# Manual on Government Deficit and Debt

**IMPLEMENTATION OF ESA 2010**

2019 edition

MANUALS AND GUIDELINES

eurostat

# Manual on Government Deficit and Debt

IMPLEMENTATION OF ESA 2010

2019 edition

Manuscript completed in July 2019

*Printed by the Publications Office in Luxembourg*

The Commission is not liable for any consequence stemming from the reuse of this publication.

Luxembourg: Publications Office of the European Union, 2019

© European Union, 2019
Reuse is authorized provided the source is acknowledged.
The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

Copyright for the photographs: Cover © cosma/Shutterstock

For any use or reproduction of photos or other material that is not under the copyright of the European Union, permission must be sought directly from the copyright holders.
For more information, please consult: https://ec.europa.eu/eurostat/about/policies/copyright

Collection: Manuals and guidelines
Theme: Economy and finance

| | | | | |
|---|---|---|---|---|
| Print: | ISBN: 978-92-76-09292-6 | ISSN 2363-197X | doi:10.2785/452836 | KS-GQ-19-007-EN-C |
| PDF: | ISBN 978-92-76-09294-0 | ISSN 2315-0815 | doi: 10.2785/844106 | KS-GQ-19-007-EN-N |

# PREFACE

In the context of the Excessive Deficit Procedure (EDP)[1], originally defined by the Maastricht Treaty (Article 104) and currently defined in the 2012 consolidated version of the Treaty on the Functioning of the European Union (TFEU) (Article 126), Eurostat, from 1994 onwards, has the mission to ensure a proper application of this conceptual reference framework, in order to obtain reliable and comparable statistics across the European Union.

The core of this conceptual framework is the European system of national and regional accounts in the European Union (referred to as ESA 2010) published in May 2013, enforceable (by Regulation (EU) No 549/2013) from 1 September 2014 onward, replacing the previous ESA95. In addition, Eurostat publishes the Manual on Government Deficit and Debt — ESA Implementation (MGDD).

The MGDD, first published in 1999, provides guidance on the appropriate treatment of statistical issues raised in the European Union regarding government finance statistics. It is an indispensable complement to ESA 2010 and an important tool for statisticians and specialists dealing with public finance issues. It also helps to better understand the methodology applied to government finance data for the EDP.

This new edition of the MGDD focuses on some methodological aspects which have been closely considered since 2016 in the context of a specific Eurostat Task Force on methodological issues and EDP Statistics Working Group (EDPS WG), composed by experts in EDP statistics, Government Finance Statistics and National Accounts from Eurostat, EU Member States and other institutions.

The following parts were amended in substance or newly included compared to the previous version of the MGDD:

In Part 1 Delimitation of the general government sector, sections 1.2.2 Concept of an institutional unit and 1.2.3 Concept of a government-controlled institutional unit, sub-section 1.2.4.5 Rearranged transactions, chapters 1.5 Units engaged in financial activities: general rules and 1.9 European entities related to the euro area sovereign debt crisis were amended.

In Part 2 Time of recording, chapters 2.4 Recording of interest and 2.5 Military expenditure were amended. New sub-sections 2.4.3.17 Recording interest when there is a derivative in a debt instrument, 2.4.3.18 Interest on off-market swaps, 2.4.3.19 Interest accrued on intergovernmental loans in dispute and 2.4.3.20 Interest accrued on intergovernmental loans unlikely to be repaid, as well as new section 2.6.3 Accounting treatment of the so-called EU ‘financial instruments’ were added.

In Part 3 General government and entities controlled by government, chapters 3.5 Dividends, super-dividends and interim dividends and 3.7 Impact on government accounts of transfer of decommissioning costs were amended.

In Part 4 Relations between government and the financial sector, a new chapter 4.7 Income contingent loans was added.

In Part 6 Leases, concessions and PPPs, chapters 6.1. Overview and 6.2 Sale and lease-back were amended.

Finally in Part 8 Measurement of general government debt, section 8.2.1 Measurement of liabilities in ESA 2010 and three sub-sections — 8.2.2.1 Coverage of the government debt for EDP purposes, 8.2.2.2 Valuation of government debt for EDP purposes. The nominal versus face value and 8.2.2.3 Accrued interest — were amended.

In addition, editorial changes (without a change in substance) have been introduced in the following chapters/parts:

[1] See statistical aspects in Council Regulation (EC) No 479/2009, as amended by Council Regulation (EU) No 679/2010 and Commission Regulation (EU) No 220/2014.

Chapters 2.6 Grants from and contributions to the EU Budget and 3.8 Annex: selected ESA 2010 transactions; Parts 7 Debt related transactions and guarantees and 8 Measurement of general government debt.

For the statistical recording of Public-Private Partnerships (PPPs) and Energy Performance Contracts (EPCs), please also refer to the dedicated guides available at https://ec.europa.eu/eurostat/web/government-finance-statistics/methodology/guidance-on-accounting-rules.

This 2019 edition was prepared under the responsibility of Luca Ascoli, Philippe de Rougemont and Olga Leszczynska-Luberek from Eurostat Unit D-1 (Excessive deficit procedure, methodology and GFS)[2] in cooperation with experts of the Task Force on methodological issues and EDPS WG and other colleagues from Directorate D, who made a significant contribution to the present version of the MGDD. In this context special thanks go to Miguel Alonso, Thomas Forster, Monika Gapinska, Daniela Ilavska, Rasa Jurkonienė, Didier Lebrun, Alexander Reimers, Nicoleta Savu, Malgorzata Szczesna-Rundberg, Levente Szekely and Laura Wahrig.

August 2019

Luca Ascoli
Director

Directorate D: Government Finance Statistics (GFS)

[2] For any further information, please contact Unit D-1 Secretariat (email: ESTAT-D1-SECRETARIAT@ec.europa.eu).

# INTRODUCTION: SCOPE AND DEFINITIONS

## The Excessive Deficit Procedure (EDP)

The Maastricht Treaty signed in 1992 foresaw the creation of the Euro. It organised the way that multilateral fiscal surveillance would be conducted within the European Union. The provisions regarding the EDP are currently defined in the 2012 consolidated version of the Treaty on the Functioning of the European Union (TFEU).

The surveillance is based on the EDP which sets out schedules and deadlines for the Council, following reports from and on the basis of opinions by the Commission and the Economic and Financial Committee, on how to judge whether an excessive deficit exists in an EU Member State.

The TFEU obliges EU Member States to comply with budgetary discipline by respecting two criteria: a deficit to GDP ratio and a debt to GDP ratio not exceeding reference values of 3 % and 60 % respectively, as defined in the Protocol[3] on the EDP annexed to the TFEU.

Council Regulation (EC) No 479/2009, as amended by Council Regulation (EU) No 679/2010 and Commission Regulation (EU) No 220/2014, requires that EU Member States report EDP-related data to Eurostat twice per year at end-March and end-September. The data are reported in harmonised tables — EDP Notification Tables. These tables are designed specifically to provide a consistent framework, with a link to national budgetary aggregates and between the government net lending/borrowing (B.9) and changes in government debt. EDP data should be fully consistent with GFS data supplied through the ESA 2010 Transmission Programme.

The latest EDP Notification Tables for each EU Member State as well as the historical Notification Tables, including a brief explanation of their contents and further information on Government Finance Statistics, can be found on the Eurostat EDP/GFS dedicated web page.

## Statistical Methodology

The reference values for deficit and debt are based on concepts defined in the European System of Accounts (ESA 2010). The surplus (+)/deficit (–) of the general government sector is in the national accounts referred to as the net lending (+)/borrowing (–) (B.9).The government (EDP) debt is defined as the total consolidated gross debt at face value in the following categories of government liabilities (defined in ESA 2010): currency and deposits, debt securities and loans.

ESA 2010 is derived from, and broadly consistent with the worldwide manual for national accounts (2008 SNA). ESA 2010 is a legislative text in a user-friendly form. Since ESA 2010 is a conceptual framework, it has been necessary for Eurostat to supplement it with additional guidance in the form of this Manual on Government Deficit and Debt, Eurostat's decisions, guidance notes, clarifications and bilateral advice to EU Member States.

Eurostat, statisticians from the EU Member States and other interested parties meet several times per year in the *Excessive Deficit Procedure Statistics Working Group* to discuss methodological and practical issues relating to government statistics. The guidance in this Manual has benefited greatly from expertise provided by this Working Group and in addition from the work of the dedicated *Task Force on methodological issues*.

## Key concepts for measuring government deficit and debt

ESA 2010 is a system for producing macro-economic statistics. As such, it records the economic reality of transactions rather than their legal form. This can involve looking through complex financial operations to understand who bears the financial risks and who has control over the rewards, irrespective of how the contracts have been constructed. In the context of measuring government deficit and debt, this search for the economic reality affects such matters as the following.

[3] Protocol (No 12) on the Excessive Deficit Procedure annexed to the Treaty on the Functioning of the European Union (ex. Protocol 19 annexed to the Maastricht Treaty).

- The classification of units: is a unit included in the government sector or not? The government deficit and debt are primarily affected by units classified to the government sector. This is determined by considering whether or not a unit is controlled by government and whether it is a non-market or market (financed mainly by its own sales) unit. Privately controlled market institutional units are not included in the government sector.
- The timing of transactions: ESA 2010 records transactions on an accrual basis, i.e. when the economic activity takes place, rather than when the cash is paid. Such differences may be large, and therefore significant for the government deficit/surplus.
- The nature of a transaction: ESA 2010 distinguishes non-financial transactions such as consumption, wages and salary, subsidies or grants to cover losses, which directly affect the government deficit; and financial transactions as e.g. the acquisition of financial assets or the repayment of debts, which do not.

**Structure of the Manual**

The following terms are used when referring to text within the Manual, based on the hierarchical structure shown in the table of contents on the next page.

| | |
|---|---|
| 1. | Part |
| 1.1 | Chapter |
| 1.1.1 | Section |
| 1.1.1.1 | Sub-section |

Each of the eight parts starts with an overview and ends with keywords and references. The links to legal texts are shown in the Annex.

## LIST OF ABBREVIATIONS AND ACRONYMS

**2008 SNA** – System of National Accounts 2008
**AAUs** – Assigned Amount Units
**CDS** – Credit default swap
**BPM6** – Sixth Edition of the IMF's Balance of Payments and International Investment Position Manual
**DTAs** – Deferred tax assets
**EC** – European Commission
**ECB** – European Central Bank
**EDP** – Excessive Deficit Procedure
**EDPS WG** – Excessive Deficit Procedure Statistics Working Group
**EFSF** – European Financial Stability Facility
**EFSM** – European Financial Stability Mechanism
**EIB** – European Investment Bank
**EMU** – Economic and Monetary Union
**ESA 2010** – European System of Accounts 2010
**ESIFs** – European Structural & Investment Funds
**ESM** – European Stability Mechanism
**ESCB** – European System of Central Banks
**ETS** – Emission Trading System
**EU** – European Union
**Eurostat** – Statistical Office of the European Communities
**GDP** – Gross Domestic Product
**GFCF** – Gross fixed capital formation (net acquisitions of fixed assets)
**GFS** – Government Finance Statistics
**GNI** – Gross National Income
**IFRS** – International Financial Reporting Standards
**IMF** – International Monetary Fund
**IPSAS** – International Public Sector Accounting Standards
**IRS** – Interest rate swap
**ISWGNA** – Inter-secretariat WG on National Accounts (UN, EC, IMF, OECD, WB)
**LSCB** – Loan Specific Cash Buffer
**MGDD** – Manual on Government Deficit and Debt – ESA implementation
**NCB** – National central bank
**NPI** – Non-profit institution
**OECD** – Organisation for the Economic Cooperation and Development
**PAYE** – A pay-as-you-earn tax
**R&D** – Research and Development
**RoE** – Return on equity
**RoW** – the rest of the world
**SPE** – Special purpose entity
**TFEU** – Treaty on the Functioning of the EU
**UN** – United Nations
**VAT** – Value added tax
**WB** – World Bank

# Contents


**1 Delimitation of the general government sector ..... 9**

1.1. Overview ..... 9

1.2. Criteria for classifying units to the general government sector ..... 11

1.3. Pension institutions ..... 45

1.4. Market regulatory agencies in agriculture ..... 50

1.5. Units engaged in financial activities: general issues ..... 55

1.6. Specific public entities ..... 60

1.7 Government debt management offices ..... 71

1.8 Joint ventures ..... 72

1.9 European entities related to the euro area sovereign debt crisis ..... 74

1.10 Keywords and accounting references ..... 78

**2 Time of recording ..... 79**

2.1 Overview ..... 79

2.2 Recording of taxes and social contributions ..... 80

2.3 Changes in the due for payment dates ..... 86

2.4 Recording of interest ..... 88

2.5 Military expenditure ..... 111

2.6 Grants from and contributions to the EU Budget ..... 121

2.7 Court decisions with retroactive effect ..... 134

2.8 Keywords and accounting references ..... 136

**3 General government and entities controlled by government ..... 137**

3.1 Overview ..... 137

3.2 Capital injections into public corporations ..... 139

3.3 Capital injections into public quasi-corporations ..... 152

3.4 Capital injections in kind ..... 156

3.5 Dividends, super-dividends, interim dividends ..... 159

3.6 Impact on government accounts of transfer of pension obligations ..... 163

3.7 Impact on government accounts of transfer of decommissioning costs ..... 172

3.8 Annex: selected ESA 2010 transactions ..... 178

3.9 Keywords and accounting references ..... 182

**4 Relations between government and the financial sector ..... 183**

4.1 Overview ..... 183

4.2 Payments between the central bank and government ..... 184

4.3 The sale of gold and foreign exchange by the central bank ..... 190

4.4 Non-returned banknotes and coins after a cash changeover ..... 195

4.5 Financial defeasance ..... 202

4.6 Capital increases in multilateral development banks ..... 214
4.7 Recording of income contingent loans ..... 217
4.8 Keywords and accounting references ..... 220

**5 Sale of assets** ..... 221

5.1 Overview ..... 221
5.2 Sales of financial and non-financial assets ..... 222
5.3 Privatisation proceeds from public corporations ..... 226
5.4 Restitution and use of vouchers for privatisation ..... 229
5.5 Securitisation operations undertaken by general government ..... 236
5.6 Low interest rate loans and sale of government low interest loans to third parties ..... 252
5.7 Keywords and accounting references ..... 253

**6 Leases, concessions and PPPs** ..... 255

6.1 Overview ..... 255
6.2 Sale and leaseback ..... 266
6.3 Contracts with non-government units related to fixed assets ..... 272
6.4 Public-Private Partnerships (PPPs) ..... 281
6.5 Emission trading allowances ..... 300
6.6 Keywords and accounting references ..... 307

**7 Debt related transactions and guarantees** ..... 309

7.1 Overview ..... 309
7.2 Debt assumption and debt cancellation ..... 310
7.3 Debt rescheduling ..... 318
7.4 Government guarantees ..... 327
7.5 Keywords and accounting references ..... 342

**8 Measurement of general government debt** ..... 343

8.1 Overview ..... 343
8.2 The calculation of general government debt ..... 344
8.3 Recording of swaps ..... 349
8.4 Repurchase agreements and securities lending ..... 362
8.5 Keywords and references ..... 367

**Annex Legal texts (references and links)** ..... 368

# 1 Delimitation of the general government sector

## 1.1. Overview

1. Government deficit and debt statistics report on the activity of the general government sector (S.13) as defined in national accounts. According to ESA 2010 paragraph 2.111, as a general definition of main features, this sector *consists of institutional units which are non-market producers whose output is intended for individual and collective consumption, and are financed by compulsory payments made by units belonging to other sectors, and institutional units principally engaged in the redistribution of national income and wealth*. This does not exclude that, as a minor part, government units may have other kind of resources (such as property income and sales of goods and services, but the key distinctive point is the existence of the capacity of levy.[4] In this regard, ESA 2010 paragraph 20.02 insists also on 'powers to raise taxes and other compulsory levies and to pass laws affecting the behaviour of economic units'. ESA 2010 paragraph 20.06 also adds that *government units are legal entities established by political process which have executive legislative, judicial authority over other institutional units within a given area*. However, this definition fits totally only for the units, which are designed as 'primary' units in ESA 2010 paragraph 20.10 but other kind of entities may be established in order to carry out some specific activities. If they meet the criteria of institutional units (see below), they must be considered separate government units.

2. The qualification of institutional units as non-market producers, i.e. units providing all or most of their output (goods and services) free of charge or at prices that are not 'economically significant' (ESA 2010 paragraph 20.19), is fundamental for the proper delimitation of the general government sector. Therefore, the general government sector excludes all government-controlled units (as defined on the basis of different criteria, see ESA 2010 paragraph 20.307) that are considered market producers ('public corporations'). The public sector consists of all general government units and public corporations outside government (ESA 2010 paragraph 20.303).

3. Under ESA, the general government sector is divided into four subsectors: central, state and local governments and social security funds. It may also be relevant, notably for practical reporting purpose, like in ESA 2010 (see chapter 20 Government accounts), to make a distinction between the 'core' or 'primary' units (such as 'budgetary central government' or 'regional/local authorities budgets') and the other government entities with separate legal identities and various degree of autonomy which are part of the given government subsector as controlled by the core units (and frequently mostly financed by transfers from them).

   a) Central government (S.1311): includes all administrative departments of the State (such as ministries, boards, authorities, etc.) globally considered a single unit[5] and other central bodies whose competence (made of legislative, judicial, taxation and executive powers) extends normally

[4] ESA 2010 chapter 2 (Units and groupings of units) specifies in addition that such units may be engaged in other types of non-market production which covers cases of sales of goods and services on 'pseudo-markets', but such that the corresponding income does not cover the production costs.

[5] Notably because they operate collectively, dependent on a single budget, under the responsibility of the Ministry of Finance, which in addition to 'controlling' most of the revenue, allocates to 'line ministries' (spending departments with generally no autonomous public accounts) their expenditure limits.

over the whole economic territory (as defined in ESA 2010 paragraphs 2.05–06).[6] Non-profit institutions (NPIs) which are non-market producers and are controlled by central government with a competence on the whole economic territory are part of this subsector. The central government subsector is itself divided into two components, 'budgetary central government' and 'other central government bodies' (ESA 2010 paragraph 20.62);

b) State government (S.1312): consists of separate institutional units exercising some of the functions of government at a geographical level below that of central government and above that of the local government. These government units have a full and exclusive competence (in the areas specified in constitution or fundamental law) on a state or regional territory; normally the existence of significant legislative power is an element as to identify this subsector level which may also include other dependent bodies and state government controlled non-market NPIs;

c) Local government (S.1313): is made of public administration whose competence (frequently small from legislative and judicial points of view) extends to only a local part of the economic territory. ESA 2010 paragraph 20.65 specifies that 'statistics for local government cover a wide variety of government units' and it also mentions that there may be an overlapping of different local governments on the same geographical area, based on their respective functional responsibilities; a great number of non-market producers, of various statutes, may also be attached and they can control also numerous non-market NPIs[7], which are also included here;

d) Social security funds (S.1314): include all central, state and local institutional units whose principal activity is to provide social benefits and which fulfil each of the following two criteria[8]:

- by law or by regulation certain groups of the population are obliged to participate in the scheme or to pay contributions;
- government is responsible for the management of the institution in respect of the settlement or approval of the contributions and benefits independently from its role as supervisory body or employer (ESA 2010 paragraph 2.117).

4. Statistical authorities frequently encounter units for which the sector classification is not straightforward and represent borderline cases. This chapter gives guidance on how to resolve such problems with the aim to ensure full comparability across the European Union.

5. The government net lending/borrowing (B.9) (as well as government debt[9]) is primarily affected by units classified to the government sector, thus the proper sector classification of units greatly matters.

[6] Except for the administration of social security funds which have their own subsector.

[7] ESA 2010 paragraph 20.64 stresses that there should be a distinction between units that are fully dependent on central government but act locally and units part of the state and local subsectors that are not subject to central government (for instance they have their own funding, discretion on expenditure, ability to appoint officers, etc.).

[8] S.1314 is only relevant if 'an institutional unit is organized separately from the other activities of government units, holds its assets and liabilities separately, and engages in financial transactions on its own account', see ESA 2010 paragraph 20.12.

[9] See Part 8 Measurement of general government debt.

# 1.2. Criteria for classifying units to the general government sector

## 1.2.1 The definition of the general government sector

1. The general government (S.13) sector includes all institutional units which are non-market producers controlled by government, whose output is intended for individual and collective consumption, and are financed by compulsory payments made by units belonging to other sectors; it also includes institutional units principally engaged in the redistribution of national income and wealth, which is an activity mainly carried out by government. It includes:

   a) general government entities which exist through a legal process to have judicial authority over other units and administer and finance a group of activities, principally providing non-market goods and services, intended for the benefit of the community;[10]

   b) non-market public producers, i.e. corporations and quasi-corporations controlled by government if their output is mainly non-market;

   c) non-profit institutions recognised as independent legal entities which are non-market producers and are controlled by general government;

   d) pension funds, recognised as separate institutional units ('autonomous') where there is a legal obligation to contribute, and where government manages the funds with respect of the settlement or approval of contributions and benefits.[11]

2. The general government sector comprises four subsectors, as mentioned above, although the state government subsector applies only in a minority of the EU Member States. It excludes market public producers (public corporations, quasi-corporations or, by virtue of special legislation, entities recognised as independent legal entities), which are classified in the non-financial corporations (S.11) or financial corporation (S.12) sectors.

3. In order to decide whether an entity should be classified to the general government, it is necessary to determine whether:

   - it is an institutional unit,
   - it is a government-controlled institutional unit,
   - it is a non-market institutional unit.

   These criteria are discussed in detail below including the qualitative criteria as well as some specific government controlled entities for which market/non-market test is not relevant.

## 1.2.2 Concept of an institutional unit

4. ESA 2010 paragraph 2.12 sets out the rules according to which an entity can be considered an institutional unit:

   *An institutional unit is an economic entity characterised by decision-making autonomy in the exercise of its principal function. A resident unit is regarded as constituting an institutional unit in the economic territory where it has its centre of predominant economic interest if it has decision-making autonomy and either keeps a complete set of accounts, or is able to compile a complete set of accounts.*

   *To have autonomy of decision in respect of its principal function, an entity must be:*

[10] For sector classification of some particular units controlled by government, see chapter 1.6 Specific public entities.

[11] This is the definition of SSFs in ESA 2010 paragraph 2.117 (c). ESA 2010 paragraph 4.89 (a) also specifies that social security schemes are 'covering the entire community, or large sections of the community, that are imposed, controlled and financed by government units'. This means that resources of such schemes take the form of compulsory levies (social contributions or taxes) and that government is obliged to cover any gap between the resources and the benefits, including using its power to change some parameters.

a) *entitled to own goods and assets on its own right; it will be able to exchange the ownership of goods and assets in transactions with other institutional units;*

b) *able to take economic decisions and engage in economic activities for which it is responsible and accountable at law;*

c) *able to incur liabilities on its own behalf, to take on other obligations or further commitments and to enter into contracts;*

d) *able to draw up a complete set of accounts, comprised of accounting records covering all its transactions carried out during the accounting period, as well as a balance sheet of assets and* liabilities.[12]

5. ESA 2010 paragraph 2.13 recognises certain specific cases where an entity does not have the characteristics of an institutional unit and provides the following principles:

   - if it is not possible to draw up a complete set of accounts for the entity, then the entity is not recognised as an institutional unit and its partial accounts are integrated with the accounts of the institutional unit that controls it;
   - if an entity, for which a complete set of accounts can be drawn up, has no autonomy of decision in the exercise of its principal function, then the entity is not recognised as an institutional unit and it is instead part of the unit that controls it;
   - individual entities being part of a group structure and for which a complete set of accounts can be drawn up, are considered institutional units even if they have partially surrendered their autonomy of decision to the central body (head office) responsible for the general direction of the group; the head office itself is also deemed to be an institutional unit distinct from the units which it controls (see chapter 1.6 on Specific public entities);
   - entities for which a complete set of accounts can be drawn up that do not have a separate legal status but have an economic and financial behaviour comparable to that of corporations (i.e., market producers) that is different from that of their owner(s), are deemed to have autonomy of decision and are classified as quasi-corporations in the financial or non-financial corporation sectors.

6. ESA 2010 also specifically mentions artificial subsidiaries and ancillary units and provides advice that such units do not meet the requirements to be recognised as institutional units since they are deemed considered to lack decision-making autonomy (regardless of the fact that they may be legal entities). This points to the fact that the term 'economic decision' is not to be understood in its legal dimension. Rather, 'the ability to take economic decisions and engage in economic activities' requires a genuine ability to actually take meaningful decisions and does not merely characterise the fact that legal capacity would by itself imply such an ability. This is, essentially, the application of the substance-over-form principle, which is an inherent principle in ESA 2010.

7. It must be stressed that the ESA 2010 sector classification criteria and the definition of an institutional unit are **not** based on the legal form of an entity. For some entities it may be concluded that they do not have the required autonomy of decision, which is not automatically evidenced by their legal status.

8. In this respect, an entity basically under auto-pilot, because for example it exists solely to implement contracts (often through-subcontracting) that are agreed by other entities, or an entity that provides its output to a unique 'client'[13], passively responding to its needs, is generally not deemed to be an institutional unit since it does not meet the ESA 2010 criteria concerning autonomy of decision. In particular:

   a) many resident special purpose vehicles (SPVs) or special purpose entities (SPEs) are basically auto-pilot devices (i.e., the rights, obligations and activities of such entities are mostly predefined and limited either by contractual or legal provisions)[14] and as such are not institutional units. When such

[12] It is possible to compile both flows accounts for the unit, showing net income and cash flow statements, and balance sheets showing its patrimonial situation. ESA 2010 specifies that the publication of such accounts is not a condition for being considered as an institutional unit. Only their existence, or potential existence, matters. This condition is not formally required for households.

[13] The term 'unique client' means that the entity provides its output either to a single customer (frequently the 'parent' company — in some cases where legally separate it is the economic equivalent of this) or to other units in the same group of units (see ESA 2010 paragraph 20.24) such as a group of related entities (see ESA 2010 paragraph 2.13e).

