. AnaCredit also requires data relating to foreign branches resident in reporting Member States to be reported by the foreign branch to its NCB, although NCBs may bilaterally agree how data are to be received.<sup>175</sup> This is the host approach. Even though AnaCredit follows a mixed home/host approach, reconciliation between AnaCredit and MFI balance sheet statistics, which follow the host approach, is still possible, in terms of coverage of resident credit institutions, provided the NCB opts to collect the required data.

A further significant initiative underway is the ESCB's long-term approach to collecting data from banks that aims to standardise and integrate existing ESCB statistical frameworks as far as possible across domains and countries. The main objective of this approach is to increase the efficiency of reporting and reduce the burden for banks, while continuing to provide users with high-quality data.

One element of this strategic approach is the ESCB's **Integrated Reporting Framework** (IReF),<sup>176</sup> which aims to integrate banks' statistical reporting requirements, with a focus on MFI balance sheet statistics, MFI interest rate statistics, securities holdings statistics and AnaCredit. In particular, the IReF will consist of an integrated set of reports for banks that would be directly applicable to reporting agents. The IReF will thus substitute the national reporting frameworks that implement the existing ECB statistical regulations (as far as possible). The IReF will also include a unique set of transformation rules for compiling the derived statistics required by authorities, possibly to be shared with the stakeholders involved. A cost-benefit analysis is currently ongoing to assess the suitability of the IReF to achieve its objectives and the specific elements of the reporting. After the successful conduct of two cost-benefit assessment questionnaires, the ESCB, in close cooperation with the banking industry, is currently matching the costs and benefits of the specific IReF

---

<sup>173</sup> [Commission Implementing Regulation \(EU\) 2021/451 of 17 December 2020 laying down implementing technical standards for the application of Regulation \(EU\) No 575/2013 of the European Parliament and of the Council with regard to supervisory reporting of institutions and repealing Implementing Regulation \(EU\) No 680/2014](#) (OJ L 97, 19.3.2021, p. 1).

<sup>174</sup> Under Article 6(4) of the AnaCredit Regulation, this requirement is left to the discretion of the home NCB.

<sup>175</sup> Under Article 6(3) of the AnaCredit Regulation, this requirement is left to the discretion of the host NCB. In addition, all data reported must follow the accounting principles of the legal entity that the foreign branch is part of.

<sup>176</sup> For more information on the IReF, see the [Statistics section](#) of the ECB's website.

elements proposed based on feedback received. This will be used as a basis for drafting an ECB Regulation on the IReF, which will be subject to a public consultation before it is adopted.

Another element of the ESCB's strategic approach to collecting data from banks is the **Banks' Integrated Reporting Dictionary (BIRD)**.<sup>177</sup> The ESCB and the banking industry have been working together to produce the dictionary, which provides banks with up-to-date reference material to help them produce statistical and supervisory reports. The BIRD provides banks with a precise description of the data that should be extracted from their internal systems to generate reports and clearly defined rules for transforming these data to ensure compliance with reporting requirements (supervisory and statistical). Adoption by banks of the initiative, which was launched in 2015, is voluntary, with documentation being freely available to interested parties. In the longer term, if the IReF is implemented, then the BIRD would be associated with integrated data collection rather than with several distinct sets of reporting requirements. BIRD is closely linked to the Single Data Dictionary (SDD), an ECB internal data dictionary which describes the different datasets used at the ECB.

## 8.6 Main differences between MFI balance sheet statistics and other frameworks

### 8.6.1 Supervisory data

The ECB and the European Banking Authority (EBA) have jointly published an in-depth methodological manual that provides a bridge between the statistical and supervisory reporting frameworks, the ultimate aim being to reduce the reporting burden.<sup>178</sup> The manual, authored by the Joint Expert Group on Reconciliation of credit institutions' statistical and supervisory reporting requirements (JEGR), identifies linkages and differences between supervisory reporting (mainly the FINREP supervisory framework) and the ECB statistical requirements applicable to MFIs: MFI balance sheet statistics (BSI), MFI interest rate statistics (MIR) and securities holdings statistics (SHS).