[14] In some extreme cases, the activities/decisions of the entities are fully determined at the time of the creation of the entity.

entities are non-residents, they are deemed institutional units by convention, although many of their operations may need to be rearranged when they are created or sponsored by government;

b) generally speaking, an institutional unit requires employees or other staff, without which decision making is unlikely to be possible. However, entities with no staff but with an active 'board' (e.g. management board, board of directors or executive board) may be considered institutional units in some circumstances. In some cases, 'notional units' are established for accounting purposes even if they do not have decision-making autonomy, for example, when an entity is engaged in different activities and it is not possible to form separate institutional units for these activities. In such cases, the usual control indicators shall nonetheless be applicable;

c) entities with legal status that service a unique client have generally no autonomy of decision and are not recognised as institutional units in ESA 2010. They may be ancillary units or artificial subsidiaries. For example, an IT department, even if it is legally incorporated, will be considered as lacking autonomy of decision unless it is demonstrated that it sells a significant part of its output outside the parent or the group. Where one legal entity hosts all the staff while another legal entity hosts all the fixed assets of the group, neither can be considered to be separate institutional units because each cannot be deemed to have a production without the other. This situation may develop into something different if it can be shown that each are providing significant services outside the group (as employment-outsourcing company and asset-renting company to think of suitable examples). For the same reason, an incorporated factory that provides all its output to another subsidiary of the group also lacks autonomy of decision.

9. Decision-making autonomy does not have to encompass strategic business decisions like the sale and purchase of company divisions, relocations or the closure of establishments or undertakings etc. Such decisions will normally be taken by the parent entity, owning the attribute of control, without ruling out *a priori* the decision-making autonomy. At the same time, operational autonomy in some respects, such as ability to assign staff to a given task etc., may not amount to sufficient autonomy of decision in the exercise of the principle function if certain key parameters are outside the hands of the management board. This is why a factory in a group is not an institutional unit when it is incorporated. The factory director does not control the key elements that are the attribute of a (market) producer — such as fixing the price and/or the volume of the supply — and has merely the sole function as being as efficient as possible in producing the output specified by the group.

10. Ultimately, a parent is able to set (generally limit) the purpose (object) of its subsidiary. If it sets these parameter so narrowly that all decision-making autonomy is effectively surrendered, then the subsidiary loses its institutional unit status (see the case of SPEs). However, decision-making autonomy can also be constrained by the parent through interference[15] in the activities of the subsidiary. Therefore, in order to maintain the sufficient degree of decision-making autonomy to qualify as an institutional unit, under ESA 2010, the narrower the purpose of the subsidiary is, the narrower the degree of parent interference is deemed acceptable.[16]

11. In general, the entire activity of a legal unit is classified to one sector. Exceptions are, for instance:

- when part of a non-market legal unit can be recognised as a market quasi-corporation (which is then classified outside the government sector);
- when a notional unit needs to be created, such as in the case of some market regulatory agencies (see chapter 1.4), or
- joint ventures, with two joint venture parties each owning 50 % of the shares of the joint venture company (see chapter 1.8);
- when transactions and stocks need to be rearranged (see sub-section 1.2.4.5) for instance, when a public entity (notably a public financial institution) is managing special purpose funds on behalf of government;
- certain types of pension funds (see chapter 1.3).

[15] Both the scope and frequency of the interference should be taken into consideration when judging its restrictive effect on decision-making autonomy.

[16] This rule should be understood in a broad sense, i.e., 'parent' can mean any entity or group of entities that alone or jointly may have the power to interfere.

12. For certain public legal units, it can be very difficult to judge whether the management board takes decisions autonomously from government. This is particularly the case for entities whose management board is made up, either in its entirety or, at the very least, in its majority by general government officials (i.e., those that belong to the legislative, administrative and judicial part of the government).[17] This peculiarity is frequently encountered with financial entities which are mainly providing financial services to its parent or other entities of the parent (group entities).

13. In the specific case of captive financial corporations, the issue is whether such entities have a sufficient degree of independence from their parent regarding the corporate decision-making process. Independence may be demonstrated by exercising some substantive control over its assets and liabilities to the extent of carrying the risks and reaping the rewards associated with assets and liabilities (see ESA 2010 paragraph 2.22). A lack of decision-making autonomy in respect of their principal function is assumed when there are government constraints both on the asset and liability side of the entity (see section 1.6.6 of this Manual).

14. In the case of entities where the majority of the management board is staffed by government officials, it is even more likely that they are operating within a narrowly-defined (public-service) remit. In fact, it is almost impossible to determine whether the management board decides autonomously from the government by acting like a normal shareholder (aiming at, for example, maximising profits), or whether it acts in the interests of the public administration policy requirements (for example, aiming to provide an optimal supply of a specific public service at low prices or prices which are not economically significant).

15. The appointment of the majority of the management board with government officials can be, in the case of financial entities[18], an indicator that the entity does not have decision-making autonomy 'in the exercise of its principal function' and if this is the case, the entity should be classified in general government.

16. The ESA 2010 provisions regarding autonomy of decision and control (see section 1.2.1) provide a two-step procedure: firstly, to assess whether an entity has sufficient decision-making autonomy in the exercise of its principal function and, secondly, to determine who actually controls the entity. This follows the basic approach of national accounts to start with the definition and identification of units, which allows the measurement of the production in the respective territory, and then, as a second step, to group units with a similar behaviour to institutional sectors (see ESA 2010 chapter 2).

17. ESA 2010 may be viewed as materially diverging from the 2008 SNA (see paragraph 2.16 and paragraph 4.69) that specifically indicates that autonomy of decision is not required for institutional units and that legal status is generally sufficient to meet the institutional unit criteria.

18. Nonetheless, national accounts compilers commonly equate the existence of a legal entity with existence of an institutional unit. This is because business registers are a major data source input and such registers are usually constructed from the legal basis of entities. Such a pragmatic approach is acceptable in view of the large number of entities to be analysed as, in general, legal entities will typically comply with the aforementioned requirements. They have the legal capacity to enter into contracts, incur and repay debts, acquire economic and/or legal ownership over assets, appear in court in their own right and be responsible for their activities. In most cases, it is also likely that their management board enjoy a sufficient degree of autonomy to make their own day-to-day operational decisions rather than being dependent on the decisions of others such as the parent. For the government sector accounts, the use of business registers as a data source is less of a consideration than it is for the other sectors of the economy. In addition, due to the specific importance of the EDP procedure the requirements of ESA 2010 paragraph 2.12 have to be examined particularly carefully for the government sector.

19. For certain public legal units, the analyses of the control criteria may bring new findings to light, substantially questioning the decision-making autonomy of the legal entity. In such a case, it is recommended that compilers should reassess its decision-making autonomy.

[17] A member of the management board is not considered a general government official if it has neither an existing employment relationship with general government nor a political mandate.

[18] In the case of nonfinancial entities, the outcome of the 50% criterion would provide sufficient evidence that the entity undertakes market activity at prices that are economically significant and that the entity can make economic decisions independently of the units to which the government officials in the management board belong (see ESA 2010 paragraph 2.12).

## 1.2.3 Concept of a government-controlled institutional unit

### 1.2.3.1 GOVERNMENT-CONTROLLED ENTITIES RECOGNISED AS INSTITUTIONAL UNITS

20. A government-controlled institutional unit (otherwise known as a public producer or public sector unit) is an institutional unit, which is **directly** or **indirectly** controlled by resident general government units or other public producers. All other domestic producers are private producers.

21. All public producers are part of the 'public sector', as stated in ESA 2010 paragraph 20.303: *The public sector consists of general government and public corporations*. The term corporation must be understood in an economic rather than a legal sense, since it includes entities that do not have the legal status of a corporation but are market producers. In addition, non-profit institutions (i.e., those entities that are not allowed to distribute profits to their owners) which are controlled by government but are also recognised as market producers (see below) are part of the public sector (but not part of the general government sector) unless they lack autonomy of decision.

22. Control of an institutional unit by government (sometimes by a core government unit, as mentioned in ESA 2010 paragraphs 20.08–20.09 and 20.29, or collectively by public units as described in ESA paragraph 20.309[19]) determines whether or not this institutional unit is part of the public sector. The inclusion of a public sector unit in the general government sector (S.13) or not, ultimately depends on the criteria described in the section 1.2.4 Concept of a market or a non-market institutional unit.

23. The concept of government control in national accounts is the same for both non-financial and financial corporations. The control of non-profit institutions and educational units is addressed separately further below.

24. In ESA 2010 paragraph 20.18, control over an entity is defined as 'the ability to determine the general policy or programme of that entity'. Since we are considering economic accounts, the general policy or programme of an entity is usually linked with the key financial and operational policies of the concerned entity. ESA paragraph 20.309c provides some examples for these key factors which are the remuneration of staff and the pay and business strategy. Control of general policy is quite different to control of day-to-day operational tasks. Control of the general policy does not require interventions in the day-to-day business of the entity, even though certain interdependencies between general policy and the day-to-day business exist. However, control of the day-to-day business is different, to the extent that individual measures, tasks or activities are exactly specified and require explicit approval. In the latter case, the constraints are of a general nature and not limited to unique or at least exceptional issues, and accordingly the unit is deemed not to be an institutional unit because it has not decision-making autonomy. What is relevant is that the entity (or entities) that control another entity has the power to determine the general policies of the concerned entity.

25. Usually, an entity operates within the framework, the general policy or programme, that has been set for it and once that is established there is usually no need for its owner (or controlling entity) to intervene and correct the economic operations. The absence of such apparent interventions does not entail that control over the entity has not been established. Rather the concept of control is not related to actual interventions as such, but to the extent that power (or rights) to determine the general policy can be exercised, whether or not that power is actually used.

26. ESA 2010 refers to 'influence' in assessing whether an entity is controlled or not. As the instructions at ESA 2010 paragraph 20.309 emerged from the joint discussions of national and business accountants, the business terminology of 'dominant influence' as powers that could constitute control even also appears in ESA 2010 paragraph 20.309f.

27. ESA 2010 paragraph 20.309 sets out a list of indicators that allows the assessment about whether rights of influence are sufficient to judge whether control of a unit exists. Some of the indicators are considered as sufficient by themselves to establish control over a unit, while others are not individually sufficient but can provide evidence of control when considered collectively alongside other indicators.

[19] In practical terms, in those cases where no single entity controls another, and if joint control can be ruled out, the private or public nature of the latter shall be decided by whether private or public entities controls the entity as an aggregate. After deciding whether it is public or private and whether it satisfies the additional necessary criteria to be classified inside government (e.g. qualifies as a non-market producer), it should then be classified into a sub-sector depending upon its activity (e.g. social security) or its geographical remit (level of government from national to local). In the unlikely event that such an entity may not qualify as an institutional unit, it should be consolidated with any of the units that belong to the sub-sector into which it would have been classified based on the previous paragraph.

28. According to ESA 2010 paragraph 20.310 each of the following three control indicators are individually sufficient to determine government control:

**1) Rights to appoint, remove, approve or veto a majority of officers, board of directors, etc.**

The rights may be decided by different public units (whether classified either in the same sector/sub-sectors or not). The direct appointment and dismissal of key personnel is the most direct way to intervene and determine the general policy of an entity. Having the rights to remove appointees is also important as they indicate that if the appointees do not behave in the way that government wants then they may be removed or not reappointed.

**2) Rights to appoint, veto or remove a majority of appointments for key committees (or sub-committees) of the entity having a decisive role on key factors of its general policy**

The issue of veto powers, under the criteria mentioned above, requires specific attention. It is useful to recall that a veto gives the right to oppose some decisions, or to impose a decision, that is covered by the veto power. From a general perspective, the existence of veto powers by government or the public sector is sufficient by itself to conclude that the unit is controlled in cases where public units exclusively hold such rights. However, there may be cases where private units also hold similar veto powers for similar decisions, or cases where unanimity is required. The number of veto powers held by private units is not relevant; instead, the potential impact of them is to be considered.

Control of a unit normally means that the controlling units have, by themselves, a 'final last say' regarding the main important decisions. For instance, public control is typically determined if the veto powers by public sector entities cover the more important decisions than the veto powers held by others. As an example, government could have the main veto powers over decision-making such as dissolving the unit, merging it with another unit, modifying its status or significantly changing its activity. In other cases, government and others may each have the same level of veto powers, meaning that either party could block a decision. However, in this case, control would be also assessed by other additional criteria, notably the nature of the unit where government holds the power of veto. For example, if the unit in question obtains its resources predominantly from public units, such as under sale contracts and other arrangements (such as PPPs), government or another public unit would be deemed to have a greater influence (*de facto*) on the unit and therefore the unit would be classified to the public sector.[20]

In some cases, the decision about majority appointment rights of the entire board of directors, or officers, can be misleading. It is entirely possible that the most important decisions about the general policy are not taken by the management board but instead by key committees. In such cases, it is more appropriate to additionally consider the appointment/veto rights over these committees rather than just the management board itself. ESA 2010 paragraph 20.309c gives some examples of key factors of the general policy that may be delegated to subcommittees: remuneration of senior staff, pay and business strategy.

**3) Ownership of the majority of the voting interest**

Ownership should be considered in aggregate (jointly) when voting rights are held by more than one public unit, notably when no one reaches a majority. In counting voting rights, both direct and indirect ownership should be considered. For example, consider a corporation which is 30 %-owned by central government, 40 %-owned by a public corporation which is itself 75 %-central government owned and 25 % privately-owned, with the remaining 30 % by a private corporation (which is 10 %-owned by government). In such a situation (often referred to as mixed group situation), the 30 % direct voting rights and the 40 % indirect voting rights held by the public corporation are added so that the public sector has effectively 70 % voting rights and hence control (see figure 1). The calculation of control (direct or indirect), here 70 %, is not the same as the calculation of ownership (direct or indirect), here 63 %. It can even happen that public control is not established while direct and indirect ownership is above 50 %.

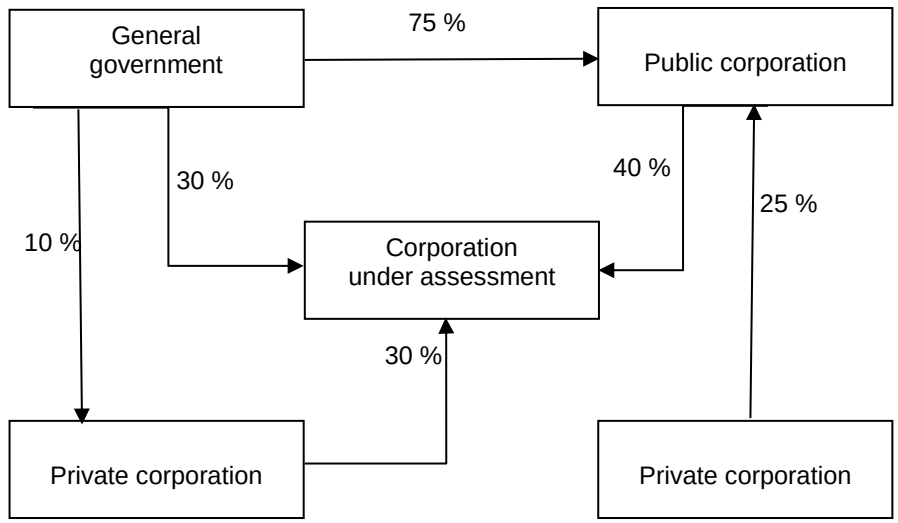
The existence of multiple voting rights attached to some shares must also be closely considered. As long as government can effectively control — directly or indirectly — more than 50 % of the voting rights, the unit is part of the public sector. In most cases, a corporation with less than 50 % public

[20] If at the end of the analysis, it is concluded that control is equally shared between public and private units, the ESA rules on joint ventures (see chapter 1.8) apply: the unit should be classified in the government sector if it is non-market and in the non-financial or financial corporation sector if it is market or considered a financial intermediary.

sector ownership would not be part of the public sector based on ownership criterion, but it could nevertheless still be part of the public sector if other indicators of control are also present.

There could be very marginal cases where public sector units hold an arithmetic minority of voting rights, but the other shareholders holdings concern much smaller amounts (i.e., the private shareholding comprises many small shareholders). In this case, it is very unlikely that a coalition of private shareholders, gathering at least 50 % + 1 rights, could oppose the public shareholding bloc and, thus, secure control over the corporation. In theory, the unit should be deemed to be private controlled under ESA 2010 since it is the power to control that matters, not whether it is actually exercised. However, in exceptional cases, a pragmatic approach could be relevant, for example assessing observed voting turnouts, which may show that public sector effectively has control through repeated majority of actual votes cast as a very large number of private shareholders might not vote or not vote in a unified manner. In such cases, which should be in any case analysed on a case-by-case basis, the unit could still be considered a part of the public sector.

**Figure 1: Assessment of control on the basis of voting rights**




The corporation under assessment is a public corporation because of the 30 % direct voting rights and the 40 % indirect voting rights held by the public corporation by which the public sector has effectively 70 % voting rights and hence control.

29. Having analysed the outcome of the aforementioned 'sufficient-by-themselves' criteria, no sufficient evidence of government control is identified then other criteria (4–9 below) also have to be considered, as ESA 2010 paragraph 20.310 further specifies that 'a number of separate indicators may collectively indicate control'. This is done on a case-by-case approach. As a result, a unit for which none of the criteria were sufficient by themselves to determine public sector control, could still be included in the public sector (even if majority owned by the private sector) by examining the totality of all the indicators.

**4) Rights to appoint, veto or remove key personnel**

This refers to the role of determining the general policy through a small number of 'influential members of the board', such as the chief executive officers and the chairperson. This will indicate control only if such key personnel are entitled to a degree of power (under various ways) which, *de facto*, gives them a decisive say in the major decisions related to the entity.

Government may have also less direct possibilities to exercise control over an entity via its role in the nomination, selection and election process established for key staff. Government may establish procedures that would create the impression that it is only to a minor or even negligible part involved

in the appointment, removal or approval of key personnel of the concerned entity. However, when examined in closer detail, it becomes evident that government de facto essentially determines or, at the very least, is substantially involved in the appointments.

An example of an arrangement that is equivalent to the direct appointment of key personnel is when government delegates the right to elect the members of the supervisory board or the board of directors to a number of predefined private bodies (often-private non-profit institutions) and only government can replace the electing entities. While it may seem that government does not provide significant input into the appointment process, since the private bodies make the decisions and there is no possibility of rejecting them, if the delegated entities make decisions that government does not approve, a real possibility exists that they may be replaced by others. A decisive factor here is that government must de facto have the genuine right to appoint the key personnel; otherwise, it would not have been able to delegate that right. In such circumstances, there is at least some influence by government although this may not necessarily establish public control by itself.

**5) Rights under special shares and options**

'Golden shares' are sometimes created in in the context of privatisation. Although, in principle, it is not any more possible for such arrangement to be granted in the EU on an ongoing basis, nevertheless the issue of legacy golden shares remain. If such shares cover powers over only some very specific contingent events and are restricted in scope and/or time, which is usually the case, they should then be considered as contingent 'reserve powers' and not considered as an indicator of control.

However, if these powers *de facto* influence the general policy of the unit, then they should be taken into account in the classification decision. If the contingent powers are actually utilised it is expected that this will be enough in itself to trigger immediate reclassification as a public unit, or even earlier, if it becomes evident that the government/public sector will, in the future, exert a decisive control on the strategy of the unit and on other key decisions.

The existence of shares purchase options, which would mean that during their lifetime a government/public unit would meet the first series of control criteria, could have the same effect. This is because the threat of the exercise of the option could give to the government/public sector a decisive influence on the strategy of the controlled unit and on other key decisions.

**6) Rights to control via contractual agreements**

This usually refers to the exclusive use by public sector entities of goods and services produced by an entity, which may indicate scope for there to be a dominant influence over the entity via contractual clauses. The contractual arrangements themselves would need to be investigated. This may also call into question the market nature of the unit in the case of output that is purchased by government (see sub-section 1.2.4.2 Specific cases of producers). If the entity is restricted from entering into sales with non-public units then this is a clear indicator of public control.

**7) Rights to control from agreements/permission to borrow**

To indicate control, government/public sector should play a predominant role in setting the conditions of the borrowing (for example, maturity, rates, forms, location, counterpart, collaterals, etc.) and/or exert a narrow control of the use of the funds by the entity (for instance for a given acquisition of equipment or shares in other corporations).

**8) Control via excessive regulation**

In some industries (in particular those that involve public utilities), a tight regime regulation would strongly reduce the room for manoeuvre of the entities regarding the determination of their general policy. Generally, the typical situation would be an entity to set up to carry out a specific activity (through delegation by government) that cannot decide to change or complement it. Thus, this criterion should apply when there are restrictive conditions to exit or to diversify the activities of the unit.

**9) Others**

ESA 2010 paragraph 20.309i specifies that control may be obtained from provisions in the statute of an entity where public sector approval is required for some important decisions such as: the allocation of its profit; the development or the abandonment of activities; merger and acquisition operations; and dissolving and changing statutes. Some provisions of this kind may indicate control.

ESA 2010 paragraph 20.309i also mentions that if an entity is fully, or close to fully, financed by the public sector then control via the funding stream may be restrictive enough to dictate the general policy. This is particularly relevant when the entity has no access (*de jure* or *de facto*) to other financing sources: if the entity lost its public sector contracts then it may not be able to replace them with other sales and so would be forced to close.

The ESA 2010 notion of control is different from the notion of independence. Many government entities operate with legal independence from the cabinet/ council of ministers or core government unit. The fact that public control is determined is a statistical classification issue and should not be interpreted as if the institutional unit was not fully independent. For example, the fact that central banks are by convention part of the public sector does not preclude them being independent entities (see ESA 2010 paragraph 20.311). In the same manner, parliament, the constitutional courts and others are clearly part of the government function whilst being independent from government ministers.

### 1.2.3.2 GOVERNMENT-CONTROLLED ENTITIES NOT RECOGNIZED AS INSTITUTIONAL UNITS

30. In ESA 2010, the analysis of control is mainly related to institutional units in order to identify whether they are controlled by government or not, and thus as a step in determining the sector classification of institutional units (see ESA 2010 Diagram 20.1).

31. Control is, however, also of importance for entities that do not pass the institutional unit test since they do not have autonomy of decision regarding their principal function. ESA 2010 paragraph 2.13 requires that such entities are classified as a part of the institutional units that control them. This often arises when an institutional unit is composed of a number of legal units or when a main unit (such as core government) comprises a number of ministries or departments within their own set of accounts.

32. Separate entities without legal status can be created that are aggregated to a main unit and, although in these situations the parent entity is often obvious, there may be occasionally a genuine doubt about this. For example, an SPE created by a public corporation may in fact be under the direct control of government. It would be the case where, for example, the SPE in question cannot receive emergency funding from the public corporation but instead must appeal directly to government.

33. In some extreme cases, the notion of control of an entity may correspond with the notion of control of an asset, which is particularly the case when the entity exists simply to own, and possibly finance, an asset. Another example is an auto-pilot arrangement where the entity is *de facto* just a collection of assets and/or liabilities. ESA 2010 occasionally refers explicitly to control of an asset, for example, in the context of captive financial institutions (see ESA 2010 paragraph 2.22).

34. Control of an entity, irrespective of whether the entity is an institutional unit or not, usually in fact concerns the control of people who are taking decisions for the concerned entity, while the idea of controlling an asset itself is altogether different. Control of an asset implies the ability to direct the use of the asset and realise the benefits associated with the asset. This can be demonstrated, among other things, through exposure to both risks and rewards. In practice, further indicators of control might include, for example, the existence of a legal title to the asset, the physical possession of the asset, or the ability to sell the asset, or the right to receive the payments linked to the asset. The risks and rewards concept used in national accounts and the notion of control of an asset are similar in that both look at the economic ownership of an asset rather than the legal ownership.

35. When the assessment of the risks and rewards is not conclusive, for example, when an entity has neither transferred nor retained most of the risks and rewards, the notion of control of an asset acts as a useful complement the general risk and rewards concept, in order to determine on which balance sheet an asset is to be recognised.

**Control of non-profit institutions**

36. The notion of control is also applicable to non-profit institutions, which might have different features and different importance (in terms of size, effect on net lending/borrowing (B.9) and debt, etc.) among EU Member States and may have an activity to the benefit of different kinds of agents.

37. Similarly to the case of corporations (and equivalent entities), control of an NPI covers the ability to determine the general policy or programme of the NPI. However, here, there is a significant difference

between market and non-market NPIs, determined according to the criteria below in sub-section 1.2.4.3 on the quantitative market/non-market test.

38. NPIs controlled by government, and considered market producers (for instance because they sell services to corporations or to households, at economically significant prices) are classified in the sector non-financial corporations (S.11). On the contrary, ESA 2010 paragraph 20.13 states that 'NPIs that are non-market producers and are controlled by government units are units of the general government sector'. Concerning control of NPIs, ESA 2010 paragraph 20.15 indicates that the following five criteria should be considered[21]:

**a) The appointment of officers**

The government may have the right to appoint the officers managing the NPI under either the NPI's constitution, its articles of association or other enabling instrument.

**b) Other provisions of the enabling instrument**

On this point, 2008 SNA paragraph 4.92 is more explicit than ESA 2010. Notably, if statutorily government already determines the functions, objectives and operating provisions, the appointment of officers would become of secondary importance. However, control by government would result if government would have the right to revoke staff and to approve budget or financial arrangements. An NPI would be considered to be controlled by government if approval of government would be required to change the statute of the entity (or the type of activity carried out by the entity), or if the entity could not dissolve itself or terminate any relation with government without such approval.

**c) Contractual agreements**

Some NPIs may enter into contracts with government units in order to perform tasks defined by government, acting as a specialised operator, notably in social areas. When such contracts are the main, if not total, part of the activity of the NPI, it is clear that government would be able to influence the general policy of the NPI. However, control should be assessed if the approval of government would be required for exiting from contracts with government.

**d) Degree of financing**

Although ESA 2010 paragraph 20.15 does not specify exactly which should be the degree of financing, 2008 SNA paragraph 4.92 indicates that government may control an NPI that is mainly financed by government. 'Mainly' must be as at least over 50 %. The control would be assessed if such financing would be permanent (and not on temporary basis) and/or if it would result in a narrow monitoring of the use of the funds and a strong influence from government on the general policy of the entity.

**e) Risk exposure**

This indicator is not developed in ESA 2010 but 2008 SNA paragraph 4.92 evokes government 'exposed to all, or a large proportion of, the financial risks associated with an NPI's activities.' In this case, the arrangement would constitute government control. Financial risks refers to ex-ante commitments taken by government on some liabilities incurred by the NPI, on possible disruptions of other sources of revenue apart from those received from government, etc.

39. ESA 2010 specifies that, in some cases, one indicator can be sufficient to establish control, but also that it is most frequently necessary to consider collectively a number of indicators and a case-by-case analysis may be frequently needed. In any case, a decisive point is the ability of the NPI to determine by itself or not its general policy.

**Control of educational units**

40. Many educational units (schools, colleges, vocational training, universities, etc.) are non-profit institutions and are generally largely funded by government. They represent a practical example for applying the ESA 2010 control criteria mentioned in the paragraph above. Most of them are financed by government funds above 50 %, since other sources, such as fees paid by parents or students or gifts, appear frequently as a minority source of funding. In some countries, government (at different levels) may take over directly some expenditure, such as teachers' salaries or building maintenance.

[21] In ESA 2010 (like in 2008 SNA) these criteria are applied only to the case of a controlling government unit. However, they may also be relevant for market producers NPIs controlled by public units not part of the government sector.

41. As a matter of principle, the mere financing of the educational unit should not be, as such, a determining criterion in classifying government-supported educational units. It is likely that government exerts some influence on the use of its funds. However, if government influence only takes the form of the respect of standards (concerning teaching programmes, the quality of the education, material conditions, teachers' competences, etc.), which are imposed on any educational unit independent of its statute, then it is not control. It is also frequent that different kinds of schools (government units, private NPIs, etc.) are part of the education system. Thus the application of similar standards or norms, to a large number of units, seems to be an important feature in the case of such NPIs.
42. This must be distinguished from direct involvement of government in significant decisions related to the school. By application of the general rule, if government appoints the managers (or approves their appointment or holds a revocation right) or gives instructions related to the everyday management of the school, thus leaving restricted decision-making capacity to educational unit's officers, the unit should be classified in the general government sector. Under these conditions, government is deemed to control such a unit if its approval is needed to create new classes or to specialise in some teaching areas, make significant expenditure in gross fixed capital formation (which could be mainly financed by government), borrow, recruit teachers, or if it can prevent the educational unit from ending its relationship with government.

## 1.2.4 Concept of a market or non-market institutional unit

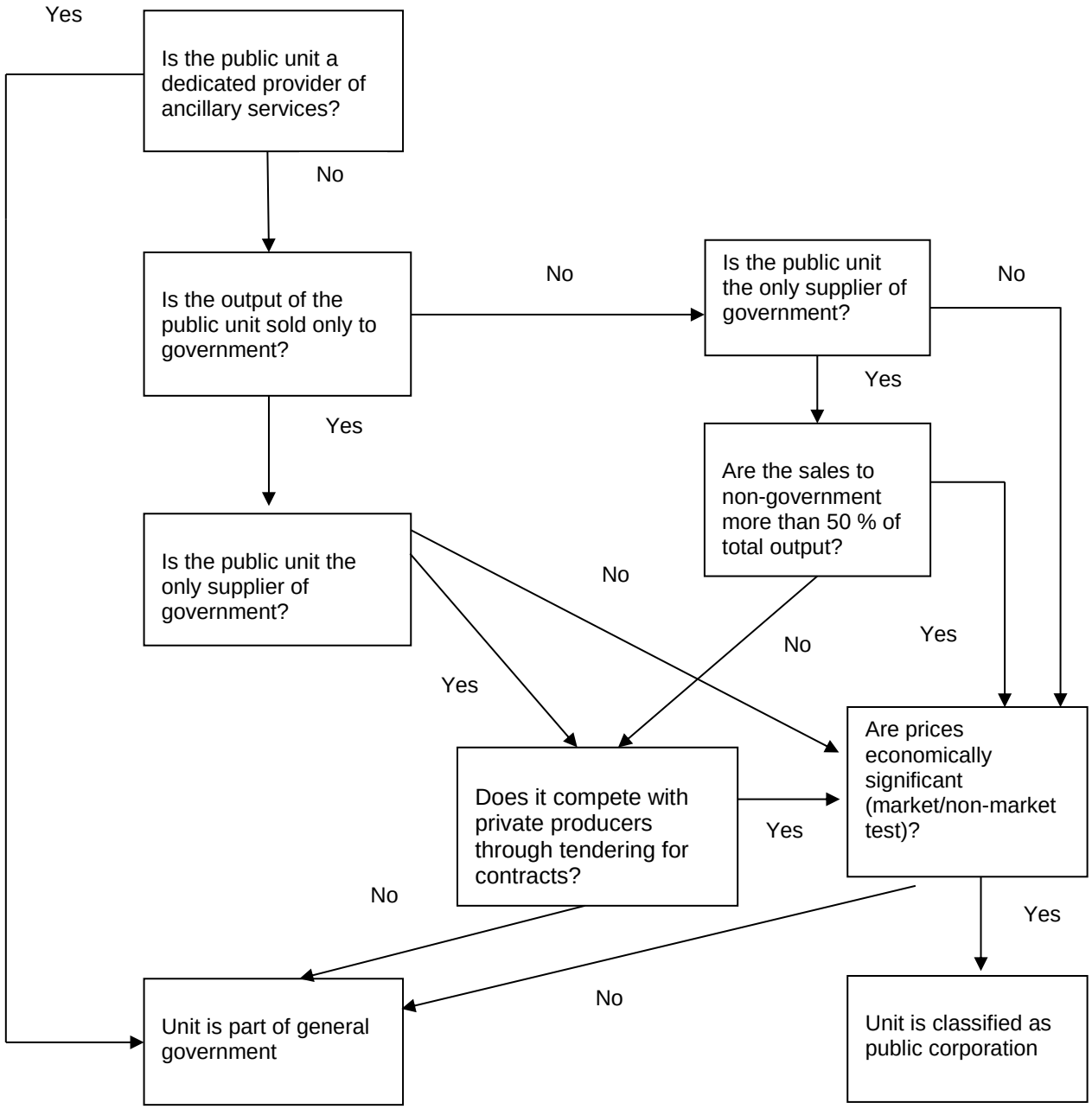
43. When the principal function of a public institutional unit is the redistribution of national income and wealth, it is to be classified by definition in the general government sector.
44. When the principal function of a public (government-controlled) institutional unit is financial intermediation activity, as defined in ESA 2010 paragraph 2.57, it must be classified outside the general government sector in the financial corporations sector, i.e. the market/non-market test (see below) is not relevant to apply (ESA 2010 paragraph 20.34). However, it must be checked whether the entity is effectively carrying out financial intermediation (managing/acquiring financial assets and incurring liabilities in its own account) and/or auxiliary financial activities (see ESA 2010 paragraphs 2.95 and 2.96). If it is not the case, the unit would be classified in the general government sector.
45. In other cases, it is necessary to check whether the unit is market or non-market: in other words, if the unit finances its operational activity by sales of goods and services at economically significant prices then it is a market producer. Market producers are classified to the corporations sectors.
46. The general government sector includes only public non-market institutional units. When these non-market institutional units have some residual market activity, it is the case of secondary local kind-of-activity units (KAUs) which are not recognised as quasi-corporations and must be included in the general government sector (see ESA 2010 paragraph 2.144 and following).

### 1.2.4.1 THE CONCEPT OF 'ECONOMICALLY SIGNIFICANT PRICES'

47. ESA 2010 states that the distinction between market and non-market producers depends on whether or not prices charged for sales of goods and services are economically significant (see ESA 2010 paragraph 20.19 and following paragraphs). A price is said to be economically significant *when it has a substantial influence on the amounts of products the producers are willing to supply and on the amounts of products that the purchasers wish to acquire.* The capacity of producers and consumers to react to economic 'signals' is fundamental as to assess market behaviour. Conversely, a price is said to be not economically significant when it has little or no influence at all on how much the producer is prepared to supply and have only a minor influence on the quantities demanded. It is thus a price that does not determine the observed levels of supply or demand.
48. Market producers sell their output at economically significant prices. Non-market producers are typically providing their output free of charge or at prices that are not economically significant. A public market producer will act as a business unit subject to market forces such that it might have to close down if it cannot survive at those prices without the permanent support of government or it would be subject to restructuring.[22]

[22] From a general point of view, normally a private market producer cannot incur losses in the long run as this would mean a negative return of equity (with possible exceptions for some entities within a group). The case of a public market producer is different in the sense that in many cases one can assume that government would provide support for public policy reasons. Usually, the RoE requirements would not apply in similar conditions for the private sector whereas, frequently, events triggering bankruptcy (such as negative equity) are not applicable to these entities. In terms of public finance, any government support to public market producers has an impact on government net lending/borrowing (B.9) and possibly its debt. However, generally, government would decide corrective measures or restructuring plans when the burden becomes too heavy on public finances.

**Decision tree**



### 1.2.4.2 SPECIFIC CASES OF PRODUCERS

49. Independently of the results from the quantitative market/non-market test described in the next sub-section 1.2.4.3, there may be cases needing specific analysis where the producer 'by its nature' is not considered a market producer. These would be relevant for a public producer. In the case of private producers (those not controlled by public sector as described above), the price is by definition deemed to be economically significant because of profit constraints.[23] On the contrary, public enterprises (mainly corporations) may be set up for public policy purposes, with various degree of public support, which may influence the price of their output. Their market/non-market nature has to be considered through both quantitative test below), which shows the conditions in which they can undertake market activity, and qualitative criteria, to establish whether they are undertaking market activity. The quantitative test result should not be considered the only relevant criterion determining the classification of the entity. It is also necessary to examine the specific nature of their activity and the specific links they have with government. It is assumed that the relevant information should be available for statisticians.[24]

**a) The public producer is not an institutional unit**

The distinction between market/non-market makes sense only if the producer is an institutional unit and is not a dedicated provider of ancillary services to government, as defined in ESA 2010 paragraph 3.12. If this is the case, the entity is servicing almost exclusively government and so has to be integrated into the government unit it depends on. There are also cases where a unit controlled by government has to be classified within the government sector, so that the quantitative test is not appropriate (see below in chapter 1.6 Specific public entities).

**b) The public producer sells its output both to government and other customers (corporations, households, non-residents)**

If the public producer is the monopoly (only) supplier of its goods and services in the economy, it is presumed to be a market producer if more than 50 % of its output is sold to private units. In the case that more than 50 % of its output is sold to government units but government purchases goods and services under the same conditions as other private units, i.e. under fully commercial terms (at very similar prices for the same goods or services), then government is deemed to be acting as a 'price taker' in economic analysis and the selling unit is treated as a market producer. In this case, it is likely that the producer would react to market signals.

If there are several suppliers (i.e. also private producers in the national economy or from abroad), and government buys a significant part of the output of the producer (i.e. more than 50 %) but if there are several competing producers, the public producer is considered a market producer if the contracting process with government takes place in an actual open and fair competition (for instance through open tender procedures). It is also likely that the producer would react to market signals, whereas consumers would have a free to choose on basis of price and/or other aspects.

**c) The public producer sells its output only to government**

In this case, government is in a dominant position (monopsony). This situation calls for a close examination by national accountants as government has in general a significant influence on the level of the prices (it is *de facto* the 'price maker').

If the public producer is the only supplier of government for this kind of good or service, possibly for technical and economic reasons (such as scale of economy), it will normally be considered a non-market producer. The exception is the case of a clear and open competition with private producers. This would notably be evidenced by an open and fair tendering procedure for the initial selection on

[23] In some cases, this criterion must be considered at the level of the private group because of non-market-based transfer pricing between entities of the group.

[24] This means that, when assessing the coverage of the production costs by the sales, it is important to identify the share of government units among the all buyers, where relevant. There are also cases when it is well known that the production is exclusively (or almost) dedicated to government's use.

commercial terms. In addition, if such competition clearly exists,[25] the specific position of the public producer is not definitive where the contract is renewed after a given period with a competitive process.[26]

50. Whatever the cases above, if this public producer is not the only supplier to government and is acting in real and open competition with other producers its market/non-market nature must always be checked through the quantitative test.

### 1.2.4.3 THE QUANTITATIVE MARKET/NON-MARKET TEST

51. To be considered as market, a producer must sell its products at an economically significant price, which, in practice, would be assessed through whether the sales of the producer cover a majority of the production costs. In distinguishing market and other non-market producers a quantitative market/non-market test (50 % criterion) is used, comparing 'sales' and 'production costs'.

52. '**Sales**' of goods and services according to ESA 2010 paragraph 20.30 and ESA 2010 paragraph 3.33 correspond to sales receipts plus all payments made by general government or the Institutions of the EU[27] and granted to any kind of producer engaged in the same type of activity. Other sources, such as for example holding gains, dividends, investment grants or other capital transfers, must not be considered in this notion of 'sales'. Sales do not take into account taxes on products (D.21) and also own-account production is not considered as part of sales in this context.

    In order to be assimilated to 'sales', these payments (to which any producer of the same activity should be entitled) must be directly linked to the volume or value of the output, and not only because the producer is engaged in such production. For example, in respect of public transport, government could choose to pay subsidies based on the number of tickets sold, such that the subsidies paid would vary directly with usage and cover the gap between the price charged to users (generally restrained by government) and the costs for the corresponding output. On the contrary, payments made to a producer irrespectively of the actual amount of tickets sold to final users, under the form of a global lump sum to cover operating deficit resulting for the insufficient coverage of costs by pricing, would not be added to the sales for the 50 % criterion. In practice, the payments included in the notion of 'sales' are labelled subsidies on products (D.31), defined in ESA 2010 paragraph 4.33 as *payable per unit of a good or service produced or imported.* ESA 2010 paragraph 3.33 (a), however, specifies explicitly that *the payments made by general government to cover an overall deficit of public corporations and quasi-corporations* that *constitute part of other subsidies on products as defined in ESA 2010 paragraph 4.35 (c)* are not considered sales.

    Other subsidies on production (D.39) receivable (ESA 2010 paragraph 4.36) and other transfers from government are not taken in account. Therefore, any subsidy for which the total amount to be paid has been fixed *ex-ante* (possibly already partially or totally paid before the whole activity has been carried out) — generally in the context of global budget negotiations focusing on factors such as maintenance of buildings, investment in technical equipment, payment for compensation of employees etc. — must not be considered as 'sales' when applying the 50 % criterion.

53. '**Production costs**', for the purpose of the market/non-market test, are defined as the sum of intermediate consumption (P.2), compensation of employees (D.1), consumption of fixed capital (P.51c), other taxes on production (D.29) payable and the net interest charge (while other subsidies on production (D.39) receivable are not deducted). To ensure consistency between the concepts of sales and production costs when applying the 50 % criterion, the production costs do not consider imputed costs made for own-account capital formation.

    The net interest charge is defined in ESA 2010 paragraph 20.31 as: *interest (D.41), payable less interest (D.41), receivable.* The net interest charge is assumed a plausible approximation of the cost of capital, which is mainly the cost of financing of (fixed) assets used in production with the idea of the opportunity cost of capital. In some cases, the net interest charge may be negative (e.g. when income from interest bearing assets is higher than interest payable or when a unit has no liabilities, but only interest bearing assets, etc.). When the net interest charge becomes negative, it should be replaced by zero in the calculation of the market/non-market test, in order to recognise the idea that the net interest charge is an approximation of the cost of capital. In general, in case of negative net interest charge, one should check carefully the economic nature of the unit, i.e. the applicability of the market/non-market test in the specific case, as well as the qualitative criteria mentioned above (see sub-section 1.2.4.2).

---

[25] This competition must be assessed not only by the presence of different firms on the domestic market but also by the degree of openness of the market to new producers.

[26] As a reminder, there are rules at the level of the EU concerning public procurements based on open competition.

[27] See more details on the treatment of EU grants/subsidies in chapter 2.6 of this Manual.

54. It should be stressed that the market/non-market test is applied to public producers (government controlled institutional units), after checking the qualitative criteria, as mentioned above in sub-section 1.2.4.2. The market/non-market test is used for public non-financial units and it is also relevant for most public units engaged in financial auxiliary activities. The market/non-market test is not used for units engaged in financial intermediation, public holdings and some other specific public units. For government controlled units, the qualitative criteria are to be checked first as they have priority over the quantitative criterion. In case that at least one of the qualitative criteria, as described in sub-section 1.2.4.2, would not be fulfilled, this would be a sufficient condition for this public unit to be classified in the general government sector (the market/non-market test would then not be applied). If the qualitative criteria would be met, the market/non-market test would be used for assessing the sector classification of the unit. However, the market/non-market test is not relevant for specific public entities described in chapter 1.6 of this Manual.

55. The market/non-market test should be applied by looking over a range of years on an individual institutional unit basis (even when entities are part of a group). In general, only when the market/non-market test holds above 50 % for several years (at least 3 years) or if, in some cases where the unit had passed the market/non-market test in year t-1 and it is strongly expected to hold it for near future, then the unit could be classified outside government. In some cases, when the unit had not passed the test for one year and it is expected not to pass it in the next two years, the unit should be immediately classified in the government sector. Minor fluctuations (or a result deemed to be a one-off exceptional case) in the ratio of sales to production costs from one year to another, do not necessarily need to result in a reclassification of institutional units (and of their local KAUs and output).

56. The market/non-market test decides also whether a government entity can be treated as a quasi-corporation (owned by the government): a quasi-corporation can be created only if the entity is a market producer.

57. In case of new public enterprises, the market/non-market test may be difficult to apply immediately due to the lack of data and/or because of a progressive gearing up.[28] The classification should therefore be based on a realistic business plan[29] and special attention should be given to check whether the unit is likely to become a market producer in a short period. In some cases, where the new unit is a merger of previous units, the results of previous periods can be used as an indication of future performance.

### 1.2.4.4 PUBLIC UNITS IN LIQUIDATION

58. In this section, liquidation means a situation in which a unit (a corporation or an assimilated entity) starts to cease its productive activity. The following methodological provisions cover public (government-controlled) units engaged in the production of goods and services or in financial intermediation (as defined in ESA 2010 chapter 2), except those units which are covered by specific resolution and recovery procedures (normally classified in the deposit-taking corporations except the central bank (S.122)).

59. When a unit classified outside the government sector (i.e. meeting the criteria as to be considered as a market producer[30]) enters into a liquidation process, progressively, its assets are realised ('monetised'), either through their sales or through the recovery of the claims held by the unit (for instance, commercial claims on customers). The corresponding proceeds are used to pay the various creditors, in a pre-determined order based on legal provisions (for example in the case of staff or of tax) and on the nature of the debts towards the creditors (senior, junior, subordinated). The remaining cash, if any, as the net worth and the own funds may be negative, is distributed to the shareholders. ESA 2010 paragraph 5.141 states that *…equity is a financial asset that is a claim on the residual value of a corporation after all other claims have been met.* Generally, in a 'voluntary' liquidation, the unit will not show a negative net worth and government is likely to receive some cash.

60. The legal framework may impose the liquidation when the unit is not in a position to face its obligations towards its creditors (case of 'bankruptcy'). This may also happen after some special measures (such as moratorium or restructuring) have failed to ensure the long-term solvency of the unit. The owner of the unit for various reasons may also voluntarily decide the liquidation. However, this distinction cannot result in different national accounts rules, which would apply independently of the origin of the liquidation. In fact, one could consider that, in the case of public units, the liquidation would result always

[28] This is notably the case for new units, which in a first step need significant capital expenditure and which will start to sell its services only after the completion of the works.

[29] The term 'realistic' should refer to several notions, such as the availability and quality of the data used, the plausibility of the hypotheses used in forecast, the competence of the authors, etc. However, when it turns out after some years that the business plan has not given the expected results, the ex-ante sector classification of the entity should be revised.

[30] In the case of liquidation of a unit in 'financial distress', the unit might already have failed the market/non-market test before entering into liquidation and, thus, it would already have been reclassified in the government sector.

from a deliberate decision of the controlling unit, notably when government would judge that it is not worth continuing to support the unit.

61. It may also happen that a government-controlling unit decides to place a public unit, not classified in the government sector, under an 'inactive' status. This means that the unit would be 'dormant' with no explicit formal decision to close it down. Such situation may be temporary or last for many years.[31] The provisions below are also applicable to this case.[32][33]

62. A liquidation process may take some time, independently of the time needed to realise/monetise the assets which may be difficult to anticipate and which depends largely on external factors. In other words, during the process the unit may still have some productive activity and obtain revenue from it. For instance, the unit may still have to honour some past orders. However, this is temporary and, as a rule, the unit is not deemed any longer to carry out its former activity. It is in addition normally closed to new business. This does not necessarily mean that there could not be, along the process, an active management of some assets and liabilities, such as sales of residual output or from inventories, renegotiations, restructuring and other technical arbitrages, but the unit has normally no longer access to capital markets.

63. There may be considerable differences as regards the way the liquidation would be conducted — either by the previous management or by a new management of the unit, or by an 'administrator'/'liquidator' entitled to take the main decisions on the liquidation, instead of the shareholders.[34] The liquidator cannot be considered as exerting control on the unit, in the sense of the definition in ESA 2010 paragraph 2.35, i.e. the ability to determine general policy, as his function is simply to compensate the creditors of the unit in liquidation by realising the value of the assets. However, the fact that government would be controlling or not the liquidation process should not be a relevant criterion for the sector classification of public units in liquidation. What only matters here is that the unit was considered as public before the entry into liquidation. Furthermore, government will bear similar risks as any other shareholder in this process.

64. There may be substantial differences among EU Member States as far as liquidation procedures are concerned. In some countries, public corporations may benefit from a special legal status, such that the normal procedures related to bankruptcy (generally at the request of creditors which are holding claims on the units) would not be applicable. On the contrary, some public corporations may have a full 'commercial' status and therefore could be submitted to the same legal provisions as any other market producer in the same situation. Nevertheless, this heterogeneity across EU Member States, should not affect the classification of the units under liquidation mentioned below.

65. Any public unit, not included in the sector of financial corporations[35], in order to qualify as a public unit classified outside the government sector, must fulfil (amongst other)[36], the 50 % criterion, independently on whether it is in a liquidation process or not. In this respect, it must be underlined that there is no exception in ESA 2010 for such public units, stating that the 50 % criterion is not to be applied, in order to decide on its classification, if a unit enters into a liquidation process. The respect of the 50 % criterion is therefore to be considered as a 'condition *sine qua non*' for a public non-financial corporation[37] to be classified outside government.

66. Under these conditions, depending on the results of the quantitative market/non-market test (50 % criterion), in normal cases[38] the unit should be classified outside the government sector as long as it passes the market/non-market test and reclassified to the government sector if it fails it, with a possible impact on government net lending/borrowing (B.9) and government (consolidated) debt. The general rule is that the reclassification should take place after a maximum of three consecutive years of non-compliance with the 50 % criterion. However, when the market/non-market test is below 50 % for a single year and it is considered that it is unlikely that the result of the market/non-market test could

[31] In some EU Member States, such status for corporations must not exceed a given period and, if the unit does not start again an activity (including a new one), it must be automatically liquidated.

[32] Usually, a dormant unit would not comply with the market/non-market test or with the financial intermediation criteria (see ESA 2010 paragraphs 2.57–2.58). As a consequence, if public, such a unit should be reclassified in government. If the dormant unit would not satisfy the market/non-market test during three consecutive years, it should in any case be reclassified in government, unless there would be evidence after the first year that the unit will not satisfy the market/non-market test also in the next two years, in which case it should be reclassified in government immediately.

[33] If data are no longer reported by a dormant unit, the last available (stock) data should be used, notably for the reporting of its debt, if any.

[34] The 'liquidator' may have a variable degree of independence, depending on legal provisions or specific arrangements. The liquidator may be accountable to a judge or to a committee of creditors, set up often in order to try to realise certain claims. Generally, in such circumstances, shareholders have no 'last say' in decisions related to the sale of assets.

[35] With the exception of financial auxiliaries.

[36] For instance, the qualitative criteria would continue to apply (e.g., the remaining sales could be only with government).

[37] Or for a financial auxiliary.

[38] When the unit would be neither in liquidation nor dormant.

reverse in the next two years, the reclassification must be implemented as soon as the market/non-market test is no longer met. However, in the case of a public unit under a liquidation process, as it is known from the outset that the unit will progressively cease its productive activity, the reclassification in government should be undertaken in the year when the unit fails the 50 % criterion for the first time.

67. In case of public units, except those units which are covered by specific resolution and recovery procedures (normally classified in the subsector S.122), which had been engaged in financial intermediation before they entered in liquidation, it must be checked whether such units under liquidation should still be considered as financial intermediaries or not. As soon as these units would not be allowed to issue new liabilities and acquire new assets, they cannot be seen as engaged in financial intermediation (as defined by ESA 2010) anymore.[39] In most cases, this would occur immediately after the entry in liquidation. As a result, they should be reclassified in government sector.

    In case a government-controlled unit with the features of a financial defeasance structure enters in liquidation, the provisions of chapter 4.5 Financial defeasance should be followed.

68. It may happen that, at the start of the liquidation process, the debt of the public unit is, all or partly, explicitly guaranteed by government (unconditional and at first demand). In addition, it is very likely that a bankruptcy would trigger an automatic call of the guarantees, as this is generally considered a default, which allows the holders of the debt to exercise their rights.[40] It is possible that, even if the unit was in a situation of severe financial distress before the entry into liquidation, the debt had not yet been called (and thus assumed by government) if the unit has benefited from transfers from government.[41] Under these conditions, the debt should be considered as assumed by the government controlling unit at the start of the liquidation process, i.e. a capital transfer expenditure (D.99) should be recorded, to the benefit of the relevant creditors, together with an increase in government debt[42], following the normal rules related to guarantees.[43]

69. In some cases, there would be no explicit guarantee attached on the individual financial instruments previously issued by the unit in liquidation, but there would be some explicit provisions (notably in law or specific regulations) such that government would be irrevocably committed to take on all the unit's debt obligations. Also in this case the provisions mentioned in the previous paragraph should apply.