The key differences between MFI balance sheet data and supervisory data relate to the reporting population, geographical coverage and degree of consolidation of the reported data, categorisation of counterparties, valuation methods and treatment of certain financial instruments. It should also be noted that the different objectives of the respective frameworks give rise to differences in some of the definitions underpinning reporting requirements. Supervisory data aim to provide a comprehensive view of the risk profile of institutions' activities, while the focus of MFI balance sheet statistics is to support monetary policy decision-making. MFI balance

---

<sup>177</sup> For more information, see the [BIRD website](#).

<sup>178</sup> The third version of "[Bridging the reporting requirements – methodological manual](#)" was published in May 2014.

sheet statistics therefore place greater emphasis on the availability of time series and the ability to derive transactions that are important for economic analysis.

The **reporting population** in MFI balance sheet statistics consists of those institutions that meet the MFI definition, as presented in Chapter 2. The MFI sector includes the ECB, NCBs, deposit-taking corporations except central banks (i.e. credit institutions and other deposit-taking institutions) and MMFs. Non-MFI credit institutions are also subject to reporting requirements under Regulation ECB/2021/2. Of these, only credit institutions are covered by supervisory data, unless they are excluded from the scope of supervision pursuant to Article 2(5) of the CRD IV).

A second important difference is the **degree of consolidation**. Supervisory reporting requirements are applied on a cross-sector and cross-border consolidated basis, using the prudential consolidation approach prescribed in the CRR. Supervisory reporting is also required at solo level unless the competent authorities waive the application of CRR requirements at solo level.

Balance sheet data of individual credit institutions are most comparable to supervisory data based on solo accounts of resident institutions, although foreign branches are excluded from the parent institution's reporting requirements for statistical purposes. In other words, MFI balance sheet statistics are defined on the basis of the "host" **residency principle** for each individual institution, whereas supervisory reporting under Regulation (EU) 2021/451 (which includes common reporting (COREP) and FINREP) follows the "home" residency approach (branches of a supervised entity established in a different country will be part of the solo supervisory reporting). These branches, if reported, would, however, be part of their host country's reporting population for MFI balance sheet statistics.

These different approaches mean there is little comparability between the two reporting frameworks for credit institutions that have complex domestic structures and many foreign subsidiaries or branches. In certain countries, supervisory reporting requirements are met through the use of an integrated framework that also incorporates statistical data. For solo accounts, the statistical and supervisory reporting frameworks broadly relate to the same reporting population and geographical coverage, the only difference being the treatment of foreign branches, as explained above.

With regard to the **categorisation of counterparties** in MFI balance sheet statistics, these are broken down by standard sectors that represent groups of entities with similar economic behaviours, in line with European statistical standards. The rationale lies in the requirements for monetary analysis and consequently the need for sector classifications to match those used in other economic and financial statistics. The FINREP framework also provides a harmonised counterparty breakdown to map economic sector allocations in FINREP to exposures classes in the COREP framework, those sectors being central banks, general governments, credit institutions, other financial corporations, non-financial corporations and households.

The following table illustrates a number of additional differences concerning valuation methods, classification of financial institutions and the treatment of specific instruments.

**Table 18**  
Differences between statistical and supervisory statistics

Object	Statistical treatment	Supervisory treatment
<b>Valuation of loans</b>	Valued at nominal amount (the amount that the debtor is obliged to repay to the creditor)	Valued mostly at amortised cost (net of valuation adjustments/provisions)
	Valuation adjustments recorded under "capital and reserves", independently of the underlying instrument	Valuation adjustments recorded within the underlying instrument (although separately available)
<b>Valuation of securities</b>	Recorded at market value (where possible) and at the original maturity	Recorded at book value (depending on the portfolio in which the security is held, it may be at amortised cost, market or fair value) and at residual maturity
<b>Financial vehicle corporations</b>	FVCs in BSI terms are resident in an EU country. They do not need to engage exclusively in securitisation transactions to meet the definition	SSPEs in FINREP may be resident in any country. Their activities are limited to the accomplishment of securitisation objectives
<b>Suspense and transit items</b>	Gross amounts receivable in terms of suspense and transit items recorded as a separate item (sub-item of remaining assets/liabilities)	Gross amounts receivable and transit and suspense items are recorded with the underlying instrument
<b>Interest accrued but not yet paid on deposits, loans and securities</b>	Recorded separately from the instrument it refers to (sub-item of remaining assets/liabilities)	Recorded with the underlying instrument
<b>Bad loans</b>	Not recorded separately from loans. Based on the definition of default in the CRD IV	Recorded separately from loans. Based on the definition of default in IAS 39/IFRS 9

## 8.6.2 Consolidated banking data

Consolidated Banking Data (CBD) statistics contain information on the aggregate consolidated position of EU banks and refer to all EU Member States. The dataset is disseminated by the ECB and published alongside its other supervisory and prudential statistics. While some concepts are aligned with the MFI balance sheet statistics, there are substantial differences in areas such as the objectives, reporting population, consolidation, accounting and valuation principles, and scope of the data collections.