70. After the transfer of the debt obligations, the realisation/monetisation of the financial assets, during the liquidation process, would enter the financial accounts, without an impact on government net lending/borrowing (B.9) when the unit has been reclassified in the government sector or would be recorded as capital transfer if the unit has not yet been reclassified, with a positive impact on government net lending/borrowing (B.9).

## 1.2.4.5 REARRANGED TRANSACTIONS

### 1.2.4.5.1. Introduction

**Three modalities of rearrangement**

71. Chapter 1 of ESA 2010, related to general features and basic principles, provides that '**rearranged transactions**' are recorded *…in order to bring out the underlying economic relationships more clearly*. Rearranged transactions include 'rerouting', 'partitioning' and 'recognising the principal party to a transaction'.

72. Concerning '**rerouting**', ESA 2010 distinguishes two cases. A first type of rerouting is defined in ESA 2010 paragraph 1.73 as follows: *a transaction that appears to the units involved as taking place directly between units A and C may be recorded in the accounts as taking place indirectly through a third unit B. Thus, the single transaction between A and C is recorded as two transactions: one between A and B, and one between B and C. In this case the transaction is rerouted*.

[39] This should not be confused with possible liquidity management or debt restructuring during the liquidation process.

[40] In some cases, the debt could be immediately liable for its whole amount (this is referred to as 'acceleration'); however, this has no impact on the recording of the assumed debt by government.

[41] However, it must be checked whether such support does not fall under the case of 'disguised' or 'indirect' calls, as mentioned in sub-section 7.4.2.1.3 Case where it is judged that government repays or will repay the debt.

[42] The capital transfer expenditure should also apply if, in the absence of explicit government guarantees, there were other legal provisions, which would oblige government to compensate in any case the creditors of a public unit in case of liquidation. However, the capital transfer expenditure should not apply, in the absence of an explicit guarantee or other legal provisions, as government would be just the unique or principal shareholder with unlimited liability.

[43] However, in some cases where the liquidated unit does not show a negative net worth (for instance in case of voluntary liquidation which could nevertheless trigger a call of guarantees) and where there is a high likelihood that the value of assets held by the unit will be recovered, this capital transfer could be reduced by the estimated value of these assets.

73. In this regard, ESA 2010 paragraph 1.74 gives the example of the social contributions paid by employers on behalf of their employees. Recording a transaction corresponding to the actual cash flow, i.e., showing a transaction between the employer and the social security funds (or any other social protection unit) only shows a specific part of the economic reality — the cash flow. Through rearranging, the transaction is adapted to the concepts and definitions of ESA 2010, i.e., to show that the social contributions are a part of the compensation of employees. In this case, rerouting means the recording of two imputed transactions, i.e., the employers are considered to pay the amount to their employees (as part of compensation of employees), who then pay the same amount to the corresponding social protection unit (as social contributions).

74. A second type of rerouting is explained in ESA 2010 paragraph 1.75 as follows: *Another type of rerouting is that of transactions recorded as taking place between two or more institutional units, even though, according to the parties involved, no transaction takes place at all. An example is the treatment of property income earned on certain insurance funds, which is retained by insurance enterprises. The system records this property income as being paid by insurance enterprises to policyholders, who then pay the same amount back to the insurance enterprises as premium supplements*. Again, this is designed to capture the economic reality and adapt the actual situation to the concepts and definitions of ESA 2010. A further example for this type of rerouting is the treatment of retained earnings of foreign subsidiaries or branches. They are considered as property income of the parent company, which in turn is deemed reinvested in the form of equity. Such types of rerouting are often referred to as 'imputation'.

75. In this context, rerouting means recording a transaction as taking place through different units as compared to the cash movements, or as taking place in an economic sense when no actual transactions are observed in the source data. Implementing rerouting is required when a unit, which is in fact at the origin of the transaction, does not appear in the actual accounting records because of administrative arrangements, or because these records reflect the actual flows of payments. When necessary, the actual cash transaction reflected in basic data sources should be disregarded in the compilation process and rerouted to the units concerned.

76. '**Recognising the principal party to a transaction**' is described in ESA 2010 paragraph 1.78 as follows: *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*.[44] In this case, unit B, which carries out a transaction with unit C on behalf of unit A, just acts as an intermediary, as an agent. Thus the transaction must not be recorded in the accounts of the unit B, instead directly between the units A and C. For public corporations, it is not necessary that there is an explicit re-funding arrangement since the principal owns the agent.

77. The term 'partitioning' refers to different situations when *a transaction appearing to the parties as a single transaction is recorded as two or more differently classified transactions* (ESA 2010 paragraph 1.77). Partitioning, or splitting of an observed value, is, for example, necessary when a PPP is recorded on the government balance sheet in national accounts. Then, the unitary payments recorded in the public budget has to be split into at least three parts and allocated to different ESA transactions (repayment of loan, interest and intermediate consumption). Another well-known example is the calculation of FISIM, which involves partitioning the actual 'interest' flows into property income and intermediate consumption. Another example is the splitting between a capital transfer and a financial transaction in the case of an acquisition of a financial asset carried out on terms outside commercial considerations. Such cases, involving partitioning, are not covered in this section as appropriate guidance is provided in other sections of this Manual (i.e. 3.5.2.5 on leases, 3.2.3.2.2 on loans, 3.5.2.4 on dividends and 6.1.2.5 on sale of service).

**Terminology**

78. The above terminology, describing different types of rearranged transactions, is often confused and in particular the term 'rerouting' is frequently (mis)used for operations falling under 'recognizing the principal party to a transaction'. In national accounts, the difference between 'rerouting' and 'recognizing the principal party to a transaction' is that, in the latter case, the involved transactions (other than the net claim existing between B and A reflecting the refund commitment of A, if any) should in principle not be recorded at all in the accounts of unit B even if they appear in its financial statements, while on the contrary 'rerouting' implies recording additional transactions.

79. In the guidance provided herewith, the generic term '**rearrangement**' is used. Deciding if a rearranged transaction should be 'rerouting' or 'principal party recognition' should then be subject of further analysis at a technical level.

[44] This may cover only the collection (for instance local government 'using' service of central government) but also the redistribution of a tax, which contains components related to different units (for instance an income tax with one part for central government and one part for local).

**Important points for consideration**

80. First, the notion of rearranged transactions cannot be separated from the source data being considered/used. Indeed, the notion of rearranging does not exist by itself, but depends on the recording in the source data in comparison with the ESA transactions. The source data used can be very diverse (budget, cash flow statement, profit and loss, balance sheet, among others) and their reporting basis can be different and, sometimes unit-specific (e.g. not necessarily following IFRS). In addition, the source data observed may be different or follow different accounting standards for the three parties typically involved. The notion of rearrangement that is pertinent for EDP/GFS generally concerns cases where the economic transaction to be recorded deviates from the recording in the source data of the unit of general government considered (e.g. the public corporation involved as an agent of government may itself correctly reflect the transaction).
81. Second, rearrangement of transactions must obviously respect the basic accounting rules of the system (ESA 2010), in particular: (1) balancing the rearranged transactions (e.g. recording rearranged financial transactions associated with rearranged nonfinancial ones in a balanced way), and (2) recording related rearranged stocks and other economic flows consistently with rearranged transactions. Thus, rearranged transactions often lead to a rearranged balance sheet, while at the same time the recognition/derecognition of an asset on/from a balance sheet obeys specific rules (e.g. risks and rewards analysis).
82. Third, and as a consequence, when involved entities have complete freedom to decide on undertaking an operation/activity within their mandate, rearrangement is aligned with the risks and rewards approach when deciding whether an asset should be recognized or derecognized in the account of an entity. However, such complete freedom is sometimes not ensured for an entity that belongs to a group. This is particular relevant for the public sector, notably for relations between government and 100 % owned public corporations. Ownership is linked with the right to influence the corporation, for example, via the supervisory board, the shareholders' meeting or to appointment/removal of key staff is connected. Exercising the ownership rights is usually related to the concept of control in national accounts. Where government directly intervenes in day-to-day operational decisions of the public corporation and an operation/activity is carried out only because of a government request, the analysis of risks and rewards should be complemented by other factors in order to conclude about the appropriate presentation of the underlying economic substance in national accounts (i.e., whether it is really the corporation's transaction or whether it is acting as an agent of government).
83. Fourth, not all of the unit's activities will be rearranged since otherwise the unit might fail to have autonomy of decision in respect to its principal function.

**Reasons and circumstances for rearranged transactions**

84. Rearrangement of government transactions might be necessary in a number of circumstances involving various operations carried out by non-government units (predominantly public corporations). Government may be involved with transactions that are rearranged for two reasons of particular importance. First, because it is at the origin of the transactions in the context of policies aimed at influencing the behaviour of economic agents. Second, because government has, under its control, public units that are entrusted to perform some tasks. This is frequently the case with development banks but also other public units, and even, in some cases, private entities, which may contribute to the implementation of specific government interventions.
85. Examples of transactions that should be subject to rearrangement via government accounts are:[45]
86. The objective of this sub-section is to specify under which conditions some transactions should be subject to rerouting via government accounts. Examples of such transactions are:

a) loans granted to some units at the request of government (e.g. observed in the aviation industry);
b) trading market instruments for price stabilisation purposes (the gold or copper price);
c) acquiring or holding of shares of public corporations at the request of government for industry policy reasons (e.g. observed in aviation, railways, defence industries and during privatisation processes);
d) granting subsidies or investment grants to some units in the context of public policies (e.g. specific tax subsidies schemes supporting renewable energy);
e) managing financial assets on behalf of government units (e.g. cash pooling undertaken by units classified outside general government);
f) providing hedging of market risks on behalf of government;
g) purchasing goods or services in order to support corporations;

[45] This list is not exhaustive.

h) collecting compulsory contributions in the context of special arrangements set up by government[46];
i) receiving fees for services which have the features of taxes in national account, etc.

**Atypical transactions**

87. Rearrangement should also be diligently considered with regard to atypical transactions carried out by non-government units. A transaction is considered as atypical if it is not part of the expected business of the unit. This is particularly the case when a transaction has the nature of a one-off or ad-hoc measure without reasonable justification derived from the basic mandate of the unit. A transaction is not considered as atypical if it is a meaningful addition or extension of the activities of the unit clearly communicated in advance or accompanied by an appropriate adjustment of the mandate of the unit. For example, if the mandate of the entity concerned generally limits its activities to support domestic economic entities and suddenly it is observed that it engages in foreign transactions, it would be indicative for rearrangement. It might be the case that the mandate generally permits an entity to enter into foreign transactions but the transactions actually carried out are not in line with the general provisions of the mandate.
88. Atypical transactions can be often one-off events. However, in some cases, atypical transactions may also have a permanent nature, but they remain a secondary and separated part of total activity of the entity (this can for example be observed in the context of energy saving schemes).
89. Atypical transactions are often observed in the areas like social housing, development aid, military services, financial stability issues or sovereign loans.

**Development banks**

90. Rearrangement might be relevant in the context of activities of development banks, irrespective of whether they operate towards domestic or foreign markets. The activities and services of these banks are often defined by law or in very close co-operation with government.
91. In addition, development banks are usually engaged in activities, where commercial banks do not offer the full range of, if any, banking services, due to insufficient profitability, high risks or lack of collateral. As a result, development banks generally operate in areas where the market does not provide financial services, or alternatively, where the price for these services is seen as socially unacceptable. Their activities thus contain very often a grant or subsidy component.
92. Since development banks usually operate in a broader scope of activities, it allows government to direct funds to specific programmes/operations under the guise of the general policy mandate of the development bank.
93. Although the activities of development banks are characterised by strong links to the government, they are not automatically rearranged through government accounts. However, they should be closely analysed in this context.

**Identifying transactions to rearrange**

94. Identifying transactions for rearrangement is a demanding task, usually requiring a thorough analysis of all circumstances that contributed to the design and execution of a transaction. Thus, it is only possible to provide general guiding principles rather than an exhaustive list of such transactions.
95. The following three sub-sections lay out the general rules for the three potential rearrangement types when a non-government unit is (1) acting as a 'government agent' or at government's request, (2) sharing with government the risks and the rewards of a transaction/programme or (3) is carrying out non-commercial transactions. In addition, sufficient and indicative indicators are listed pointing at such potential rearrangement cases.
96. The indicative circumstances/indicators are insufficient by themselves but they require further examination. As soon as they are identified, it is expected that the facts will be investigated and analysed in detail. If, however, two or more indicative circumstances occurring at the same time, this may collectively suffice to demonstrate the need for rearrangement (principle of additivity). In addition, the decision whether a transaction or a programme should be rearranged or not is frequently judgmental in nature since the analyses of, for example, the exposure to risks and rewards include statistical and judgmental elements.

[46] For instance, government may impose a price on some transactions that does not reflect market conditions or may oblige economic agents to pay contributions, decided by government, to third parties when engaging in some activities or holding some assets.

97. The indicators presented in this guidance do not claim to be exhaustive and, moreover, they are also characterized by the fact that they come often irregularly to the knowledge of national accountants via various information channels.

98. In order to identify potential rearrangement transactions, statisticians need to use a variety of data sources and non-standard methods to collect information. The statistical surveys are usually only able to capture cases which follow general principles. Hence, for many (especially new) cases, which are only identifiable under non-standard (e.g. oral statements of government officials) or indicative conditions, statisticians can rely only on information provided via news, articles, papers, reports, etc.

#### 1.2.4.5.2. Rearranging of transactions carried out by non-government units when they act as 'government agents' or at government's request

99. Rearrangement of transactions should be undertaken when a unit acts solely or predominantly as an agent of government when carrying out some transactions. As it is recognised by ESA 2010 paragraph 20.204, *some operations originated by government units may involve the intervention of entities not ruled by the legal government framework, including public corporations. Though they will not be reported in the budget, and might escape the usual control procedures, it is appropriate to record them within government revenue and expenditure. This is because the ESA recognises when government is the principal party to an operation and the public corporation is acting as an agent*.

100. More precisely, a non-government unit, in most cases a public corporation, for example, a development bank, is asked to implement a transaction at the request of government. In this case, the non-governmental entity has limited freedom in defining the conditions of the transaction. As long as such transactions do not constitute the majority of activities, the entity is not to be reclassified inside general government but the specific transactions are to be rearranged.

101. 'Acting at the request of government' does not cover the case where government merely provides a general mandate to the entity (stipulating its general policy and/or strategy of the unit) in its role as owner. A specific government request for a transaction, activity or program should be clearly distinguished from the business mandate of a corporation defining the tasks and/or business lines in which the entity may operate. The autonomy of decision of the non-government unit as a whole is not in question if the unit has autonomy of decision in exercising its principle function under its general policy/mandate/regular business.

102. In particular, development banks may be limited to carry out a limited number of business activities based on their mandate described by government in the context of the EU state aid rules. Such a government entrustment is materially different from the aforementioned specific government request for a transaction, activity or program and should therefore not be seen as triggering element for rearrangement.

103. Rearrangement should be applied as soon as government requests an entity to carry out a specific transaction whereby it de facto limits the operational autonomy of the entity with regard to a specific transaction (i.e., government initiates or orders the transaction with no meaningful possibility for the unit to oppose it).

104. Such a request may be explicitly associated with the agreement to take over all the risks and rewards of the assets involved, but not necessarily so (e.g. when involving fully-owned public corporations): (a) the agreement may involve some sharing of risks and/or rewards, or (b) even no agreement of refund exists at all, for instance on the understanding that the net worth of government will reflect the net worth of the public corporation. In this case, the analysis of risks and rewards is not decisive. Instead, the key aspect here is that the entity is instructed by government to enter into the transaction, limiting its capacity to independently conduct the activities.

105. An example is when a unit might be considered as a kind of 'accounting tool' for government. This may appear in official statements or documents, and even in the annual report of the unit, clearly mentioning that the unit is not accountable for the transaction. The latter may be presented segregated in the financial statements. This may be important if the unit is borrowing financial resources on capital markets for its own activity.

106. There may be different reasons for which governments prefer to use the services of such units instead of undertaking the transaction directly, such as: the expertise of the unit in a specific area, their higher efficiency than government administration, their independence from government administration, their frequent relations with the beneficiaries, or the hope of an accounting effect in the domain of public finance. It has also been observed that government uses public corporations to support other entities if State Aid rules might prevent a direct government intervention.

107. As a general rule, if government aims at granting a benefit/support to an entity via a specific transaction or programme implemented by a non-government unit, the transaction/programme is to be rearranged to government. This applies particularly if the non-government unit has no freedom in setting a dedicated beneficiary/counterparty or setting substantial characteristics (e.g. volume, maturity,

interest/price charged) of the specific transaction or programme for a group of entities.[47] In such a situation, the non-government unit acts rather like a government agent even if the non-government unit can define some characteristics and/or is bearing risks and/or reaping rewards related to this specific transaction/ programme.

108. This general rule does not apply to cases in which the non-government unit is asked by government to only distribute government funds, which are already recorded in government accounts (e.g. on-lending of loans or distributions of subsidies/grants). Such government funds might be shown at the level of the non-government unit as subsidies on product while, at the same time, they might represent subsidies on production for the beneficiary (e.g. grant on interest charged). However, if there is evidence that the subsidy is primarily intended to support the non-government unit rather than the final recipient, the subsidy should be considered as subsidy on production to the non-government unit, which may result in the reclassification of the unit (if, in this case, the unit does not meet the quantitative 50 % criterion).

109. As a result, it should be analysed if government nominates the beneficiary/counterparty or aims at benefiting an entity via a specific transaction or programme.

110. In this context, any of the following indicators is considered **sufficient for rearrangement**:

a) There is evidence that government has requested the unit to carry out the specific transaction through instructions under various forms (decree, formal letter, official statement, etc.).[48] Among other things, it covers:

- granting loans to some units at the request of government. It also includes the case when government signs an agreement to provide loans to third parties (usually third countries) where the provision of these loans and setting of the conditions are delegated to a non-governmental unit (most often a development bank);
- acquiring or holding of shares of public corporations at the request of government for industrial policy reasons (e.g. in aviation, railways, defence industries and during privatisation processes);

b) government predetermines almost all[49] terms and conditions (e.g. interest rate, individual beneficiaries, repayments terms, loan amounts) of a transaction or a programme such that the unit's ability to effectively influence the contracts becomes negligible;

c) the general government officials are the majority of members in investment committees which actual decide if the unit should undertake a specific transaction(s). A general government official is considered to be a person representing the executive governmental powers and might even include the representatives of legislative or judicial powers of government (see section 1.2.2, paragraph 12 of this Manual).

111. Moreover, the following indicators are **indicative** for rearrangement:

a) there is other evidence that a transaction/programme has been carried out at the request of government with limited freedom of the non-government unit in defining the conditions. It concerns, for example, statements made in the annual reports of the units in question, of supervisory authorities or of auditors, etc. In some cases, it may even concern oral statements by government officials;

b) when a non-governmental unit carries out tasks for which a genuine government responsibility exists or which covers stated public policy goals/commitments. In such cases, it should be analysed if the unit acts in its own interest or as an agent of government — even if there is no explicit reference that the entity is acting on behalf of government;

c) when a transaction or programme was previously directly administered and recorded in the government accounts (with related stocks and flows) and then was transferred to the unit, either with only minor changes or with no change to the relevant parameters;

d) loans that have become subject to Paris Club[50] negotiations if they have been provided not directly by the government but by other public financial institutions, frequently development banks.

[47] This does not concern programmes under which a non-government entity has a complete freedom in undertaking and executing the transactions (see paragraph 61).

[48] Such instructions should be clearly distinguished from formal letters that might be exchanged to confirm that a transaction is compliant with the mandate of the entity.

[49] There might be situations where government determines only some terms and conditions of a transaction, but it is considered that these terms and conditions are the essential elements for the transaction. In such cases, the situation is considered to be equivalent to a situation where government determines almost all terms and conditions.

[50] The 'Paris Club' is a group of 'official creditors with which the developing countries can renegotiate their debt with creditor countries.'

Rearrangement should be undertaken if government officials do not act in the interest of the public financial institution/development bank (i.e. maximizing recoveries or fulfilling the general mandate of the public financial institution/development bank). This is particularly the case if the negotiations result in a non-negligible debt cancellation component, thus the remaining part of the loan should be rearranged to government.

#### 1.2.4.5.3. Rearrangement of transactions carried out by non-government units based on risks and rewards

112. An asset, under normal circumstances, is recorded in the balance sheet of the entity that will assume the risks and rewards related to the asset. Rearrangement should be undertaken when, *de jure* or *de facto*, the principal party assumes all risks and rewards of the asset that for some reasons does not already feature in its balance sheet (and presumably features instead in the balance sheet of the agent) or when it is appropriate to report, in the balance sheet of a party involved in the transaction, an asset and a matching liability to properly reflect its involvement or the sharing of risks and rewards (see above).

113. *A priori*, if correct accounting is applied, the source data should show the asset on the balance sheet of the principal when the latter assumes the risks and rewards. Conversely, the agent should not show the given asset on its balance sheet. In case it does, the asset may be located in a segregated part of the balance sheet, with a corresponding liability entry to neutralise the impact on the agent's net assets. However, in practice, all sorts of situations can be found in the source data (of both the principal and its agent) used by compilers. Rearrangement can thus be required.

114. Rearrangement may also be undertaken when a unit acts under substantial government involvement, taking no (or minor) risks but benefiting from the rewards, in certain conditions that are explained below.

115. Rather than merely acting as an agent of government, in this case the unit normally shows a higher involvement in the implementation of the transaction. For instance, the unit has incentives to perform at its best, and take rewards in the form of a larger operating margin (frequently paid by government). In this situation, the government influence is demonstrated by the involvement in the design of a programme (e.g. to support SMEs) or by the fact that the government imposes substantial conditions on the transaction or programme which usually belong to the core tasks of a corporation (e.g. volume, counterparty and/or price/interest charged).

116. Government usually takes over the risks through the existence of dedicated guarantees or other arrangements. In general, the sole existence of guarantees does not impact the classification of its assets and liabilities since the system generally treats guarantees as contingent liabilities. However, if the guarantee or guarantee-like arrangement is clearly linked with the substantial government involvement in designing a programme or a transaction, it is then considered as a dedicated guarantee arrangement that requires rearrangement.

117. In contrast to dedicated guarantees on assets or liabilities, the existence of a blanket guarantees on assets and/or liabilities, as well as some forms of implicit liabilities like an institutional liability, are not indicators for rearrangement, but should be closely analysed in the context of sector classification of the entity itself. They are more a global form of protection of the whole entity itself or of its creditors.

118. In the context of the above, any of the following indicators is **sufficient** for rearrangement:

a) government assumes most of the risks and most of the rewards on an asset, despite a non-governmental unit having legal ownership. Among others, it covers the cases when, on behalf of government, a non-government unit manages financial assets (e.g. cash pooling), provides hedging of market risks or trades market instruments for price stabilisation purposes (the gold or copper price);

b) when government imposes substantial conditions on a transaction/programme and the entity is compensated for at least half of the related losses. This is notably the case where transactions or programmes are accompanied by additional government guarantees on the related assets and/or liabilities.

#### 1.2.4.5.4. Rearrangement in the context of non-commercial transactions carried out by non-government units

119. Rearrangement should also be considered in the context of non-commercial transactions carried out by non-governmental units. In these cases, the mere characteristics of the activities (e.g. redistribution of income and wealth, structural losses) might provide sufficient evidence of the existence of government influence and might require rearrangement.

120. If a non-government unit carries out transactions that result *de facto* in the redistribution of income and wealth it is sufficient for rearrangement since this is a task of government. The redistribution of income is

often disguised as a price adjustment (e.g. fees), whereas it has in substance the nature of a tax, subsidy or social benefit mechanism. This is particularly the case in government promotion of renewable energy where non-government entities collect taxes and provide subsidies under the guise of the existing energy price system. Similarly, government could use non-government entities to provide investment grants, interest/redemption subsidies or other grants to corporations, private households or non-profit institutions.

121. Rearrangement should also be applied if, while the unit acts in general as a market producer with regard to a specific transaction/programme, it cannot be demonstrated that the unit strives for economically significant prices for the products concerned, as defined in ESA 2010 paragraph 3.19 and ESA 2010 paragraph 20.23.

122. Rearrangement is also needed in the case when the non-government unit's own prices are pre-assigned or modified (high pricing or low pricing) in order to support public policy purposes. For example, government may ask a non-government unit to purchase/sell goods and services of/to a specific corporation at higher/lower prices in order to support another corporation.

123. However, transactions below the usual market terms do not always have to be related to government interventions and they are often observable in the context of business targets to increase supply or competition pressure on the price (e.g. opening markets for electricity or telephone). Providing services at below-market terms is also often observed in the context of cross-subsidising activities in private corporations (i.e., the return on some activities is supporting less profitable or even loss-making activities).

124. In the context of the above, the following indicators are **indicative** for rearrangement:

a) the conditions used in the contract or agreement between the business partners and the non-governmental entity are set considerably below the terms usually applied by the entity, after accounting for subsidies on product. In particular, this is a case when the agreed terms do not allow to cover the related administration and borrowing cost (including opportunity cost of own funds). If the entity is constantly operating on non-market terms, a reclassification of the unit may be more appropriate than rearrangement;

b) the contract or agreement between the business partners and the non-government entity involves a government subsidy on production (not on products) and only because of that the non-government entity is not constantly loss-making on these activities;

c) the contract or agreement, which is carried out by the non-government unit, is fundamentally associated with losses after subsidies on products;

d) the unit enters into rescue operations linked to financial and non-financial institutions/corporations, notably where previously no, or comparatively minor, business relations existed and the assumed burden is out of proportion to the possible benefits resulting from such operations.

125. In contrast, exceptional or occasional occurrences of losses related to a specific transaction within a group of similar transactions or within programmes would not necessarily be considered as a decisive factor for rearrangement.