In terms of **objectives**, MFI balance sheet statistics provide information on macroeconomic and financial developments with the primary purposes of supporting monetary policy decision-making, although the data can also be used for other analytical purposes. By contrast, CBD statistics support financial stability analysis, macroprudential policy and structural analysis.

The **scope** of MFI balance sheet statistics is to provide a detailed picture of an MFI's balance sheet, broken down by instrument. CBD statistics require detailed reporting in a number of other areas, with the result that CBD data also describe the profitability, efficiency, asset quality, concentration, liquidity, funding structure and solvency of EU banks.

For MFI balance sheet statistics, the **reporting population** covers all entities that are classified as MFIs or non-MFI credit institutions. The CBD framework covers the same population as supervisory data as described in Section 8.6.1, i.e. only credit institutions. In addition, CBD statistics are broken down into three size groups of domestic reporting banks – small, medium-sized and large – and also include foreign-controlled institutions active in EU countries. This is not a feature of MFI balance sheet statistics.

The principles with regard to **residency** are similar to those outlined in Section 8.6.1. For MFI balance sheet statistics, data refer to an MFI's country of activity (host approach). Under the CBD framework, data are reported on domestically controlled banks that have been consolidated across borders and sectors, and on foreign banks that are defined as subsidiaries and branches controlled by either an EU or non-EU parent that is “foreign” from the reporting country's perspective. This approach provides a comprehensive view of risk. In cross-border consolidation, information on branches and subsidiaries located (from the reporting country's perspective) outside the domestic market is included in the data reported by the parent institution, while cross-sector consolidation involves the inclusion of data on branches and subsidiaries of banks that can be classified as other financial institutions (apart from insurance companies).

CBD statistics are based on the aggregation of micro-supervisory FINREP and COREP templates, with **valuation** based on IFRS or national GAAP. A subset of data is reported quarterly, while a comprehensive set of year-end data is collected annually. MFI balance sheet statistics are underpinned by Regulation ECB/2021/2 which follows the classification principles and definitions set out in the ESA 2010. The preferred valuation approach is market and nominal values, although prudential practices are allowed in certain cases. Detailed data are reported monthly for MFI balance sheet statistics, with further breakdowns requested on a quarterly basis.

One final difference to note is the long time series available for MFI balance sheet statistics, which are available quarterly from 1999 for many countries. Annual data exists for CBD statistics from 2007, with semi-annual data available from 2010 and quarterly data from 2015.

## 9 Confidentiality of statistical information and arrangements for exchanging data

The general basis for the collection of statistical information by the ESCB is outlined in the Statute of the ESCB. In particular, Article 5.1 requires the ECB, assisted by the NCBs, to collect any statistical information necessary for the tasks of the ESCB, either from the competent national authorities or directly from economic agents. In addition, Regulation (EC) No 2533/98, as amended by Regulation (EC) No 951/2009<sup>179</sup>, defines the general framework for the collection of statistical information by the ECB, which has the right to collect statistical information “within the limits of the reference reporting population and of what is necessary to carry out the tasks of the ESCB”.

### 9.1 Confidentiality regime

Regulation (EC) No 2533/98 lays down the confidentiality regime applicable to confidential statistical information transmitted to the ECB for the performance of the tasks of the ESCB.<sup>180</sup> Specifically, Article 1(12) states that: “‘confidential statistical information’ shall mean statistical information which allows reporting agents or any other legal or natural person, entity or branch to be identified, either directly from their name or address or from an officially allocated identification code, or indirectly through deduction, thereby disclosing individual information. To determine whether a reporting agent or any other legal or natural person, entity or branch is identifiable, account shall be taken of all the means that might reasonably be used by a third party to identify the said reporting agent or the other legal or natural person, entity or branch”.