#### 1.2.4.5.5. Recording of rearranged transactions

126. Amongst rearranged transactions, cases of rerouting or of partitioning do not create particular accounting difficulties. In contrast, principal party recognition may lead to difficulties that originate from the fact that cash flows are undertaken by an agent (e.g. a public corporation) that may or may not be refunded. Technically, various recording options might be possible depending on the characteristics of a transaction to be rearranged: financial or non-financial, funded/repaid or not by government, existence of segregated accounts (see examples below). However, as a general rule, the accounting should not only result in entries in non-financial accounts but also in financial accounts in order to show the economic reality that government is using the financing capabilities of an entity.

127. In the case of non-financial transactions, such as 'channelling' subsidies or investment grants to beneficiaries, it is likely that government provided or will provide the resources for undertaking the transactions. Normally, as government does not expect any return on the funds, the funding should already be included as an expense in the source data of government. In this case, it is appropriate to record the subsidies to beneficiaries directly/only in government accounts. Timing differences between the subsidy accrual and the government settlement may take the form of a government payable/receivable — perhaps a loan, (in recognition that the public entity is providing an advance to government), or an 'other accounts payable'. However, in other cases, when the transaction is financed by the public unit itself with no prospect of government refund an entry in equity is appropriate (withdrawal of equity from the public corporation).

128. In other cases, government may ask a unit to engage in a financial transaction on government's behalf. This frequently takes the form of loan disbursement for specific purposes (such as to foreign governments). It may also cover cases where government asks the unit to invest some funds in defined categories of financial assets (such as management of 'sinking' funds for debt amortisation, environmental funds, or natural disasters funds). Government may also ask a unit to carry some equity stakes on its behalf (recorded in the financial accounts, if there are effective expectations of return). Government may provide the necessary financing for the transaction/programme and, in this case, the impact on government liabilities has already taken place. Timing differences between the loan granted (or equity acquired) and payment may take the form of a government payable — in most cases a loan (in recognition that the public entity is providing an advance to government), or an 'other accounts payable'. However, in other cases, the transaction is financed by the unit itself and, in this case, the corresponding liability should be rerouted to government, through an imputed loan between the unit and government, 'mirroring' the features of the underlying borrowing.

129. The recording of rearranged transactions to government should always be 'gross' (no netting showing only the final impact on government net lending/borrowing — B.9) and should be implemented even in case where there is no impact on government net lending/borrowing and on the outstanding amount of government debt. The main reason is that government finance statistics are not restricted to the amount of government net lending/borrowing and debt. Many other indicators are widely used such as level of government expenditure and revenue, tax burden, etc.

### 1.2.4.5.6. Accounting examples (simplified)

130. In the following, four accounting examples are presented, all of which refer to the standard case of rearrangement involving a 100 % government-owned public corporations.

131. Accounting examples 1 and 2 refer to the case where a wholly government-owned development bank grants a loan to a small or medium-sized enterprise (SME, classified in S.11) in the framework of specific programme, in which the government has exercised substantial influence on the terms and conditions. The development bank maintains some room for manoeuvre in the implementation of particular transactions. Both examples are based on the following assumptions:

- at the start of year t the development bank has 1 000 in AF.2 assets and an equity liability of 1 000 in AF.5. The SME has 100 in AF.2 assets and the government has 1 000 in AF.5 assets (its equity in the development bank);
- at the beginning of the year t the SME receives a 5-year loan from the development bank for the amount of 1 000. The loan issued carries interest of 2 %, which is settled in cash at the end of the year;
- the development bank refinances by issuing a debt security of 1 000 to the market at the start of the year. This carries interest of 2 % and is settled at the end of the year;
- any repayment of the loan by the SME would similarly need to be rearranged, i.e., the SME repays government and then government repays an identical amount to the development bank on its imputed debt instrument;
- the difference between the above examples is that in example 1 the development bank does not have separately managed accounts for assets and liabilities that are acquired or issued in the framework of the mentioned programme for SMEs, whereas in example 2 the development bank maintains a specific account for these transactions.

132. Accounting example 3 considers the case where the government wants to subsidize a certain SME but instead of granting the subsidy itself and borrowing the necessary funds on the capital market, the development bank is instructed to grant the subsidy. The government does not reimburse the subsidy granted by the development bank. Accounting example 3 is based on the following assumptions:

- at the start of year *t* the development bank has 1 000 in AF.2 assets and an equity liability of 1 000 in AF.5. The SME has 100 in AF.2 assets and the government has 1 000 in AF.5 assets (its equity in the development bank);
- at the beginning of the year t the SME receives a subsidy from the development bank for the amount of 1 000;
- the development bank finances the subsidy from its existing cash assets;
- using the financial capabilities of the development bank to finance the subsidy is recognised by recording an equity withdrawal in the government accounts.

133. Accounting example 4 is a modification of example 3 and it reflects the case when the development bank pre-finances the subsidy (i.e., government commits to reimburse the subsidy later on). Using the financial capabilities of the development bank to pre-finance the subsidy is reflected by the imputation of a loan from the development bank to government. At the time when the government reimburses the development bank for the pre-financed subsidy, the loan is repaid. All other assumptions are the same as in example 3.

**Example 1**

The development bank does not have segregated accounts meaning that the assets and liabilities acquired/issued in the context of rearrangement are held together with the development bank's own assets and liabilities.

**Reporting year t:**

**Opening balance sheet year t**

| A (S.12) Development bank | | L | | A (S.11) SME | | L | | A (S.13) Government | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AF.2 | 1 000 | AF.5 | 1 000 | AF.2 | 100 | | | AF.5 | 1 000 | | |
| | | B.90 | 0 | | | B.90 | 100 | | | B.90 | 1 000 |

**Non-financial accounts**

| U (S.12) Development bank | | R | | U (S.11) SME | | R | | U (S.13) Government | | R | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D.41 | 20 | D.41 | 20 | D.41 | 20 | | | D.41 | 20 | D.41 | 20 |
| B.9 | 0 | | | B.9 | – 20 | | | B.9 | 0 | | |

**Financial accounts**

| A (S.12) Development bank | | L | | A (S.11) SME | | L | | A (S.13) Government | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| F.4 | +1 000 | F.3 | +1 000 | F.2 | +980 | F.4 | +1 000 | F.4 | +1 000 | F.4 | +1 000 |
| | | B.9f | 0 | | | B.9f | –20 | | | B.9f | 0 |

**Closing balance sheet year t**

| A (S.12) Development bank | | L | | A (S.11) SME | | L | | A (S.13) Government | | L | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AF.2 | 1 000 | AF.5 | 1 000 | AF.2 | 1 080 | AF.4 | 1 000 | AF.5 | 1 000 | AF.4 | 1 000 |
| AF.4 | 1 000 | AF.3 | 1 000 | | | | | AF.4 | 1 000 | | |
| | | B.90 | 0 | | | B.90 | 80 | | | B.90 | 1 000 |

**Example 2**

The development bank maintains a specific account to separate the activities with the SMEs from its other activities. As a result, all cash flows that concern its operations with the SMEs can be clearly identified - allowing the separation of the assets and liabilities to be rearranged. In such a case, the loan assets and their financing through securities issued by the development bank can be recorded directly in the government accounts.

**Reporting year t:**

**Opening balance sheet year t**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| AF.2 | 1 000 | AF.5 | 1 000 |
| | | B.90 | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| AF.2 | 100 | | |
| | | B.90 | 100 |

| A (S.13) Government | | L | |
|---|---|---|---|
| AF.5 | 1 000 | | |
| | | B.90 | 1 000 |

**Non-financial accounts**

| U (S.12) Development bank | | R | |
|---|---|---|---|
| | | | |
| B.9 | 0 | | |

| U (S.11) SME | | R | |
|---|---|---|---|
| D.41 | 20 | | |
| B.9 | –20 | | |

| U (S.13) Government | | R | |
|---|---|---|---|
| D.41 | 20 | D.41 | 20 |
| B.9 | 0 | | |

**Financial accounts**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| | | | |
| | | B.9f | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| F.2 | +980 | F.4 | +1 000 |
| | | B.9f | –20 |

| A (S.13) Government | | L | |
|---|---|---|---|
| F.4 | +1 000 | F.3 | +1 000 |
| | | B.9f | 0 |

**Closing balance sheet year t**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| AF.2 | 1 000 | AF.5 | 1 000 |
| | | B.90 | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| AF.2 | 1 080 | AF.4 | 1 000 |
| | | B.90 | 80 |

| A (S.13) Government | | L | |
|---|---|---|---|
| AF.5 | 1 000 | AF.3 | 1 000 |
| AF.4 | 1 000 | | |
| | | B.90 | 1 000 |

**Example 3**

**Subsidy with no reimbursement by government**: the development bank is providing a subsidy that is rearranged through the government accounts. The accounting example shows the rearrangement of the subsidy through the nonfinancial accounts and the financing of the subsidy via a government withdrawal of equity from the development bank.

**Reporting year t:**

**Opening balance sheet year t**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| AF.2 | 1 000 | AF.5 | 1 000 |
| | | B.90 | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| AF.2 | 100 | | |
| | | B.90 | 100 |

| A (S.13) Government | | L | |
|---|---|---|---|
| AF.5 | 1 000 | | |
| | | B.90 | 1 000 |

**Non-financial accounts**

| U (S.12) Development bank | | R | |
|---|---|---|---|
| | | | |
| B.9 | 0 | | |

| U (S.11) SME | | R | |
|---|---|---|---|
| | | D.3 | 1 000 |
| B.9 | +1 000 | | |

| U (S.13) Government | | R | |
|---|---|---|---|
| D.3 | 1 000 | | |
| B.9 | –1 000 | | |

**Financial accounts**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| F.2 | –1 000 | F.5 | –1 000 |
| | | B.9f | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| F.2 | +1 000 | | |
| | | B.9f | +1 000 |

| A (S.13) Government | | L | |
|---|---|---|---|
| F.5 | –1 000 | | |
| | | B.9f | –1 000 |

**Closing balance sheet year t**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| AF.2 | 0 | AF.5 | 0 |
| | | B.90 | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| AF.2 | 1 100 | | |
| | | B.90 | 1 100 |

| A (S.13) Government | | L | |
|---|---|---|---|
| AF.5 | 0 | | |
| | | B.90 | 0 |

**Example 4**

**Subsidy with reimbursement by government:** the government instructed the development bank to grant a subsidy to the SME with the commitment to reimburse, at a later stage, the necessary financial resources to the development bank. The accounting example shows the rearrangement of the subsidy through the nonfinancial accounts and the use of the financing capabilities of the development bank through the imputation of a loan to government.

**Reporting year t:**

**Opening balance sheet year t**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| AF.2 | 1 000 | AF.5 | 1000 |
| | | B.90 | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| AF.2 | 100 | | |
| | | B.90 | 100 |

| A (S.13) Government | | L | |
|---|---|---|---|
| AF.5 | 1 000 | | |
| | | B.90 | 1 000 |

**Non-financial accounts**

| U (S.12) Development bank | | R | |
|---|---|---|---|
| | | | |
| B.9 | 0 | | |

| U (S.11) SME | | R | |
|---|---|---|---|
| | | D.3 | 1 000 |
| B.9 | +1 000 | | |

| U (S.13) Government | | R | |
|---|---|---|---|
| D.3 | 1 000 | | |
| B.9 | –1 000 | | |

**Financial accounts**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| F.2 | –1 000 | | |
| F.4 | +1 000 | | |
| | | B.9f | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| F.2 | +1 000 | | |
| | | B.9f | +1 000 |

| A (S.13) Government | | L | |
|---|---|---|---|
| | | F.4 | +1 000 |
| | | B.9f | –1 000 |

**Closing balance sheet year t**

| A (S.12) Development bank | | L | |
|---|---|---|---|
| AF.2 | 0 | AF.5 | 1 000 |
| AF.4 | 1 000 | | |
| | | B.90 | 0 |

| A (S.11) SME | | L | |
|---|---|---|---|
| AF.2 | 1 100 | | |
| | | B.90 | 1 100 |

| A (S.13) Government | | L | |
|---|---|---|---|
| AF.5 | 1 000 | AF.4 | 1 000 |
| | | B.90 | 0 |

### 1.2.4.6 SPECIFIC CASE OF PUBLIC HOSPITALS

134. Public hospitals[51] are a specific case[52] in the context of the sector classification of public producers. The reason is mainly due to the fact that it is one of the main responsibilities of government to organize the health care services in each EU Member State, as it is part of its public policy to ensure that all the community can access the health care providers.

135. The ways in which government organizes the provision of health care services are numerous. For instance, government can regulate the supply of public and/or private hospitals by geographic area, or it can impose constraints in the provision of same services, or can regulate the general system of prices with or without specifying the price for each specific treatment. The purpose of this sub-section is therefore to identify the key points that compilers have to take into account when dealing with the classification of public hospitals, namely and mainly, the degree of control of government, the presence of a situation of real competition with private hospitals and the absence of sustained financial losses of public hospitals.

136. Control over a hospital is recognizable from the list of indicators mentioned in ESA 2010 paragraph 20.309 (and in section 1.2.3 Concept of a government-controlled institutional unit). If government determines the general policy of the public hospital, the hospital would be considered to be controlled by government. It is important in this context to assess the degree of control exercised by government. In some cases, it is such that, *de facto*, the public hospital cannot act with full autonomy. Notably, this would cover cases where its capital formation (for extension/renovation of buildings or for acquisition of expensive equipment) may be decided/vetoed by its controlling unit or by an authority responsible for health policy implementation. When government permission is required for acquiring machinery or complex equipment or for borrowing in the market in order to finance the acquisition of new assets, it is government (and not the hospital) which is empowered to take the economic decisions on the assets and liabilities of hospitals. In such cases, the public hospitals should be classified within the general government sector[53].

137. The presence of a real market competition should be carefully checked by verifying if public hospitals are really competing in practice with private hospitals. The competition can be assessed by checking the presence of private hospitals operating in all the different fields and the willingness of the private sector to enter in the market in all the fields. It is crucial, in this respect, to verify if the openness of the market is only theoretical or not. In other terms, it is necessary to check if public and private hospitals are effectively supplying, in practice, the same services in all areas and if there is a real possible choice for patients or prescribers. In such cases where market competition would only be purely theoretical and not found in substance, public hospitals should be classified in government.

138. Thus, in a situation of real market competition, a hospital can decide which health services it wants to provide on the basis of profitability considerations or it can decide to adjust the prices in order to influence the demand. There are situations where the prices can be set up unilaterally by government (which is usually the dominant purchaser) or under a contractual agreement between parties, in a larger context, between the economic actors (government, hospitals and insurance health units). In this context, it would be necessary to verify if a specific system of prices exists only for public hospitals, which would differ from the one for private hospitals (with the consequence that the public hospitals will have to be reclassified in the general government) instead of a pricing system applicable to both private and public hospitals. Moreover, it will also have to be checked if the prices are set in such a way which would not allow *de facto* a market competition, as for instance it would be observed that prices for some medical services would be too low to induce private units to participate in the provision of such services, as it would be unprofitable to do so.

139. Public hospitals, because of their statute of public producers in the sector of public health, might have an obligation to produce such services (which must be obligatorily provided by some units) which would likely *de facto* not cover their production costs, with the consequence that they would usually run losses. On the contrary, a private hospital can and will most likely decide not to enter into a market concerning the provision of unprofitable services as they could not survive making loses on a persistent basis. As a result, they might provide only a limited range of profitable health care services whereby public hospitals, could provide a wider range of health care services and therefore run losses.[54] In such circumstances,

[51] The term 'hospital' in this sub-section 1.2.4.6 refers to the health care institutions that provide medical, surgical, or psychiatric care and treatment for sick or injured people and which, in order to do so, use buildings and dedicated equipment and employ specialised staff. According to the NACE classification, there is a specific code for the hospital activities (86.1). However, this code has to be used only on an indicative basis, because other human health activities (86) or residential care activities (87) should be checked in this context.

[52] For this reason, since 2002, this Manual has always included a specific part on public hospitals

[53] Public hospitals may be controlled by different government subsector according to institutional arrangements in Member States. However, when a hospital is in majority financed by social contributions to Social Security entities (and not from subsidies from government raising taxes), for practical reasons, it might be included in the subsector social security funds (S.1314).

[54] The existence of quasi-permanent losses as such is not an indicator that there is not full competition. On the contrary, the fact that public hospitals are profitable (or at least, not incurring permanent losses) is also not a sufficient indicator that there is real market competition.

where competition would be limited and public hospitals in most cases would run losses on an almost persistent basis due to government policy, public hospitals should be reclassified with the relevant controlling government subsector being responsible for covering the resulting deficits on a regular or irregular basis.[55]

140. The support of government to public hospitals might take different forms, such as covering regularly or unregularly (e.g. every 5 years) their losses, being committed to assume the accumulated debt (as debtor of last resort), financing in total, or for a predominant part, the acquisition of equipment, (especially when particularly expensive), etc.[56] Any government intervention (either observed by experience or foreseen from official commitments),which would cover the business risk of public hospitals, would highlight a difference in respect to the private sector and would reflect a situation of a *de facto* no real market competition. Therefore, if the hospitals are public and the conditions of a real market competition would not be satisfied (as evidenced, amongst other, by public hospitals incurring regular losses or accumulating significant debts and government support being continuously observed on an aggregated basis and not for individual public hospitals separately), the public hospitals will have to be classified in government.

141. In this respect it is to be underlined that the classification of public hospitals in government sector will also provide a more faithful picture of government accounts, as losses will be accounted in net lending/borrowing (B.9) of government on a regular yearly basis according to the performance of the individual hospitals every year and not according to when the government might decide to cover the losses incurred by way (for instance) of assuming the debt of the hospitals every X years and possibly choosing the most favourable moment for when to impact government accounts.

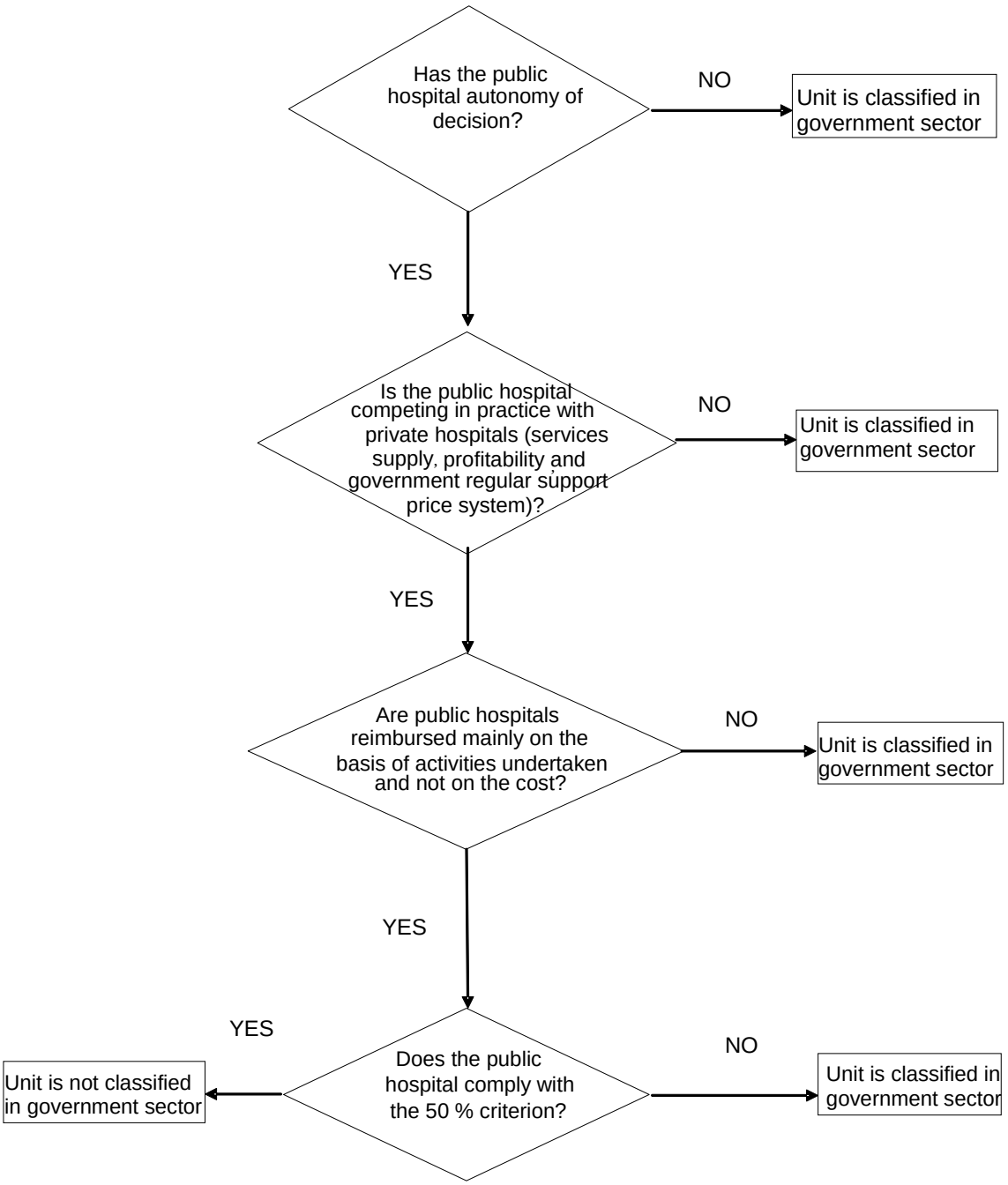
142. Notwithstanding the above[57], in those cases where a pricing system would be applied in its entirety to both public and private hospitals, covering most of the activities of the public hospitals subject to competition and public hospitals would not be reimbursed simply on the basis of their costs and not run losses on an almost continuous basis which would then be covered by government (as in this way government would basically reimbursing the hospitals, *de facto*, on the basis of costs incurred), the consequent payments can be considered the result of a market activity and therefore used in the context of the market/non-market test, which would constitute the possible last step in the decision tree for assessing the sector classification of public hospitals.

[55] Government may entrust public hospital with specific tasks, in addition to medical care, possibly as education and research. The payments received for these tasks should normally not be considered a market activity.

[56] Other indicators of government support would be government guarantees or loans at favourable non-market conditions, if provided only to public hospitals.

[57] This is under the condition that public hospitals comply with the other rules for the existence of a real market competition (openness of the market, provision of the same services, lack of government support, etc.).

**Decision tree on public hospitals**



### 1.2.4.7 SPECIFIC CASE OF PUBLIC TV AND RADIO BROADCASTING

143. Broadcasting is the distribution of audio or video content to a dispersed audience via any electronic mass communication medium. Over recent decades, the institutional settings for broadcast services have considerably changed and public broadcasting has been widely supplemented by private broadcasting. In addition, substantial technological developments have taken place in broadcasting.

144. Public broadcasting exists in all EU Member States, however not all Member States have established an earmarked user payment[58] from households (as well as from enterprises and other entities). In some EU Member States, government may directly impose such user payments or give the public broadcasting authority the right to levy them. In other EU Member States, a specific user payment is not requested and public broadcasting is financed from other sources.

145. Whereas, at the beginning of public broadcasting, the payment related to a monopolistic TV and radio service, the situation is now considerably different, as the number of private broadcasters has multiplied. Thus, while in the past there was a clear and direct link between the user payment and the service received by watching/listening a public broadcaster (the only existing broadcasting entity), now such a direct link does not exist anymore.

146. When a payment for public broadcasting is collected, the key issue is how to classify this payment in national accounts, i.e. either as a tax (a compulsory[59], unrequited transaction) or as sale of services (a requited transaction).

147. The basis on which a user payment for public broadcasting is collected varies across EU Member States, but two basic cases can be distinguished. In the first case, the user payment for public broadcasting may be based on some general condition, such as the residency of a potential user (an individual, a household or another concerned entity), a user's connection to the electricity network, the consumption of electricity, the level of income, etc. In the second case, a user payment for public broadcasting may be based on the ownership/availability of a TV/radio set or of other relevant device (a phone, laptop, PC, etc.).

148. In every case, it is important to analyse whether it is possible or not to *opt out* from making the payments requested for public broadcast services if one does not wish to watch/listen to public TV/radio (i.e. one does not want to consume public broadcast services).

149. If it is not possible to *opt out* from making the payments for public broadcast services (e.g. by declaring that one does not possess any of the relevant devices related to compulsory payments or does not consume public broadcast services), this compulsory payment should be regarded as unrequited and treated in national accounts as a tax (D.59 (d) if paid by households/D.29 (e) by other sectors). In this case, it is to be considered that a payment for public broadcasting is imposed on potential consumers of public broadcasting, who may not own (or have available) any device to consume public broadcasting or may not wish to consume public broadcast services. Similarly, a payment may be imposed on the owners of (or those having access to) some relevant device, who may not wish to consume any public broadcast service offered, but may want to consume only private broadcast services[60]. As a result, a (potential) user is prevented from having the possibility of making a deliberate choice, and retains an obligation to finance public broadcast services.

150. If it is possible to *opt out* from the consumption of public broadcast services while not affecting the ability to consume private broadcast services, i.e. only those users who wish to consume public broadcast services would have to pay, then this would imply that they agree with the price for the service. The payment can therefore be considered requited, and thus, treated in national accounts as a sale of services.

151. If a user payment relating to public broadcasting is recognised as a tax in national accounts and is collected by an entity classified outside the government sector, such a payment has to be rerouted via the general government accounts (S.13) as a matter of principle, because only general government (and the rest of the world in specific circumstances) has the power to levy taxes. See an accounting example in sub-section 1.2.4.5 Rearranged transactions.

---

[58] This subsection does not deal with the recording of licences/permits paid by TV/radio broadcasters themselves to the government in order to be allowed to perform broadcasting activities. These licences/permits should be treated according to the principles described in chapter 15 of ESA 2010 (Contracts, leases and licences), notably under the part on Permits to undertake specific activities (ESA 2010 paragraph 15.31 onwards). Some provisions are also included in this Manual (see Part 6 Leases, concessions and PPPs).

[59] If an obligation to pay for public broadcasting is imposed by government (by decree, regulation, law, etc.), it means that this payment is compulsory in the national accounts sense. There may be some specific exemptions (for example, for elderly people), however, these exemptions do not change the compulsory nature of the payment.

[60] If the obligation to pay is based not only on the ownership/availability of a relevant device but also on its use to consume broadcast services (either specifically public broadcast services or broadcast services generally), the payments should be recorded as taxes if the user cannot choose to opt out of paying for public broadcast services while at the same time remaining able to legally consume private broadcast services.

152. If a user payment is collected by government and then passed to a public broadcaster classified outside the general government sector, the payments from government to the public broadcaster shall be recorded as other subsidies on production (D.39). When a public broadcaster is classified within general government and this unit satisfies the conditions as regards recognising the principal party to a transaction as described in ESA 2010 paragraph 1.78, user payments will be recorded directly in that unit. If this is not the case, a current transfer (D.73) will be recorded from the unit satisfying the conditions of ESA 2010 paragraph 1.78 to the public broadcasting unit.

153. The classification of user payments for public broadcast services (TV and/or radio) may have an impact on the sector classification of the public institutional units providing these services. For determining the sector classification of a public broadcaster, the ESA 2010 qualitative and quantitative (market/non-market test) criteria shall be applied (see section 1.2.4 of this Manual).

### 1.2.4.8 THE BORDERLINE BETWEEN TAXES AND SALES OF SERVICES

154. In assessing whether a unit is market or non-market, it is necessary to check whether a unit's income from non-government sources should be classified as sales or as something else. For example, payments made for permissions to carry out a given business or personal activity (usually evidenced by a license), should be treated as sales of services only if the revenue is used to organise some proper regulatory function associated with the permission (such as checking the competence or the qualification of the person concerned, suitability or safety of the business premises, reliability or safety of the equipment employed, quality or standard of goods and services produced), and if the payments do not significantly exceed the cost of providing the services. However, the degree of obligations for the payers should also be considered, as there may be situations where the economic agents cannot carry out a given activity without holding a specific permission, so that the price should in no way influence the number of bid and asked permissions. Such payments should be treated as taxes if either of those conditions is not satisfied (see ESA 2010 paragraph 4.79 (d)) and, therefore, the unit classified within general government or, in some cases, the payments rerouted via government since only government has the power to levy taxes.

# 1.3. Pension institutions

## 1.3.1 Background

### 1.3.1.1 MAIN DEFINITIONS

1. Pension schemes provide an income after retirement from work and a survivor's pension to a surviving spouse in most cases. Some further risks might occasionally be insured under a pension scheme as well (sick leave, disablement). They can take the form of 'social insurance schemes', which includes both 'social security schemes' and 'employment related social insurance schemes other than social security schemes'. Protection against these risks could also be insured on a private insurance policy and through other (long-) term savings instruments arranged by individuals on their own initiative.
2. The entities managing social security schemes would normally be classified in the general government sector (S.13) whereas the entities managing the other employment related social insurance schemes would normally be classified in the subsector 'insurance corporations' (S.128), 'pension funds' (S.129) or the employer's sector (S.11, S.12, S.13 or S.14). Entities managing private insurance policies would be classified in the subsector 'insurance corporations' (S.128). Entities managing savings instruments will predominantly be allocated in the financial corporations' sector (S.12). Occasionally, depending on the country's legislation, they might also act as the insurer of an 'employment related social insurance schemes other than social security schemes'.
3. In national accounts, social insurance means collectively organised protection against a list of 'social risks or needs' such as, in the case of retirement pensions, the risk of not having an adequate income when being old. The main flows under a social insurance scheme are 'social contributions' (payments to the scheme) and 'social benefits' (payments by the scheme).

### 1.3.1.2 SOCIAL ASSISTANCE

4. In national accounts, social insurance differs from social assistance. ESA 2010 says that social assistance payments *meet the same needs as social insurance benefits but which are not made under a social insurance scheme requiring participation usually by means of social contributions* (see ESA 2010 paragraph 4.105) and they *are not conditional on previous payment of contributions and which are generally linked to an assessment of available income* (see ESA 2010 paragraph 4.85).

### 1.3.1.3 UNFUNDED AND FUNDED PENSION SCHEMES

5. In discussing the accounting of social insurance schemes, a distinction between 'unfunded' and 'funded' schemes should be made.
6. Unfunded schemes, frequently referred to as 'pay-as-you-go schemes', are schemes where the unit responsible for the scheme is not or only partially recognising in its accounts the outstanding liabilities to pay pension benefits in future. The pension benefits due during a year are primarily financed out of the pension contributions earned during the same year.
7. Funded schemes are arrangements where the unit responsible for the scheme is fully recognising the outstanding pension entitlements. The balance sheet will show a separate entry reflecting the pension entitlements. Also, the balance sheet will include earmarked investments to finance future pension benefits. The pension contributions earned during a year combined with interest flows from the investments will serve to supplement the pension entitlements for the active participants (and for the participants with postponed pension entitlements) and the pensioners in the scheme. The amount of the earmarked investments will increase accordingly.
8. Generally, the value of the earmarked assets will be well over the value of the pension entitlements; the difference serving as a buffer to accommodate the effect of any risks that might occur (especially from price risks on the financial markets, from interest rate changes or from the longevity risk). Supervisory authorities might set limits to the minimal amount of these buffers.
9. Short-term shortages, where the value of the earmarked investments is below the outstanding amount of the pension entitlements (probably increased by the amount of the mandatory buffers), might not endanger the classification of the scheme as being funded. Maintaining the classification as a funded scheme would occur under the precondition that the employer and sometimes the active participants will inject additional pension contributions and/or that pension benefits will be reduced to restore the minimal level of the buffers.

10. If the scheme becomes underfunded, meaning the mandatory buffers become too small or even negative and the employer funds into it, this is to be recoded as an employer's contribution.
11. Social insurance schemes that are partially funded by design, so the earmarked investments are significantly below the scheme obligations, are classified as unfunded schemes.
12. The participants in a pension scheme, whether unfunded or funded, do not own directly the assets that are collectively held and managed (similarly to mutual funds) but they hold an individual claim on the pension entity (the pension entitlement).

#### 1.3.1.4 DEFINED CONTRIBUTION AND DEFINED BENEFIT SCHEMES

13. With defined contribution schemes, the individual pension benefits depend on the value of the accumulated assets at or after retirement. Therefore, the individual households bear the financial risk of the performance of the earmarked assets: they are facing uncertainty concerning the level of the future pensions. Regularly (but this is not a required condition), the participants in the scheme may have some individual choice in the orientation of the investment of their funds in one or more market segments and/or of the investment manager.
14. The accumulation of the assets and the attribution to the individual participants is very similar to investing via a mutual fund. Normally, participants in the scheme cannot dispose of their holdings before retirement, see also ESA 2010 paragraph 17.54). With the aim of mitigating the risk from developments on the financial markets on the level of the pension benefits, the asset mix for participants — either on an individual or on a vintage basis — might be shifted to less volatile instruments some years before retirement.
15. Normally, a defined contributions scheme is funded though unfunded defined contributions schemes may exist. In the latter option, the scheme would use a financial market index as the yardstick to calculate the individual pension rights at retirement.
16. With defined benefit schemes, the benefits are calculated according to a scheme-specific formula. Often the number of years in service and the salary are the main ingredients of this formula (final pay, average pay). The outcome of this formula, sometimes in combination with a guaranteed minimum amount was solely decisive on the benefits to be granted in the past. The employer was obliged to supplement any deficit with the scheme in many cases. This means that if the value of the investments was less than the amount of the pension entitlements plus (part of) the buffers, the employer should pay an additional employer's contribution.
17. However, increasingly the employers stepped down from being solely responsible to supplement when needed in recent years. Accordingly, the scheme's formula was amended and/or the unconditionality of the pension promise to the participants was mitigated: a promise according to the formula often changed into a conditional entitlement. So the formula reflects the envisaged entitlement without — circumstance driven — being legally enforceable (see also ESA 2010 paragraph 17.57).
18. These defined benefit schemes should have a clear surplus of the value of the earmarked assets over the pension entitlements according to supervisory regulations in many cases. This mandatory buffer might be up to over 30 % of the pension entitlements. One could fancy a defined benefit scheme being unfunded. Present accounting regulations, however, make the existence of unfunded defined benefit schemes fairly unlikely in the corporations' sector; most applicable accounting directives prescribe all obligations of the corporation to be included in its balance sheet. Accordingly, unfunded defined benefit schemes would mainly be seen with government.
19. Some social insurance schemes have characteristics from both defined contribution and defined benefit schemes. These schemes are treated as defined benefit schemes in national accounts and government finance statistics.[61]

## 1.3.2 Treatment in national accounts

20. ESA 2010 draws a line between social insurance and any other personal protection against social risks or needs (see ESA 2010 paragraph 4.84). In order for an individual policy to be treated as part of a social insurance scheme, the eventualities or circumstances against which the participants are insured shall correspond to the risks or needs listed in ESA 2010. In addition, one or more of the following conditions shall be satisfied:
    a) participation in the scheme is obligatory either by law or under the terms and conditions of employment of an employee, or group of employees;

[61] See also IAS 26 (Accounting and Reporting by Retirement Benefit Plans), paragraph 12 (Definitions Plans with mixed characteristics).

b) the scheme is a collective one operated for the benefit of a designated group of workers, whether employees, self-employed or non-employed, participation being restricted to members of that group;

c) an employer makes a contribution (actual or imputed) to the scheme on behalf of an employee, whether or not the employee also makes a contribution.

#### 1.3.2.1 SECTOR CLASSIFICATION OF THE UNIT RESPONSIBLE FOR THE MANAGEMENT OF A SOCIAL INSURANCE SCHEME

21. Social insurance institutions should be classified according to their characteristics:

a) A government unit is judged to be responsible for the management and scope of a scheme if participation is imposed by law or specific regulation and if it is controlled and financed by government units, the level of the main flows by setting (or approving in last resort) the rules. Note that this role of managing, control and financing differs from the role government might have in supervising institutions to ensure they are run according to prudent principles, see ESA 2010 paragraph 4.89 (a).

Such schemes qualify as 'social security schemes' (ESA 2010 paragraphs 2.117 and 4.89 (a)). The government department managing such schemes, where clearly identifiable, is classified within the subsector 'social security funds'. If the department unit is no separate (quasi) institutional unit, it should be classified in the subsector of government where the larger unit is classified.

This classification applies independent of the scheme being funded or unfunded. An unfunded scheme often relates to the state pension scheme where the pension benefits normally are of a 'flat rate' nature, possibly only dependent of the number of participating or contributory years. However, funded defined contribution pension schemes and private institutions managing the scheme's investments are not classified within the general government sector.

The financial investments that are held in the context of an unfunded scheme — predominantly a liquidity buffer — are recorded as assets of the scheme's entity and not of the beneficiaries.

b) The employment related social insurance schemes other than social security schemes (including the scheme(s) for civil servants) could be organised within:

- **the unit of the employer**

  In this case the employer organises the scheme exclusively for its own staff (or part of them in some cases), manages the scheme directly and is fully responsible for all underlying flows (some might be imputed flows in national accounts).

  These schemes qualify as 'non-autonomous employer pension schemes'; if funded often also named 'book-reserve system' (ESA 2010 paragraph 2.106).

  All flows, assets and liabilities are allocated to the unit and sector of the employer. In other words, such schemes can be classified in all institutional sectors except households.

  The unit managing the scheme for government employees normally is assumed constituting a separate (quasi) institutional unit — contrarily to those with corporations — that should be classified as a pension fund (see next bullet).

- **a separate and dedicated unit (a pension fund)**

  If the employer organises the scheme exclusively for the own staff (or part of them in some cases) or jointly with other employers, managed via a separate and dedicated entity outside the employers' unit this entity is called a pension fund. The pension fund is fully responsible for all underlying flows and stocks.

  These schemes qualify as 'autonomous employer pension schemes'. All flows, assets and liabilities are allocated with the associated pension funds in the corresponding subsector (S.129).

- **an insurer**

  In this case the employer organises the scheme exclusively for the own staff (or part of them in some cases) or jointly with other employers, through an insurance contract with a life insurer who is fully responsible for all underlying flows and stocks. These flows and stock are part of the life insurer's flows and stocks. All flows, assets and liabilities are reported in the insurance corporations' subsector (S.128).

22. The role of pension funds and life insurers should be distinguished from the role of most other classes of institutions that might manage pension schemes on behalf of employers.[62] These other institutions would most often organise the scheme without being responsible and accountable for the scheme's obligations: they are the administrator and perform auxiliary activities and should be classified as such. Especially, insurers, banks and dedicated pension auxiliaries perform these activities. The pension entity itself should be classified separately. Occasionally, depending on a country's legislation, these other classes of institutions might be responsible and accountable for the scheme's obligations. The pension scheme's transactions should be reported with the institutional sector of those institutions.
23. In recent years, some countries have set up funded defined contributions pension schemes where government imposes or encourages participation, possibly collects contributions from employers/employees/self-employed and it may pay pension benefits to retirees. Also government would might fix the level of contributions and maybe possibly decide on the applicable the rules. Government has often outsourced the investment management to private sector managers (banks, insurers and brokers). Under funded defined contributions pension schemes such schemes, the pension benefits predominantly depend on the accumulated assets. Under these conditions, not all the ESA 2010 criteria for classifying such schemes as social security schemes are fulfilled, as government is not fixing the level of the pension benefits and it does not 'control and finance' the scheme.
24. Moreover, as the full investment risk is with the policyholders/beneficiaries, these schemes are comparable to an investment fund. This implies that the entity managing such a pension scheme, constituting a separate institutional unit, should be classified as a financial institution in the appropriate subsector.
25. If government would guarantee the level of the benefits under a funded defined contributions pension scheme, implying that government would bear part of the risks, this as such is not a sufficient condition for classifying it as a social security scheme. This would only apply if the scheme were under a recurrent call during several years from which it is clear that the government guarantee is not for exceptional and temporary reasons. That situation might motivate government to take full control of the scheme and adjust the levels of contributions and benefits. This reclassification might also occur before a call on the guarantee has been made but where sufficient evidence exists that such a call would be inevitable in the near future. Reclassification would be at stake only if government participation in the benefits from a funded defined contribution scheme would be over the payment from the scheme's own resources.
26. Therefore, in the absence of government guarantees, the flows of contributions and benefits under funded defined contribution schemes are not recorded as government revenue or expenditure and do not have an impact on government net lending/borrowing (B.9).

### 1.3.2.2 GOVERNMENT GUARANTEE TO A FUNDED SCHEME

27. Even where government is not responsible for the management of a scheme that is not classified as social security scheme, it may have a 'strong interest' in the sustainability of the scheme, as part of its social protection policy. Government might closely follow the performance of non-government pension schemes notably, to ensure that nobody within the population would be left without an adequate pension.
28. In this context, where government considers that the degree of uncertainty for participants in a non-government pension scheme is not acceptable, for example because of operational risks, insufficient level of accumulated reserves, market collapse, the government may grant an explicit guarantee to protect the participants. Government acts as payer of last resort to ensure that benefits reach a level considered to be satisfactory.
29. The existence of a government guarantee, in conditions mentioned above, to a funded scheme that is not classified as a social security scheme, does not as such imply that the beneficiary pension scheme should be reclassified as a social security scheme.
30. The government guarantee must be considered a one-off guarantee (a contingent liability), not recorded in national accounts as a government liability according to the general ESA 2010 principles. In this respect, the risk borne by government is only a potential one as it depends on the occurrence of certain specific events. As a result, neither government expenditure nor government revenue is recorded as long as the guarantee is not called.
31. Government may support a scheme for exceptional and temporary reasons, for instance a short-term shock on financial markets (like in 1987, 1994, or 2008) so that the government intervention is limited in time and/or amount. This does not imply reclassifying the scheme as a social security scheme, unless government takes control of the scheme and directly adjusts the levels of contributions and benefits.

[62] These other institutions should record insurance technical reserves (provisions) to reflect the pension obligations for which they are responsible. These reserves would not otherwise exist for these institutions.

This means that, in a first stage, any government support, although affecting government net lending/borrowing (B.9) would not have the automatic effect of reclassifying the scheme.

32. If government's support for the scheme is not implemented for exceptional and temporary reasons but is observed frequently and assumed permanent, national accountants should closely examine whether government has obtained some controls over the scheme such that conditions for classifying it as a social security scheme are fulfilled.

33. In the case of a defined contributions funded scheme, this reclassification as a social security scheme should be implemented only when the government is effectively ensuring the payment of benefits for an amount higher from than the one payable from the assets accumulated in the fund.

    In the case of a funded defined benefit scheme, this reclassification as a social security scheme should be implemented only when the government is effectively ensuring the payment of benefits for an amount higher than 50 % of the actuarial value of the pensions from its own resources.

## 1.3.3 Rationale of the treatment

34. The level of pensions depends on the value of the accumulated assets that are invested on the market with a defined contributions funded scheme. Therefore, government is not controlling the level of the individual pension benefits because it has no direct influence on the market performance of the assets.

35. All pension funds where the participants bear the financial risk should be treated in the same way, whatever the nature — public or private — of the unit managing the scheme, or even the obligatory or voluntary nature of the scheme. They are savings accumulated by households. Managing assets on behalf of other units is a financial intermediation activity that is not normally a function of government. When managing such schemes, government is not acting for public policy purposes but is acting in a similar way to a financial institution.

36. Classifying a funded defined contributions funded scheme into the subsector of the managing entity, often S.125 'insurance corporations' S.128 or and 'pensions funds' (S.129) but possibly (depending on the country's legislation) another (sub)sector means that, although on the one hand the liability relating to the future pensions is not recorded as government liability and on the other that, the government securities held by the managing entity on behalf of the pension scheme pension fund should be are rightly recorded in government debt (not consolidated). Under these conditions, the structure of the entity's portfolio of the pension fund has no influence on the recording of government debt.

## 1.3.4 Transfer of pension entitlements from the second pillar

37. Occasionally, pension entitlements that are accumulated in the second pillar are transferred to the first pillar of the country's pension system, accompanied by the transfer of associated assets. The transfer might be voluntary, encouraged by government or compulsory. The treatment will depend on the exact features of such transfers at inception, which are not yet fully known: future role of individual accounts, calculation of the future value of the accounts, etc. Eurostat and the national statistical authorities will examine on bilateral basis the impact on government accounts.

38. The starting point of the recording would be an identical value of the transferred entitlements and the associated assets. Under this assumption, the transaction is financial in nature. Accordingly, the transfer has no impact on government net lending/borrowing (B.9). However, government debt may be indirectly affected through the consolidation of the government bonds that are amongst the assets.

# 1.4. Market regulatory agencies in agriculture

## 1.4.1 Background

1. This section discusses the sector classification of market regulatory agencies[63] and the treatment of their inventories, when these agencies operate within the domain of agriculture. The rules could also apply for market agencies intervening in other markets such as raw materials (this is not currently observed in the EU).[64]
2. These are national agencies acting on behalf of the European Union or other units having both a market and a redistribution activity. They mainly concern agricultural products. Institutional arrangements vary between countries. Typically, their activities include the purchase and storage of agricultural products; giving direct subsidies to farmers, levying charges on producers and imports; giving subsidies for exports; giving grants for capital equipment and environmental improvements.[65]
3. The Eurostat 2005 decision on the accounting treatment of transfers between the EU budget and EU Member States specifies that EU transfers should have no impact on government net lending/borrowing (B.9), as government is considered to act 'on behalf' of the EU. The Eurostat decision focused on the recording of some ESA transactions, such as subsidies or investment grants. As noted above, market regulatory agencies buy and sell products, in most cases on behalf of the EU, with the aim to stabilize prices by setting up inventories or buffers. From a national accounts point of view, general governments are not the economic owners of these inventories. However, allocating to the EU (rest of the world (S.2)) the changes in inventories would imply recording market regulatory agencies' purchases/disposals as exports/imports with the EU institutions, which would not the relevant solution both form a conceptual and an accounting point of view.[66]

## 1.4.2 Treatment in national accounts

4. ESA 2010 paragraphs 20.53–20.54 makes a clear distinction between 'market regulatory organisations' which are either exclusively or principally distributors of subsidies and those which are exclusively or principally engaged in buying, holding and selling agricultural or food products.
5. Market regulatory agencies channelling subsidies are classified in the general government sector (subsector central government). Market regulatory agencies engaged in transactions on markets are classified in non-financial corporations sector.
6. However, market regulatory agencies may be engaged in a mixture of both activities mentioned above. In such cases, ESA 2010 paragraph 20.54 states that the agency may be split into two institutional units, which may be implemented when there evidence that one part of the activity of one unit is fundamentally different from another part (for instance in the case of quasi-corporations): the institutional unit being in market intervention activities is classified in the non-financial corporations sector. The second institutional unit distributing subsidies is classified in the general government sector.
7. When it is not possible to distinguish two separate institutional units (notably for accounting reasons or no clear management separation), the following rule should be applied to determine the 'principal activity'. Units should be classified to the general government sector if their costs incurred in market regulation compared to the total costs are less than 80 % and to the non-financial corporations sector if their costs incurred in market intervention compared to the total costs are more than 80 %.
8. The costs incurred are measured in the same way as the value of output of non-market services, i.e. as the sum of intermediate consumption, compensation of employees, consumption of fixed capital, and other taxes on production less other subsidies on production, while interest payments are not included (see ESA 2010 paragraph 3.49).

---

[63] Also referred to in ESA 2010 as market regulatory organisations.

[64] As far as other regulatory bodies (which do not intervene directly on markets through 'buffer stocks'), such as national authorities for energy, telecommunications, transportation, etc., are concerned, the classification within the general government sector would depend on their significant role in the design of the framework of the activities together with the judicial power they are entitled to. Should the above conditions not be fulfilled, it would be necessary to look at the nature of their resources, which may largely take the form of taxes.

[65] However, in the context of the current EU Agricultural policy, the regulation of output prices has decreased to a rather minor activity, observed only for a restricted number of products.

[66] For more information, see Eurostat guidance note of 20 November 2008: Recording of changes in inventories of Agricultural Market Regulatory Agencies.

9. However, where a market regulatory agency acting on behalf of the EU (i.e. in the context of EU common policies) is classified in general government, the creation of a quasi-corporation, rather than a notional unit, in the corporations sector (S.11) is recommended in order to capture the changes in agricultural inventories, and to avoid that such changes in inventories are recorded in national government accounts (as changes in government inventories, with an impact on the government net lending/borrowing (B.9), or in the rest of the world accounts (as exports and imports).
10. This recording would be mainly based on the view that the EU has economic ownership of those inventories, and not the national government, and that the market regulatory agencies are in fact acting on behalf of the EU: the EU exercising control and assuming risks and rewards associated to these inventories. Such a treatment is also in line with the convention of sector classification of market regulatory agencies (in S.11) stated in ESA 2010.

## 1.4.3 Rationale of the treatment

### 1.4.3.1 THE 80 % CRITERIA

11. The main reasons for fixing the threshold at the high level of 80 % are the following:
    - it is not a 'normal' activity of for an enterprise (market producer) to distribute subsidies;
    - in many cases the agency has a public legal status;
    - in the context of the Common Agricultural Policy, the subsidy distribution significantly prevails on market interventions;
    - a treatment ensuring stability over time for the classification of market regulatory agencies is needed.

### 1.4.3.2 ECONOMIC OWNERSHIP OF THE INVENTORIES

12. Given that a market regulatory agency would be 'acting on behalf of the EU' and thus would not use these inventories in its own production process, this institutional unit does not seem to be the economic owner of those inventories arising from its interventions on the market. The EU should be considered the economic owner of such inventories.
13. Nonetheless, in this case, the recording of exports/imports relationships with the EU does not seem desirable or plausible because this would entail recording export and import flows each time the agency buys or sells, inflating totals with limited analytical value. In addition, market interventions of regulatory agencies, although acting 'on behalf' of the EU, are made at national level, i.e. in the national markets
14. It is important to analyse the economic ownership of the inventories constituted by market regulatory agencies. In the case of public interventions on markets, the Commission bears all the financial risks including all the losses derived from the intervention in the market, as the aim of the EU common agricultural policy in this field is to avoid any financial impact on the EU Member State resulting from market interventions. The opposite situation also occurs when prices go up, the EU Member State repaying in full the difference to the Commission (gain on sale). In addition, the EU Member State is responsible for taking all necessary measures for its good conservation but, at the same time, has no control over these goods as the buying and reselling decisions are in the hands of the EU instances.

### 1.4.3.3 CLASSIFYING THE INVENTORIES IN THE CORPORATE SECTOR

**A notional unit or a quasi-corporation**

15. In national accounts, a possible solution (to avoid recording exports and imports upon each addition to or removal from inventories) would be to allocate the recording of such agricultural inventories (P.52) to the non-financial corporation sector (S.11). This would be consistent with the reasoning that general government is not the economic owner of the inventories resulting from market interventions. This approach would follow to some extent the convention stated in ESA 2010 paragraph 2.114 mentioned above.
16. The above view would imply that an artificial unit would be created to capture transactions in inventories within S.11, in those cases where the market regulatory agencies are classified in central government (S.1311).
17. One possibility would be to recognize a notional resident unit owned by the EU. The creation of a notional resident unit seems broadly in line with the ESA 2010 paragraph 2.29, which explains that notional resident units, even if they keep only partial accounts and may not always enjoy autonomy of decision, are treated as institutional units, by convention. Such a notional resident unit would hold inventories and it would be regarded as transacting in those. This implies the EU being the owner of the entity in national accounts.