In turn, Article 8 of that Regulation determines the protection and use of confidential statistical information collected by the ESCB. In particular, confidential information must be used exclusively for the exercise of the tasks of the ESCB, except in the five specific circumstances mentioned in Article 8(1), including if the reporting agent has explicitly given its consent to the use of the information for other purposes.

Article 8 also states that the reporting agent must be informed of the statistical and other administrative uses to which the data may be put (Article 8(2)) and that measures must be taken to ensure the physical and logical protection of confidential statistical information (Article 8(3)). However, Article 8(7) states that “statistical

---

<sup>179</sup> [Council Regulation \(EC\) No 951/2009 of 9 October 2009 amending Regulation \(EC\) No 2533/98 concerning the collection of statistical information by the European Central Bank](#) (OJ L 269, 14.10.2009, p. 1).

<sup>180</sup> This confidentiality regime does not affect special national or Union provisions relating to the transmission of other types of information to the ECB. For these other types of information, the rules on statistical confidentiality applied by the national statistical institutes and the European Commission to the statistical information they collect on their own behalf must be respected (see recital 22 of Council Regulation (EC) No 2533/98).

information taken from sources which are available to the public in accordance with national legislation shall not be considered confidential”.

In line with Article 8b of Regulation (EC) No 2533/98, the ECB must also publish an annual confidentiality report on the measures adopted to safeguard the confidentiality of the statistical information referred to above.<sup>181</sup> Further standards and measures on protection and access are laid down in Guideline ECB/1998/NP28<sup>182</sup> and in Guideline ECB/2016/1.<sup>183</sup>

Several points are worth considering regarding the application of the confidentiality framework to MFI balance sheet statistics. First, data are treated as confidential statistical information where a third party (outside the ESCB) could identify the relevant reporting agents. Cases where identification can only be made by the relevant NCB on the basis of specific information not available to third parties are not covered here. Second, as MFI balance sheet statistics are highly aggregated in terms of counterparties and types of instrument, they typically do not reveal information on transactions with individual customers. In addition, MFI balance sheet positions are not always confidential, as they may already be reflected in the public statements that MFIs are required to produce. As such, figures are only treated as confidential statistical information if they are not already available to the public through other sources, such as national statistics or the financial reporting of the reporting agent in accordance with public disclosure requirements.

Article 2(3) of Guideline ECB/1998/NP28 also states that “all appropriate measures shall be taken to ensure that confidential statistical information is arranged in such a way that any published data covers at least three economic agents. Where one or two economic agents make up a sufficiently large proportion of any observation to make them indirectly identifiable, published data shall be arranged in such a way as to prevent their indirect identification”.<sup>184</sup>

Since MFI balance sheet statistics relate to the entire MFI population, euro area and national statistics typically entail such a high level of aggregation that this provision does not affect them. Where a specific financial instrument is issued by only one or two MFIs resident in a specific country, this does not constitute confidential statistical information unless a third party would be able to identify the reporting agent(s) using the reported information, notwithstanding the provisions discussed in the previous

---

<sup>181</sup> Such confidentiality reports are published yearly on the [Statistics section](#) of the ECB’s website.

<sup>182</sup> [Guideline of the European Central Bank of 22 December 1998 concerning the common rules and minimum standards to protect the confidentiality of the individual statistical information collected by the ECB assisted by the national central banks \(ECB/1998/NP28\)](#) (OJ L 55, 24.02.2001, p. 72).

<sup>183</sup> [Guideline \(EU\) 2016/256 of the European Central Bank of 5 February 2016 concerning the extension of common rules and minimum standards to protect the confidentiality of the statistical information collected by the European Central Bank assisted by the national central banks to national competent authorities of participating Member States and to the European Central Bank in its supervisory functions \(ECB/2016/1\)](#) (OJ L 47, 24.2.2016, p. 16).

<sup>184</sup> The criterion used to identify cases of predominance (i.e. when a proportion is “sufficiently large” to make economic agents identifiable) is not specified in Guideline ECB/1998/NP28, nor in other official EU legislation. Following an investigation undertaken in 2002 within the ESCB that was aimed at identifying national practices in the treatment of confidential data in the context of balance of payments and international investment position statistics, an 85% share has been indicated as a general rule of thumb to identify predominance. Similar guidance has been applied to other statistics, including monetary and financial statistics.

paragraph. The same treatment should also be applied in cases where the specific data are such that one or two entities are predominant in the reported total.