18. Another possibility would be to recognize a quasi-corporation in national accounts, having the same purpose as a notional resident unit mentioned above (i.e. to capture transactions in inventories in case that a market regulatory agency is classified in central government). Normally, under ESA a complete set of accounts should be available. This is not ensured but, to the extent that the EU makes up for the losses arising from the holdings of inventories, relevant and comprehensive information is deemed to be available. This implies government being the owner of the entity in national accounts.
19. Both these treatments would avoid recording changes in acquisitions and disposals of inventories as exports/imports to the EU.
20. Summarizing, two options seem to be possible, according to who is viewed as the owner of the entity that is holding the inventories, to be classified in S.11:

    **Option 1)** recognizing a quasi-corporation, implying that the owner of the entity remains government; or

    **Option 2)** recognizing a notional unit, implying that the owner of the entity is the rest of the world (RoW).

### 1.4.3.4 NET WORTH OF GENERAL GOVERNMENT

21. Given it is argued that the EU owns the inventories, it is important to determine whether the changes in own funds of the entity owing to gains and losses on inventories at market value (which might be large from one period to the next) would impact either general government net worth, or the rest of the world net worth, or none of them.
22. It is important to determine whether the quasi-corporation option or the notional unit option would yield different, or very different, results from the point of view of the net worth of general government. It could be assumed as a preliminary conclusion that the result would be different as far as the net worth of the EU is concerned. This is because the latter would be impacted by gains and losses on inventories in the case of the notional unit option, but not in the case of the quasi-corporation option.
23. If the agency is an entity established by government, it is likely that some equity link will exist and will appear as an asset of general government when the agency is classified outside general government. However, changes in the price of inventories should not be reflected in the equity value of the entity (i.e. should not be reflected in the price of the asset of government) because by definition those gains and losses do not accrue to government but will eventually be returned to the EU or compensated by EU subsidies. Thus, in concept, the gains and losses should, at first sight, give rise to the appearance of a kind of payable/receivable with the EU, which would keep the own funds of the agency unchanged.
24. In ESA, *Own funds* is defined as net assets of units, excluding equity liabilities, while *Net worth* is defined as net assets of units, including equity liabilities. Thus, *Own funds* minus equity liabilities of units (i.e. equity issued) equals *Net worth*. See ESA 2010 paragraphs 7.02 and 7.06. The ESA net worth should thus not be confused with the business accounting notion of shareholders' equity or net worth. This business accounting notion of net worth is, in fact, closer to the ESA notion of own funds.
25. However, in concept, the time of the appearance of the payable/receivable also results from the time of recording of the subsidy, which accounting is specifically regulated in ESA.
26. This time of recording issue of subsidies would most likely lead to an impact on the own funds of the agency. However, conceptually, this should not affect the equity value of the agency. If the agency itself were to be sold, its valuation would be independent of the value of its inventories owing to the obligation of the EU to cover losses when incurred, or of the obligation of the agency to return gains to the EU.
27. Accordingly, gains and losses on inventories must be neutral from the perspective of general government net worth in all cases (notional unit or quasi-corporation), even if they are also neutral from the perspective of the EU net worth (quasi-corporation). Thus, holding gains and losses on market regulatory agencies inventories do affect only the non-financial corporations' (S.11) net worth, pending the recognition of the subsidy associated to the receivable/payable.
28. However, this will require that the valuation of the equity in the quasi-corporation will have to correspond to the financing provided to date, rather than being equal to its own funds: thus the unit net worth would be either positive or negative, although only for short periods of time, owing to the gains and losses on inventories not yet realized or recognized, and thus not yet compensated or returned to the EU. Such deviations could nevertheless be seen as a reasonable approximation of the convention that the net worth of the quasi-corporation should be zero (ESA 2010 paragraph 7.09).

### 1.4.3.5 VALUATION OF TRANSACTIONS IN INVENTORIES

29. In national accounts, the transactions related to interventions in the market should be recorded in application of ESA 2010 paragraph 4.33 and ESA 2010 paragraph 4.35, in the context of notional or quasi-corporation units. These ESA paragraphs would still be applicable for the cases of notional or quasi-corporation units.

30. The transaction value on resale must include the EU subsidy. Thus, changes in inventories will tend to compensate over time. The reimbursements made by the EU correspond to the difference between purchase and resale prices, which is shown in national accounts as subsidies paid by the EU.

### 1.4.3.6 ACCOUNTING TREATMENT IN THE FINANCIAL ACCOUNTS

31. The following discusses how to record in the financial accounts the links between the notional or quasi-corporation unit and the EU and/or government.
32. Under the **notional unit option**, the recording will be as follows: an acquisition of equity (F.5) by the EU is to be recorded, matched by an EU borrowing (F.4) from the entity financing the market regulatory agencies (often government itself). This would imply changing the present recording in the rest of the world financial accounts.
33. Under the **quasi-corporation option**, no entries are recorded in the rest of the world financial accounts, as the transactions in equity on the liability side of the quasi-corporation have a counterpart entry in the accounts of government.
34. Thus, in both cases the net change in inventories that is *de facto* financed by the entity in government (by way of borrowing from third parties or of drawing down on its liquidities) is recorded in the financial accounts of general government, instead of in the non-financial accounts as would otherwise be the case (under changes in inventories P.52): either as transaction in equity (F.5, quasi-corporation option) or as loans to the EU (F.4, notional unit option).
35. A theoretical advantage of the notional unit option, over the quasi-corporation option, is that it reflects the genuine economic ownership of the EU. However, a main disadvantage of the notional unit option is that this requires entries in the rest of the world (RoW) financial accounts that do not even exist when the regulatory agency unit is classified outside general government in the first place: thus the notional resident unit option seems to introduce an apparent asymmetric treatment between those market regulatory agencies that are classified in general government and those market regulatory agencies that are classified outside general government. This would seem to go against a homogeneous treatment across EU Member States.
36. In addition, the impact of the movement in the market value of inventories not yet covered by subsidies is likely to be small and temporary, and on average zero over time. In this context, the merit of imputing government lending to the EU and, simultaneously, EU financing of the inventories may be doubtful.
37. Finally, it should be reminded that strictly following a recording that portrays the change in the economic ownership would have implied recording imports and exports, which are deemed not to be particularly useful for analytical purposes (balance of payment). It may be noted, however, that both options leave the same impact on the government net lending/borrowing and debt.

### 1.4.3.7 'SHELL' TREATMENT

38. When the notional unit or the quasi-corporation is seen as a 'shell', for simplicity purposes, it would be conceived in national accounts as only holding inventories and undertaking transactions in those, with counterpart entries in the financial accounts: equity liability. The 'shell' option would also mean that no reinvested earnings would be recorded.
39. Alternatively, these units can be conceived to be more complete entities, showing a more complete sequence of national accounts, such as generating a margin and incurring costs.

### 1.4.3.8 TIME OF RECORDING OF THE SUBSIDY

40. ESA 2010 paragraph 4.39 (a) indicates that the time of recording of *subsidies which take the form of the difference between the purchase price and the selling price charged by a government* is *at the time the goods are bought by the agency*.
41. When a product is bought for 120 by the agency in period T, and resold for 100 in the following period T+1, a subsidy on product is recorded in T. In T, the output of farmers (S.14/S.11) is then 120, the GDP 100, changes in inventories +100. In T+1, the output of farmers is 0, GDP is 0, final consumption is 100, and changes in inventories are –100.
42. However, ESA 2010 paragraph 4.39 (a) specifically indicates: *if the selling price is known at that time*, which needs to be interpreted. The resale price is *a priori* generally not known in advance. But an expected price is probably known: suppose it was 106 in the example above. Then 6 (=20–14) only is the non-expected element.
43. The reference in ESA 2010 above presumably intends to avoid that holding gains/losses enter the production account. Only the part that the scheme is expected to finance should contribute to output. But at the same time, in the case of agricultural market regulatory agencies, no holding gains and loss will

ever be borne by farmers or by the agency: all the changes in price will be eventually assumed by the EU.

44. Finally, the selling price of the goods might have fallen to 102 by end of year T. This would be the value of inventories recorded on the balance sheet at the end of period T.

45. If ESA 2010 paragraph 4.39 (a) also covers cases when the selling price will be known only in the next period, then the amount to record as subsidy in T (and parallel acquisition of a receivable) by the agency is either:

Option 1) the actual amount observed in T+1 (20); or

Option 2) the expected amount observed in T (14); or

Option 3) an amount reflecting the market price observed as of end of the year (18).

46. In option 1), the recordings are straightforward but imply a revision in the data, when the information is gradually available (notably for quarterly data). In option 2) and 3), one issue is how to record in T+1 the difference of 6 (=20–14) or 2 (=20–18). One approach is to enter those flows in the revaluation accounts of the financial accounts (thus recording subsidies on an expected basis), which seems difficult. Another approach is to record a subsidy on production in T+1 for the remainder (that could be either positive or negative) matched by an entry in change in inventories (although this might appear artificial). In doing so an entry in the revaluation account in the non-financial assets occurs (of +4=6–(20–18) = (20–14)–(20–18) =18–14)) in T+1 in option 2) compensating the holding loss arising in T (of –4=14–18). No revaluation occurs in option 3) neither in T+1 nor in T. It should be noted that in option 3), the net worth of the quasi-corporation are always zero. In option 1) or 2), the net worth deviates from zero, for either positive or negative amounts, but for limited time spans.

# 1.5. Units engaged in financial activities: general issues

1. This chapter discusses whether certain types of public units (i.e. controlled by government) undertaking financial activities, i.e. essentially acting on diversified financial instruments on both sides of their balance sheet, should be classified in the general government sector (S.13) or as public financial corporations in the financial corporations sector (S.12) (see ESA 2010 paragraphs 2.55 and 2.56 for the general definition of financial corporations).
2. Units principally engaged in financial intermediation, as defined in ESA 2010 paragraphs 2.56 to 2.58, are to be classified in one of the following subsectors of S.12: central bank (S.121), deposit-taking corporations, except the central bank (S.122), money market funds (S.123), non-monetary market investment funds (S.124), other financial intermediaries, except insurance corporations and pension funds (S.125), insurance corporations (S.128) and pension funds (S.129).
3. Units engaged in auxiliary financial activities, as defined in ESA 2010 paragraph 2.63, are to be classified in the financial auxiliaries subsector (S.126). It is recommended that captive financial institutions, as specified in ESA 2010 paragraphs 2.21–2.23 and ESA 2010 paragraphs 2.98–2.99, are classified within the captive financial institutions and money lenders subsector (S.127).

**Supervisory authorities**

4. According to ESA 2010, supervisory authorities of financial intermediaries and financial markets, when they are separate institutional units, are classified in the subsector of financial auxiliaries (S.126). In particular, the tasks corresponding to banking supervision, and possibly also insurance and pension supervision, are frequently conducted within the national central bank. This is the case in the euro area and in other EU Member States participating in the Single Supervisory Mechanism, where significant banking institutions have been directly supervised by the ECB since November 2014 onwards. The supervision of financial markets (or other related activities) is generally carried out by specific bodies and occasionally by the Ministry of Finance.
5. The crucial point is to decide whether these tasks are undertaken autonomously and separated from a hosting/parent institution, i.e. conducted by a separate institutional unit according to the general ESA 2010 definition. Notably, the issue is to assess whether governing bodies of supervisory authorities may take decisions in full independence from government bodies or, in general, from the hosting unit (for instance, the 'Chinese wall' between the supervisory and monetary policy decision-making in the case of a central bank). The existence of an autonomous budget, fed by its own resources, is also an important feature. If these conditions are not met, the entity cannot be considered autonomous and must be included in the hosting/parent unit.
6. Financial institutions must generally pay contributions to the supervisory authorities. It is considered that, in this case, the supervisory authorities render services to the supervised units. The services provided by the supervisory authorities should enhance the confidence of customers/shareholders, improve the quality of management, and facilitate the profitability and development of the financial institutions supervised. The owners of the supervised units also benefit from this supervision, particularly in the case of banks where rules ensuring solvency are significant. Although such contributions are compulsory and imposed by law or other kinds of regulations, they should be considered a compensation for a service and thus classified under ESA 2010 as payments for non-market output (P.131), provided that they are set up globally at level covering the supervision costs[(67)]. This is generally the case, as such supervisory authorities do not manage special funds or do not have to accumulate reserves.[(68)]

**National protection funds**

7. National protection funds are entities that manage funds in order to pay compensations to eligible creditors in the event of default by units of the financial sector. In the banking sector, this primarily takes the form of deposit protection funds/schemes which can intervene up to a specific amount in order to compensate depositors for a limited amount of lost deposits if the bank defaults (such deposits are referred to as 'secured deposits'). They may also cover a resolution fund, which specifically aims to support institutions in distress through different kinds of measures and financing, thus avoiding an

[(67)] They are generally adjusted according to the size of the supervised units.

[(68)] See ECB Press release of 27 May 2014, estimating banking supervision costs in the euro area to €260 million and, as a result, the fixed the amount of fees to be paid by all banks in the area, according to their size.

immediate recourse to government support. Protection funds are often set up for financial stability purposes. Other such funds could exist with the additional aim of protecting investors in financial markets.

8. Deposit protection funds do not decide by themselves when and at which level they have to intervene and activate accumulated funds. A competent supervisory authority needs to carry out an assessment. The activation can be either automatic or triggered by a decision of the supervisory authority. The level of the compensation paid out may be fixed either by national or by EU law, notably for the deposits protection schemes.
9. A distinction is made between statutory protection schemes and contractual schemes (which are mostly voluntary). Statutory schemes are established and regulated by law, normally aiming at providing a service to the general public. Contractual schemes are often purely privately managed.
10. To ensure the minimum regulatory protection of deposits by government, European legislation[69] introduced in 2014 imposed the existence of statutory funds/schemes for which participation is compulsory. Such schemes include National Deposit Guarantee Funds (DGF) and, separately, National Resolution Funds (NRF).

**Statutory schemes**

11. All statutory schemes should be classified within the general government sector, because they can be regarded as a type of government unit within the meaning of ESA 2010 paragraphs 20.05–20.12. Even where this may be doubtful, an examination using the traditional decision tree approach (ESA 2010 Diagram 20.1) would lead to the classification as part of government, because these entities are publicly controlled and non-market.
12. By their constitution and their main purpose, the NRF and to some extent the associated DGF, may be seen outright as 'government units', being legal entities established by political process that have judicial or executive powers over other institutional units, and which redistribute wealth via compulsory payments from units belonging to other sectors (ESA 2010 paragraph 20.29). Both the NRF and DGF have been assigned public policy tasks of protecting the public's savings and ensuring financial stability. To this effect, they have a wide range of powers. The NRF has quasi-judicial powers in determining which creditors would be bailed-in, thus entailing redistribution of wealth between creditors. Both the NRF and the DGF can mobilise resources by levying taxes on banks and, often, by obtaining funds directly from government, in case of emergency. DGF and NRF funding is levied through contributions, at rates which do not meaningfully reflect the credit risks of the institutions they cover, thus entailing some redistribution between banks.
13. The NRF and DGF are publicly controlled non-market entities and as such, they are classified inside general government. Their activity is to ensure that depositors will be reimbursed, or to efficiently liquidate distressed banks as smoothly as possible in order to avoid systemic risk. This activity cannot be assimilated to market insurance, and, as such, these entities are not classified in the S.128 subsector. As the compensation payments required can be considerable and thus outside the capacity of any private operator, this coverage of risk activity should either be considered as non-insurable risk or as an insurable risk of a non-market nature. The entities are not financial intermediaries either, as they keep reserves/assets solely for the purpose of emergency and not for the purpose of conducting some kind of transformation of funds. Neither are they financial auxiliaries, as they do not sell a market service to banks and do have a balance sheet of a large size: they instead collect contributions that are economically considered as taxes levied to fund a public pool of resources that can be tapped upon emergency.
14. The contributions could hardly be considered as sales because they are unrequited. Moreover, an important consideration in any argument for classifying such statutory funds to the S.12 sector would be the need to identify the clients to whom they would 'sell' or provide their service. If plausible clients may a priori be depositors, banks, or government, one cannot easily or effectively identify what is that statutory funds would be selling to depositors or to banks.
15. The NRF and the DGF are controlled by the public sector, either directly (through the intervention of the Ministry of Finance), or indirectly through the Central Bank (which is by convention a public sector entity) or the Financial Supervisor, or through legislation (by way of so-called 'excessive legislation' foreseen in ESA 2010 paragraph 20.309 (h), even in cases in which directors are predominantly appointed from the private sector. In some borderline cases, public control over some statutory protection funds resembles the public control exercised on some NPIs through the enabling instrument, as well as risk exposure (see ESA 2010 paragraphs 20.15 (b) and (e)).

[69] Directive 2014/49/EU on Deposit Guarantee Schemes; Directive 2014/59/EU on the recovery and resolution of credit institutions and investment firms.

16. It is more difficult to judge whether the entities have autonomy of decision. However, this is also not crucial for the classification, if it is established that the unit is public and non-market. Notwithstanding this point, the DGF is often a quasi-automatic entity, whose autonomy of decision can be put into question, particularly in the context of the Single Supervisory Mechanism (SSM), which regulates in detail a large part of the DGF activity. In addition, the DGF can be seen as ancillary to resolution to the extent that (a) resolution will often take place first, ahead of outright liquidation, and (b) the DGF may be called on to finance the NRF for amounts up to that which the DGF is saving through that resolution. Similarly, to the DGF, the NRF seems to operate largely on auto-pilot, but its authority — the National Resolution Authority (NRA) — certainly has some autonomy of decision.
17. When the NRA (and its associated NRF) is organised through the Central Bank (the Central Bank managing the NRA), then, under ESA 2010 rules, the latter cannot be the parent of the NRF (or the NRA and NRF), mostly because it is prohibited for the Central Bank to fund the NRF[70]. An entity that cannot fund another cannot be its parent. As a result, the parent will be the Ministry of Finance. Thus, when the NRA is organised as part of the Central Bank, the latter is conducting government tasks on behalf of government, and, accordingly, national accounts recognises the principal party of the transactions carried out (through the NRF and the associated DGF) to be government.
18. The provisions above stem also from the necessity, under the European legal framework, to ensure homogeneity of classification of what is *de facto* a European scheme, which is then adjusted by Member States (through the national legal framework) to fit best national circumstances. Accordingly, a uniform classification across the EU is appropriate. For the sake of consistency, these provisions are applied to all statutory funds, even when they are not part of the European framework.
19. The requirements of the EU regulatory framework can be fulfilled in practice in various ways at national level. Sometimes more than one fund and/or scheme is set up to achieve the Regulation's targets, requiring an appropriate statistical assessment of these entities and existing mechanism.
20. Entities whose function is to fulfil the regulatory required targets that are normally covered by the DGF or the NRF are classified inside government because they are merely a modality to enforce a government scheme — even if some of the entities concerned are formally organised as private entities.
21. In some cases, statutory and contractual schemes are included in or managed by the same entity. In such cases, either the entity could be split into two units or the entity should be classified inside government and the non-statutory component re-routed outside government accounts. As a practical implementation of rerouting, the managing unit could be separated from the specific fund, which is classified inside general government.

**Other protection funds**

22. Regarding other, mostly voluntary, protection schemes, such as contractual (non-statutory) protection funds, the relevant analysis may follow the following path. Protection funds act largely on 'auto-pilot'. Thus, the question of their decision-making power in activating accumulated funds is frequently not relevant. Such funds may also depend on another authority for activation. The crucial point here is to assess whether the governing body of a protection fund is entitled to take a decision independently or only to make some proposals (if any), which have to be confirmed by another authority (such as the Central Bank or the Ministry of Finance).
23. Another issue is to assess whether these protection funds are free to set the level of contributions to be paid. Protection funds may have some power, especially regarding the 'modulation' of individual contributions according to estimated actual risks incurred by the participants. However, their room for manoeuvre is generally rather limited (for example, the criteria may be precisely set by another authority). Protection funds generally do not fix the global amount. Although they often have some power to redistribute the level of contributions among the units, they do not set the global amount of contributions to be raised.[71]
24. Moreover, when insufficient resources are available, it is important to assess whether a protection fund may make an entirely independent decision on the nature, amount, conditions and timing of possible irregular resources (exceptional contributions, borrowing on markets, advances from the Treasury, etc.) needed for financing the compensation or support. Protection funds may not have resources available

[70] The ECB has issued Opinions on some national laws regarding National Resolution Funds (NRFs) and Deposit Guarantee Schemes (DGS). In these opinions it is pointed out that the ESCB may not finance any NRF or DGS (except overnight, short-term or emergency financing) since it would breach the prohibition of 'monetary financing' under the Treaty. See the following: paragraph 3.1 of Opinion CON/2016/3; paragraph 2.3.2 of Opinion CON/2015/52; paragraph 3.2 of Opinion CON/2015/40; paragraph 4.1 of Opinion CON/2015/17; paragraph 2.2 of Opinion CON/2014/86; Opinion CON/2011/103 and Opinion CON/2012/22. See also page 30 of the ECB's 2014 Convergence Report.

[71] Under a general objective set as a percentage of given categories of liabilities, the fund may have some flexibility on the path to reaching the objective during a transition period or, even, to adjust according to business cycles. However, this must be seen as a time arbitrage between regular contributions and exceptional resources.

for large defaults or resolutions. It is very likely that, at least, in the years after their establishment, they may have to rely on such exceptional resources.

25. In national accounts, the sector classification of these protection funds should also depend on the autonomy of decision of such bodies. If for most of the crucial decisions regarding their principal function, which should be distinguished from mere administrative tasks, a protection fund lacks in autonomy of decision-making power, it is not considered an institutional unit in national accounts and is included as part of the unit that mainly controls it. In this respect, the main criteria should refer to decision-making related to the resources of such protection funds, and, in particular, those related to exceptional resources, which may be needed.

26. The lack of autonomy of decision on the latter point would trigger the reclassification in the sector of the unit, which has the final say on that. If it is government, the entity should be classified in the central government subsector. Consequently, the fact that the protection fund may be entitled to take decisions related to the investment of the accumulated funds (generally under some restrictive guidelines) is not, as such, a criterion for deciding on the autonomy of decision.

**Treatment of the fees payable to protection funds**

27. When the fees payable are compulsory (and beneficiaries cannot opt out of the scheme unless leaving the activity in question), the levies paid by the relevant financial institutions to the protection funds are classified as taxes.[72] The reason is that protection funds do not render services exclusively to financial institutions, but rather to 'the whole community'[73]. Also, the level of individual contributions of the paying unit may not be strictly linked to the risks incurred by the protection fund.

28. In the rare case where a protection fund is classified outside the government sector, the levies should be re-routed via the central government subsector. The amounts then imputed from governments to protection funds are classified as current transfers. In case of use of funds, any rearranged transaction should also be B.9 neutral for general government.

**Treatment of refundable contributions**

29. Protection funds might, in some cases, arrange or accept that financial institutions pay contributions that are in principle refundable, unless they have been written-off upon certain triggering events such as a financial rescue or default of a financial institution. These reimbursable contributions might take the form of paid-in cash or of mere promise to pay (e.g. guarantees or commitments — see below). In specific cases, contributions may take the form of the acquisition of an instrument recognised as an asset in the bank's own balance sheet (financial statement) and can carry interest.

30. Such reimbursable contributions to protection funds are recorded, at inception, in the financial accounts and not as revenue, thus implying recording the incurrence of a liability by the guarantee funds, as a kind of contingent tax pre-payment. When a triggering event occurs, the liability is redeemed, as if repaid, and a tax revenue is recorded — impacting government B.9 when the deposit guarantee fund is classified inside general government.

31. This liability of protection funds is recorded as other accounts payable (AF.8), reflecting the timing difference between the tax event and the corresponding pre-payment.

**Treatment of contributions made through Irrevocable Payment Commitments**

32. Under Directive 2014/49/EU on Deposit Guarantee Schemes, contributions levied can either take the form of cash payments or of Irrevocable Payment Commitments (IPCs). IPCs are a form of *ex-ante* contributions that is designed to provide some flexibility towards reaching the required target level of risk-based contribution without excessively impairing the lending capacity of credit institutions. IPCs are guaranteed by a formal pledge of low-risk assets, typically securities but possibly cash. The collateral is either transferred to the protection fund or registered in a central securities depository in favour of it. In any case, the assets must always be at the disposal of the protection funds and unencumbered by any third-party rights. IPCs can be either refundable or non-refundable (see the above section on refundable contributions for the implications of this).

33. Being just an alternative way to cash as a means to finance *ex-ante* contributions to protection funds, IPCs are, similarly, levies classified as taxes, provided that they are fully and appropriately collateralised.

[72] See ESA 2010 paragraphs 20.06 and 20.07 about the functions of government and its unique capacity to raise compulsory levies.

[73] A resolution fund does not cover the risk of insolvency, but, as specified by the European Commission, a 'resolution would have to: 1) safeguard the continuity of essential banking operations, 2) protect depositors, client assets and public funds, 3) minimize risks to financial stability, and 4) avoid the unnecessary destruction of value.'

Under the EU regulatory framework, IPCs must always be fully collateralised. The presence of collateral ensures that the obligation to pay the levies is not weaker than in the case of cash payments and, therefore, counteracts the element of contingency that could be considered to be attached to IPCs. The collateral pertaining to IPCs is recorded in the balance sheets of the financial institutions.

34. The obligation to pay the levies arises when the collateral is pledged in favour of the protection fund and, following the accrual principle, at this time, fiscal revenue (D.29) is recorded (unless the contribution is refundable — see above), matched by a fiscal receivable (other accounts receivable — AF.89).

35. A member credit institution can potentially leave a protection fund (e.g. when joining another protection fund or in case of events such as a cross-border merger). Assuming that no triggering event has occurred and the national law regulating the scheme allows it, the credit institution's IPCs would then be redeemed/cancelled (depending on whether IPCs are refundable or non-refundable, which leads to different recording solutions).

36. In the case of non-refundable IPCs, the scheme will collect the collateralised assets, whether cash or securities, which is recorded as a transaction in financial assets matched by a corresponding redemption of the AF.89 fiscal receivable.

37. In the case of refundable IPCs, the collateral financial assets return to the credit institution through financial transactions. In the cases where non-refundable IPCs are cancelled, a tax refund transaction is recorded in the protection fund's non-financial accounts against a reduction in 'other accounts receivables' (fiscal receivable) in the financial accounts. Assuming the overall level of covered deposits in the economy remains the same, other protection fund's members will probably have to increase their contributions, maintaining practically stable the level of tax revenue of the protection fund at that time. This recording is necessary to prevent over-recording of tax revenue both at the time of cancellation and over the medium term.