In addition, Article 8(1) of Regulation (EC) No 2533/98 states that the ESCB can use confidential statistical information transmitted to it for purposes other than the exercise of the tasks of the ESCB if “the reporting agent or the other legal or natural person, entity or branch which can be identified, has explicitly given its consent to the use of the said statistical information for other purposes”. Following the same reasoning, Article 2(3) of Guideline ECB/1998/NP28 provides that the rules stated in the article “shall not apply if the reporting agents or the other legal persons, natural persons, entities or branches that can be identified have explicitly given their consent to the disclosure”. Even identifiable figures can therefore be disseminated or published if the agent has explicitly consented to that dissemination and/or publication.

## 9.2 Exchange of data

Article 8(4) of Regulation (EC) No 2533/98 addresses the exchange of confidential statistical information within the ESCB. It states that data may be transmitted “to the extent and at the level of detail necessary for the performance of the tasks of the ESCB referred to in the Treaty or tasks in the field of prudential supervision given to the members of the ESCB”. Any transmission must also be “necessary for the efficient development, production or dissemination of statistics under Article 5 of the Statute or for increasing their quality”.

Article 8(4a) relates to the exchange of data between authorities and bodies of the Member States and the EU responsible for the supervision of financial institutions, markets and infrastructures or for the stability of the financial system. As above, data may be transmitted “only to the extent and at the level of detail necessary for the performance of their respective tasks”. It also states that such authorities or bodies receiving confidential data must “take all necessary regulatory, administrative, technical and organisational measures to ensure the physical and logical protection of confidential statistical information”. ESCB members transmitting such data must also implement similar measures.

Article 8a addresses the exchange of confidential statistical information between the ESCB and the European Statistical System (ESS). Article 8a(1) states that the transmission of confidential data to an ESS authority by the ESCB member that collected the data may occur “provided that this transmission is necessary for the efficient development, production or dissemination, or for increasing the quality, of European statistics within the respective spheres of competence of the ESS and the ESCB and that this necessity has been justified”. Any further transmissions must also be authorised by the collecting authority, and data must not be used for non-statistical purposes (as per Articles 8a(2) and (3) respectively). Article 8a also sets out further considerations for the exchange of information between ESS authorities and ESCB members. Measures similar to those set out above must be taken to protect confidentiality.



## 10 Compliance regime

The ECB must ensure that reporting agents comply with their reporting obligations as set out in the legal acts on the ECB's statistical requirements. To this end, Article 7(1) of Regulation (EC) No 2533/98 empowers the ECB to impose sanctions (within the limits set out in Article 7(4)) if a reporting agent's legal obligations are infringed.

The ECB's non-compliance regime for MFI balance sheet statistics has been in place since 2004. The non-compliance regime must be periodically reviewed, and the ECB monitors the national application of the logging procedure. This contributes to ensuring a level playing field among all reporting agents across the euro area. The current non-compliance regime was recently reviewed, resulting in the Governing Council of the ECB adopting Regulation (EU) 2022/1917<sup>185</sup> in September 2022. The new regime applies to MFI balance sheet statistics as of 30 April 2024, replacing the current regime under Decision ECB/2010/10.<sup>186</sup> Decision ECB/2022/32<sup>187</sup> includes further details for the implementation of the new regime by NCBs. The reviewed non-compliance regime aims to streamline the infringement procedures and clarify the roles of the relevant institutions in the process. Among other features, the Regulation also introduces the concept of "remedial plans", aimed at bringing reporting agents back to compliance and thus avoid a potential sanction.

To ensure equal treatment of reporting agents, the ECB's non-compliance regime has adopted a harmonised approach to the logging and reporting of infringements by NCBs, the calculation of proportionate sanctions and the steps to be followed in an infringement procedure. NCBs follow that procedure institution by institution, using a common approach that recognises degrees of seriousness in non-compliance. The key aspects of the MFI balance sheet statistics non-compliance regime are set out below.

- (i) Types of infringement: Sanctions may be imposed in the event of failure by the actual reporting population to comply with the minimum standards set out in Annex IV to Regulation ECB/2021/2. These standards relate to transmission (in relation to timeliness and technical reporting requirements), accuracy (in relation to linear constraints and data consistency across frequencies) and conceptual compliance (in relation to definitions and classifications). Sanctions may also be applied in the event of serious misconduct, which includes cases where there is systematic or intentional reporting of incorrect, delayed or incomplete data or an insufficient degree of

---

<sup>185</sup> Regulation (EU) 2022/1917 of the European Central Bank of 29 September 2022 on infringement procedures in cases of non-compliance with statistical reporting requirements and repealing Decision ECB/2010/10 (ECB/2022/31) (OJ L 263, 10.10.2022, p. 6).

<sup>186</sup> Decision of the European Central Bank of 19 August 2010 on non-compliance with statistical reporting requirements (ECB/2010/10) (OJ L 226, 28.8.2010, p. 48).

<sup>187</sup> Decision (EU) 2022/1921 of the European Central Bank of 29 September 2022 on the methodology for the calculation of sanctions for alleged infringements of statistical reporting requirements (ECB/2022/32) (OJ L 263, 10.10.2022, p. 59).

diligence or cooperation by the reporting agent with the relevant NCB or the ECB.

- (ii) Logging of infringements: One of the circumstances taken into account when deciding whether to impose a sanction is the repetition and frequency of the infringements logged. It is therefore crucial that the system identifies the relevant period within which repetition and frequency is to be assessed. It should be noted, however, that a sanction may be imposed even for a solitary case of serious misconduct.
- (iii) Assessment phase and infringement procedure: If an NCB detects a case of non-compliance with the reporting requirements, it may give an early warning to the reporting agent concerned, informing it of the nature of the non-compliance detected and recommending that corrective measures be taken to avoid its repetition. After repeated non-compliance logged by the NCB, an infringement procedure must be initiated unless (i) the ECB or the NCB considers, in view of the information provided by the reporting agent, that one or more of the cases of non-compliance is beyond the reporting agent's control; or (ii) the potential fine does not reach the minimum established threshold for the imposition of a sanction. If the ECB or the NCB initiates an infringement procedure, it will be carried out in accordance with Article 3 of Regulation (EC) No 2532/98,<sup>188</sup> including the issuing of a written notification and the adoption of a reasoned decision by the ECB.
- (iv) Application of sanctions: The determination of a sanction follows a two-stage procedure.
  - In the first stage, an amount is calculated on the basis of quantitative aspects. In the event of infringements relating to timeliness, the seriousness of the infringement depends on the number of working days of delay vis-à-vis the NCB deadline. In the event of infringements relating to accuracy and/or conceptual compliance, the seriousness of the infringement depends on the size of the error. The amount of the sanction will also reflect the economic size of the reporting agent. It should be noted that the ECB does not take rounding errors or negligible errors into account. With regard to conceptual compliance, ordinary revisions, i.e. non-systematic revisions to the series reported within the period following initial reporting, are also not regarded as cases of non-compliance. Article 7(4) of Regulation (EC) No 2533/98 establishes the maximum sanctions that the ECB may impose on reporting agents: €100,000 in the event of an infringement of the obligation of timeliness and €200,000 in the event of inaccuracy or conceptual non-compliance.

---

<sup>188</sup> [Council Regulation \(EC\) No 2532/98 of 23 November 1998 concerning the powers of the European Central Bank to impose sanctions](#) (OJ L 318, 27.11.1998, p. 4).

- In the second stage, the circumstances of the case (i.e. aggravating or extenuating factors) are taken into account, which may lead to the amount calculated in the first stage being increased or reduced. Aggravating circumstances include frequent infringements, inadequate cooperation, a record of earlier sanctions or possible profits obtained by the reporting agent as a result of the infringement. Extenuating circumstances include good diligence and effective cooperation shown by the reporting agent, good faith, lack of impact of the infringement or a record of no (or infrequent) infringements.

The overall aim of the non-compliance regime is to encourage good reporting by MFIs rather than to impose sanctions. In practice, the regime has been effective in contributing to the quality of the statistics and has only rarely been applied.

© **European Central Bank, 2024**

Postal address 60640 Frankfurt am Main, Germany

Telephone +49 69 1344 0

Website [www.ecb.europa.eu](http://www.ecb.europa.eu)

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

For specific terminology please refer to the [ECB glossary](#) (available in English only).

PDF ISBN 978-92-899-6450-0, doi:10.2866/43717, QB-02-24-025-EN-N