38. In case of IPCs cancellations, there should not be any entry in 'other change in volume' (K.5). Such cancellations are considered transactions rather than 'other changes' in assets. Booking an 'other change in volume' would lead to inappropriately recording uncollected tax revenue (case of refundable IPC) or to undue entries in other economic flows for the collateral seized (case of non-refundable IPC).

# 1.6. Specific public entities

## 1.6.1 Overview

1. This chapter deals with some specific units under the control of government, which have a particular area of activity, such that the usual market/non-market criterion (and the decision tree in sub-section 1.2.4.1) is not relevant as far as their sector classification is concerned. The following cases are covered — special purpose entities (SPE), public head offices and public holding companies and their subsidiaries, restructuring and privatisation agencies, market regulatory bodies, entities having features of captive financial institutions, and central stock-holding entities.

## 1.6.2 Special purpose entities (SPE)

2. In general, special purpose entities (also called special purpose vehicles) are legal entities established to undertake the economic and financial transactions associated with a single legal contract or linked to set of legal contracts.[74] ESA 2010 paragraph 2.17 specifies that SPEs are usually … *created to fulfil narrow, specific or temporary objectives and to isolate a financial risk, a specific taxation or a regulatory risk*. The governing board of an SPE is usually a trust whose sole purpose is to ensure that the SPE implements the legal contract effectively. This board has no autonomy to direct the SPE to enter into other business activity. The legal contract is usually constructed in a way that it makes very unlikely that the SPE will become insolvent or make large profits.
3. ESA 2010 paragraph 2.18 lists some usual characteristics that are assumed to be 'typical' of such entities. They must be considered to be indicative features which might be totally, partly or not observed.[75] ESA 2010 paragraph 2.19 states *Whether a unit has all or none of these characteristics, and whether it is described as an SPE or some similar designation or not, it shall be treated in the same way as any other institutional unit by being allocated to sector and industry according to its principal activity unless the SPE has no independent rights of action*. ESA 2010 paragraph 2.20 further clarifies this by stating that … *captive financial institutions, artificial subsidiaries and special purpose units of general government with no independence of action are allocated to the sector of their controlling body. The exception occurs when they are non-resident, in which case they are recognised separately from their controlling body. But in the case of government, the activities of the subsidiary shall be reflected in the government accounts*.
4. ESA 2010 does not provide details on the lack of 'independence of action' which is the term used for these entities. As already mentioned, there could be some tasks performed by the entity, provided that it has its own staff, etc. However, the lack of independence of action means clearly that there is no great amount of flexibility in respect of the principal function of such an entity (e.g. when facilitating borrowing of government and management of the debt that is incurred).
5. The case of SPEs set up by government is treated in ESA 2010 (see paragraph 2.27 and paragraphs 20.47–20.48). ESA 2010 paragraph 2.27 specifies that …*such units, if they are resident, shall be treated as an integral part of the general government and not as separate units*, i.e. consolidated with its controlling unit (parent), as they are not institutional units. An SPE should be recorded as a separate unit only if it would be clear that the SPE does not act on behalf of government, which means that it can to a great extent decide e.g. on the type and maturity of instruments to be issued and on any further decisions related to the management of the debt and/or the corresponding assets.
6. If the entity is resident in another territory than that of its parent, which may be the case for securitisation operations or other financial purposes where such entities are often set up in active financial centres (issuance is easier and market deeper), an SPE should be considered as a separate institutional unit and according to ESA 2010 paragraph 2.27, … *any transactions carried out by them abroad shall be reflected in corresponding transactions with government*.
7. ESA 2010 paragraph 20.48 provides some further details on this point. The transactions carried out by a non-resident SPE are recorded as such in the territory, but imputed 'mirror' transactions will be added between the SPE and government. For instance, any borrowing by the SPE will give rise to a claim on

[74] This is different from a 'conduit' that may be set up in the context of the issuance of some financial instruments (such as short-term bills or notes) but has no legal basis. In case of a conduit, there is no separation from the 'parent unit'.

[75] Notably: no employees, no ownership of non-financial assets, being mainly managed by other units, always related to another corporation, often as a subsidiary. ESA 2010 paragraph 2.98 (c) also specifies that SPEs will have most of either their assets or their liabilities not transacted on open markets.

government (after transfer of the proceeds from issuance) and thus an increase in government debt. In case of securitisation through non-resident SPEs, the sale of assets (financial or non-financial) would not be recognised as such in national accounts and the arrangement will result in new borrowing of government.

8. ESA 2010 paragraph 2.19 foresees the case of SPEs controlled by government, which might be classified outside the government sector (most likely in S.12). However, there should be in this case strong evidence that an SPE controlled by government could actually act 'independently' and not under a restrictive framework entirely defined by government. However, when an SPE is established to serve a government unit, the lack of independence of action, could be indicated, among other factors, by:
   - *de facto* management[76] of the SPE's debt by government (for instance by the Debt Management Office or the Treasury); or
   - the absence of the right or capacity to actively manage its assets in response to market conditions (arbitrage), such as government having the right to approve any significant decision in this matter; or
   - a contract or convention signed by government fully determining the SPE's operations.

**SPE engaged in financial activities**

9. In some cases, a government controlled SPE will be formally set up with a financial institution status (which implies that it has to meet some supervision and regulatory obligations), in order to carry out some transactions on behalf of government. In these cases, if an SPE does not act independently and has thus a very restricted autonomy of decision, and if government really originates the transaction, then the SPE only acts on behalf of government — not placing itself at risk — and does not take asset management decisions. In this regard, ESA 2010 paragraph 2.57 states that … *A financial intermediary does not act as an agent for these other institutional units but places itself at risk by acquiring financial assets and incurring liabilities on its own account*. If this is not the case, then such an SPE should be classified within the government sector. In practice, this would need a case-by-case analysis. If an SPE meets the conditions to be considered a separate institutional unit and at the same time benefits from extended powers for actively managing the assets and liabilities risks exposure, such that this activity qualifies as financial intermediation, it should be classified as a financial corporation (S.12).
10. ESA 2010 paragraph 2.90, in general, refers to 'financial vehicles corporations' (FVC) engaged in securitisation transactions (even though they are better known as SPEs) that are to be classified in other financial intermediaries, except insurance corporations and pension funds subsector (S.125), if they are recognised as a separate institutional unit.[77] For the financial corporations sector, this identification of the FVCs separately from the beneficiary entity unit can be analytically important. However, when the beneficiary from a securitisation transaction is a government unit, the sector classification follows rules mentioned in section 5.5.2 of this Manual[78]. As mentioned above, ESA 2010 paragraph 2.20 states that special bodies of general government with no independence of action are allocated to the subsector of their controlling government unit.

## 1.6.3 Public head offices, public holding companies and their subsidiaries

### 1.6.3.1 PUBLIC HEAD OFFICES

11. According to ESA 2010 paragraph 2.12. …*an institutional unit is an economic entity characterised by decision-making autonomy in the exercise of its principal function*... Among the other criteria, this one may be seen as fundamental. An important point is that whenever an entity is recognised as an institutional unit, its classification should be assessed individually. The main question in the classification of head offices and their subsidiaries is to judge whether this general rule prevails or whether there are, or there should be, any special rules concerning these entities. ESA 2010 paragraph 2.15 specifies that in groups of entities …*each member of the group is treated as a separate unit if it satisfies the definition*

[76] This could be presumed if the management of an SPE is fully carried out by members of the government entities or if all decisions are subject to an ex-ante approval by government. However, an SPE could still lack independence from government even when its Board is only made of so-called 'independent' non-government appointees, if its status and/or the contract with government strongly restrict its power of decision.

[77] The ECB maintains a list of financial vehicles corporations in line with the legal framework for FVCs set out in Regulation (EU) No 1075/2013 of the European Central Bank of 18 October 2013 concerning statistics on the assets and liabilities of financial vehicle corporations engaged in securitisation transactions (recast) (ECB/2013/40). This list is not relevant for national accounts sector classification purposes.

[78] In particular, sub-section 5.5.2.8 Classification of the securitisation entity.

*of an institutional unit*. Otherwise, it must be combined with the unit that controls it (see more details in sub-section 1.6.3.3).

12. In general, a head office is an institutional unit, which in ESA 2010 paragraph 2.14 (a) is defined as …*a unit that exercises managerial control over its subsidiaries*… and which is … *allocated to the dominant non-financial corporations sector of their subsidiaries, unless all or most of their subsidiaries are financial corporations, in which case they are treated as financial auxiliaries (S.126) in the financial corporations sector*… (see also ESA 2010 paragraph 20.35). Thus, a head office is significantly involved in the management of the other units (subsidiaries) in the group by providing some services, including the coordination of the group. It means that a head office exerts direction tasks and powers, which go beyond the simple regular participation in the Assembly of the subsidiaries of the group, and the most important decision at a lower level, are taken or approved by the directing bodies of the head office.

13. According to ESA 2010[(79)], a head office shall be distinguished from a holding company (see the following sub-section 1.6.3.2). Therefore, it is important, on a case-by-case approach[(80)], to check the actual role of such units in the direction of the group, their statute and internal regulations, their human[(81)] and physical means, the source of their revenue and the nature of their expenditure[(82)]. The presence of private shareholders (with an actual influence on some decisions, at least important for the entities of the group) is also a relevant indicator to be considered.

14. A head office has to provide services to subsidiaries. In practice, this would not be the case if such bodies were set up for a restrictive purpose: for instance, to reorganize or restructure the subsidiaries and manage their total or partial disposal or set up for a limited period of time and not as a permanent structure.

    Public head offices, when assessed as such, are classified in the non-financial corporations sector (S.11) if they control a group of market non-financial producers or in financial corporations sector (as S.126 financial auxiliaries) if they control a group predominantly engaged in financial services. In case there is a 'mixture' of activities, the sector classification of a public head office is undertaken on the basis of the predominant share of value added of its subsidiaries. In case a public head office controls mostly non-market subsidiaries, such a head office should be classified in the general government sector (S.13).

### 1.6.3.2 PUBLIC HOLDING COMPANIES

15. According to ESA 2010 paragraph 2.14 (b), a holding company[(83)] is an institutional unit, which holds assets of subsidiary corporations, exerts control over them but does not undertake any management activities, i.e. does not have an active role as regards the daily activity of the group. Holding companies mainly monitor the income distribution of the subsidiaries, and reallocate the income to its own shareholder(s). More precisely, such entities do not provide other service to the entities in which they hold assets. According to ESA 2010 paragraph 2.14 (b), from a general perspective, holding companies must be considered a captive financial institution (S.127), however this does not seem to be applicable to public holdings.

16. Government may control a holding company, which by evidence acts simply as a government agent. Indications might be given by the lifetime for which it has been created and/or the tasks, generally limited, it has been entrusted with.

17. A public holding company, which holds assets (equity and possibly other financial assets) of subsidiaries:

    a) Is classified within general government if:

    - it is a sort of 'shell', as it does not perform management and effective direction tasks over the subsidiaries but is rather a kind of 'accounting tool', as control over the subsidiaries is *de facto*

(79) As mentioned in ESA 2010 paragraph 20.36, in practice the term 'public holding companies' also covers what is described in ESA 2010 as 'head offices'. It is, however, important to make a clear distinction between these two types of entities in national accounts for sector classification reasons.

(80) In some EU countries, in general, there may be a very great number of entities, which are labelled 'holdings', having in many cases an 'artificial' nature. It seems that a 'mechanical approach' (formula to be applied automatically) is the only practicable solution. This cannot be the case for units under the control of government as their sector classification greatly matters and for which a case-by-case analysis is always needed.

(81) In this regard, a very small number of staff may be indicate, notably in the context of a group with numerous subsidiaries, that the unit does not act as a head office but is rather a holding company.

(82) Thus, an entity which has mostly revenue under the form of dividends with very small, if any, management fees or/and sales of business services, and which repays all or most of the dividends to its government owner, would not be considered a head office according to ESA 2010.

(83) ESA 2010 paragraph 2.14 specifies 'Holding companies are described under ISIC Rev.4, Section K, class 6420 (NACE Rev. 2, K 64.20) as follows: This class includes the activities of holding companies, i.e. units that hold the assets (owning controlling- levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group. The holding companies in this class do not provide any other service to the businesses in which the equity is held, i.e. they do not administer or manage other units'.

exerted by government, or it provides some ancillary services to its controlling government unit (for instance collecting data from the group), **or**

- it is, permanently or occasionally, used for typical government activities, like channelling or managing public subsidies, which implies redistributing national income and wealth. It is acting as an agent of government as government mainly provides its main resources redistributed within the group.

In both cases, the entity cannot be considered being independent in its decision making and therefore is not to be considered as an institutional unit and, thus, it is classified in the government sector and not in the financial corporations sector (S.12), as it would be the case for private holding companies.

b) it is recognised as a 'head office' (see above). In this case, the sector classification of its subsidiaries must be assessed by reference to the standard classification rules.

#### 1.6.3.3 SUBSIDIARIES OF PUBLIC HOLDING AND HEAD OFFICES

18. According to ESA 2010 paragraph 2.13 (e), some subsidiaries are deemed to be institutional units *…even if they have partially surrendered their autonomy of decision to a central body (the head office)*…. Except for some entities in the group, which could be considered as providing ancillary services, strictly confined to providing services to the central body, the classification of subsidiaries has to be assessed on an individual basis. If two legally incorporated entities cannot be meaningfully considered separately, they should be treated as a single institutional unit. However, once each of the entities is deemed to be an institutional unit, the usual sector classification rules must strictly apply.
19. If a subsidiary is recognised as an institutional unit, and the unit is determined to be non-market, it should be classified in the general government sector, even if it is only indirectly controlled by government through the head office/public holding company. It should be noted that if a market institutional unit conducts some activities/transactions on behalf of government, the rules related to 'rearranged transactions', as mentioned in ESA 2010 paragraph 1.72 and following, must be applied.
20. Another aspect relates to the government control, i.e. whether a subsidiary that is non-market, and that is only *indirectly* controlled by government can be classified in the general government sector. ESA 2010 paragraph 2.37 states:

    *In order to control more than half the shareholders' voting power, an institutional unit need not own any of the voting shares itself. A given corporation C could be a subsidiary of another corporation B in which a third corporation A owns a majority of the voting shares. Corporation C is said to be subsidiary of corporation B when either corporation B controls more than half of the shareholders' voting power in corporation C or corporation B is a shareholder in C with the right to appoint or remove a majority of the directors of C.*

21. As a result, the *corporation A* controls also the *corporation C*, 'in cascade'. It must be stressed that the government control over a given unit has to be assessed in its entirety, i.e. as a combination of all interest of (all) government units (from possibly different government subsectors). ESA 2010 paragraph 2.38 refers also to other indicators of control (see chapter 1.2 Criteria for classifying units to the general government sector).
22. A consequence of classifying a subsidiary of a public holding/head office in the general government sector is that a liability in equity (AF.5) would be recorded in the financial accounts of the general government sector. An alternative recording, that may be sometimes more appropriate, would be to record an imputed equity holding by government on the subsidiary. In this latter case, this AF.5 amount would be deducted in the consolidated financial accounts from general government AF.5 position, on the asset side.
23. Concerning the gross or net presentation of the equity liability of the government, it might be useful to distinguish cases according to the owners of the corporation. If the public holding/head office is the sole owner, both net and gross presentations might be appropriate. However, if the subsidiary is not solely indirectly owned by government, then a gross presentation is more appropriate, in order to show the equity liability of general government to other sectors.

### 1.6.4 Restructuring and privatisation agencies

#### 1.6.4.1 RESTRUCTURING AGENCIES

24. Government may control restructuring agencies, as mentioned in ESA 2010 paragraph 20.44, with the aim, for a given period, to 'restructure' several corporations (public but possibly also private), notably

when they show persistent losses. This generally implies a dramatic change in the business model and a significant adjustment in human and physical capacities of the restructured entities. In this context, such restructuring agencies may provide capital transfers, loans, acquire equity or grant one-off guarantees.

25. ESA 2010 paragraph 20.44 furthermore explains … *the major criteria determining sector classification of restructuring agencies are whether such entities are financial intermediaries, the market character of the main activity and the degree of risk assumed by the public agency. In many cases, the degree of risk taken by the restructuring agency is low due to the fact that it acts with public financial support and on behalf of the government*… . When restructuring agencies act on behalf of government, under its narrow control and with a clear support by government for own funding, these entities should be classified within the government sector and not in the financial corporations sector.

26. ESA 2010 paragraph 20.44 also states that restructuring agencies can handle privatisation and defeasance. Defeasance structures (which are often part of restructuring process) are treated in the Part 4 Relations between government and the financial sector.

#### 1.6.4.2 PRIVATISATION AGENCIES

27. ESA 2010 paragraph 20.210 states that *Privatisation commonly involves the sale by government of shares or other equity in a public corporation*… . Privatisation agencies hold shares in public corporations that the government intends to dispose of. Such units are not head offices in ESA 2010 terms, as they do not really intervene (or only in a marginal way) in the management of the corporations they hold, but are created with the aim to facilitate their disposal on market.

28. Privatisation agencies should be classified in the general government sector, because they manage assets on behalf of government, which is the ultimate owner of these assets, and their *main function is to redistribute national income and wealth, channeling funds from one unit to the other*, see ESA 2010 paragraph 20.45 (a).

29. In the case of a public head office engaged both in business market activities (in the sense of the coverage of the costs by sales) and in the management of assets to privatise for some of its subsidiaries, it might not be possible to split the unit in two separate institutional units. In this case, ESA 2010 paragraph 20.45 applies: … *The unit is classified as a corporation, and any transactions made on behalf of the government should be rerouted through the general government.* Therefore, when one unit carries out transactions on behalf of another unit included in the general government sector, these transactions should be recorded in the accounts of government.

### 1.6.5 Market regulatory bodies and professional associations

#### 1.6.5.1 MARKET REGULATORY BODIES

30. Market regulatory bodies (also named authorities, agencies, regulators, etc.) described in this chapter[84] are entitled by law with the powers to elaborate some regulations (norms, provisions, obligations, etc.). These regulations are legally binding and any actor on the market for a given activity is obliged to follow them, at the risk of possible prosecution (sanctions). Thus, market regulatory bodies exert decision-making on some key variables, influencing the way in which units carry out an activity and receive revenue from it.

31. Market regulatory bodies may also be responsible for controlling norms, although this task could be delegated to a specialised unit without normative powers. In addition, market regulatory bodies may also exert *ex-ante* control on the agents wishing to take part in an activity in order to assess their competence, professional capacity (licenses, permits to operate) and provide some assurance to consumers on the professional expertise and qualification of the professional category (doctors, lawyers, etc.). There are different models among EU Member States as regards the units responsible for such tasks. In recent decades, such units have been developed, e.g. in the telecommunication, transportation or energy sectors.

32. The first paragraphs of ESA 2010 chapter 20 (Government accounts), are unambiguous about the classification of units which are involved in activities rendered to the community. These units are entitled with sovereign powers that 'affect the behaviour of economic units.' Chapter 20 makes also a distinction between 'core government units' (depending on a public budget) and other government bodies which are recognised as autonomous institutional units. However, government may delegate some of its sovereign tasks to units that are not government bodies, often with a non-profit status. When the activity

[84] These market regulatory bodies do not distribute subsidies or grants to producers and do not act on markets in order to smooth market fluctuations by purchasing/selling goods in a contra-cyclical perspective (these are covered by ESA 2010 paragraphs 20.53–20.54) and chapter 1.4 Market regulatory agencies in agriculture.

of such units is in majority oriented to perform these sovereign tasks, under a narrow control of government (which may approve some decisions, their budget, or confirm some sanctions), these units should be assimilated to government regulatory agencies and classified within the government sector.

33. In many EU Member States, market regulatory bodies are usually considered as government units (in the central government subsector as they exert their authority on a whole country), whatever their legal status, the way the members are appointed, the degree of independence from executive units, etc. The reason is that they do not act only in the interest of the market operators, but also (and possibly essentially) for collective purposes, i.e. for the benefit of the community, notably in order to enhance the confidence of consumers and/or because of the importance of such activity in the production system.

34. Market regulatory bodies may be financed by government but they may be also entitled to directly receive funds from the regulated agents, whether these are provided on a regular basis or not. The classification of such receipts must follow the general rules set in ESA 2010. If the producer units (regulated agents) are required to pay globally an amount that corresponds to the cost incurred by the regulator in performing its missions, this should be recorded as a service fee (a sale of services). If the levies are largely above the regulatory costs ('out of all proportion to the costs' according to ESA 2010 paragraph 4.23 (e)), they must be recorded as a tax[85].

#### 1.6.5.2 PROFESSIONAL ASSOCIATIONS

35. Apart from the market regulatory bodies described above, in most EU Member States, there are numerous 'professional associations', of which membership may be compulsory or voluntary. The main aim of these entities is the 'defence' of the interests of their members as a whole, notably by contracts with government or regulatory authorities, but they may also not be strictly confined to this. Notably, professional associations may also exert professional control on members and other actors. Generally, the professional associations use legal provisions established by government but they may also have more or less extended normative and regulatory powers which influence the way in which some actors in specific fields carry out their activity, by delegation from government. Government may, for instance, set up a general legal framework and these entities are then given the task of elaborating practical guidance on how to meet the requirements. Professional associations may even have the power to impose some (e.g. financial) sanctions in cases of professional negligence.

36. ESA 2010 paragraph 20.02 states that *powers to raise taxes and other compulsory levies and to pass laws...* is specific to government. The term 'laws' must be understood in a broad sense, as some norms may not take the form of a law voted by a Parliament, but result in similar constraints on the economic agents for the conduct of some economic activities. As far as resources are concerned, any levy which is imposed to some economic agents only because they are engaged in an activity (or provide some services) and which by evidence is not in proportion to the cost of the service provided must be classified as a tax and recorded as government revenue. However, if the amounts raised can be identified as the actual counterpart of a service provision, they should be recorded as a sale of services (see also sub-section 1.2.4.5 Borderline between taxes and sales of services). In case of a private body performing some regulatory tasks but not classified in the government sector because the major part of its activities is lobbying/servicing exclusively their members, possible compulsory resources identified as taxes should be rerouted to government, which then would transfer to the unit an equal amount.

37. Professional associations provide services mainly for their members and they should normally not be classified in the government sector. However, depending on the extend of 'sovereign-nature' of tasks delegated by government, on the degree of possible influence of these associations in the design of the professional framework imposed to all relevant actors and on the extent of the control of their decisions by government, professional associations could be in some cases assimilated to government regulatory bodies, if such tasks represent the major part of their activity. Professional associations may be allowed to collect compulsory payments from their members. If these resources do not have the features of service fees, this may imply some rerouting to government as taxes.

### 1.6.6 Entities having the features of captive financial institutions

38. ESA 2010 created captive financial institutions as a new category of financial corporations (to be classified in subsector S.127), described in ESA 2010 paragraphs 2.21–2.23 and 2.98–2.99. Captive financial institutions are institutional units that do not engage in financial intermediation or in financial

[85] A market regulatory unit may also manage a fund (such as a guarantee fund) for which the levies should be recorded as taxes when the contributions to the fund are compulsory.

auxiliary services. They also should not be confused with artificial subsidiaries described in ESA 2010 paragraphs 2.24–2.25[86], which are not institutional units.

39. ESA 2010 paragraph 2.98 explains that captive financial institutions …*are neither engaged in financial intermediation nor in providing financial auxiliary services* (as listed in ESA 2010 paragraph 2.96), as they do not really place itself at risk, and further that 'most of their assets or their liabilities are not transacted on open markets.' This may mean that their assets take the form of non-negotiable instruments (by nature or because there is a unique counterpart) or that the assets would not be funded by banking (deposits) or financial markets (securities) at the prevailing conditions, but through a bilateral relation with their controlling unit, under possible various forms (loans, equity, other securities).

40. Captive financial institutions are considered institutional units according to ESA 2010 criteria (see ESA 2010 paragraph 2.12)[87], but have a limited capacity of decision as regards their current management and are very much dependent on their parent[88] (controlling unit) as regards the conduct of their activity. Thus, the influence of their controlling unit goes beyond the coverage of the notion of control in national accounts, which refers to the influence on the general policy and the strategy of the unit, i.e. the parent control goes beyond key decisions and a significant influence is also observed in 'day-to-day' activities, implementing the defined strategy.

41. Government-controlled entities may have functions similar to captive financial institutions, sharing similar features, i.e. acting mainly in the financial area (they do not produce goods and do not provide non-financial services), showing essentially financial assets on the assets side of their balance sheet and with mostly property income as revenue, and in which government exerts a significant influence on their management. From a risk perspective, it is highly likely that government is supposed automatically and immediately to bear the negative consequences of any insufficient performance of the assets held by these entities, either explicitly or implicitly. As a rule, such entities controlled by government and having, at the same time, all the features as described in the following paragraphs below and summarized in paragraph 47 should be classified in the general government sector (S.13)[89] and not in the financial corporations sector (S.12).[90]

**Range of activities and distinct economic behaviour from commercial entities**

42. The government controlled entity carries out its activity in the framework of a limited range of activities and in narrow conditions (if not direct instructions for some individual interventions), which are mainly designed, significantly influenced, closely monitored and supervised by the parent unit, with no possibility to change. Although the unit has nevertheless a certain degree of independence in the daily management, it must however aim at objectives specified by its controlling unit and is imposed some specific restrictions and constraints. It is important to note that the influence of the parent unit is simultaneously over the assets and over the liabilities. As a result, such a 'captive' unit acts differently from private financial institutions, i.e. does not behave as a 'normal' commercial entity, searching to extend the scope of its activities, specialising in some (more profitable) areas, arbitrating between different strategies and, in general, looking to obtain a market rate of return in similar activities. Government plays a predominant role in the conduct of the activities of the entity and does not require a market rate of return, i.e. the aim is not to ensure a return for government (such as a minimum return on equity rate). Such units do not provide services for the benefit of government units but they carry out some financial tasks, almost exclusively in the context of public policy objectives under the close monitoring of government. In fact, these entities represent an alternative to the performing of these tasks directly by government.

43. These activities and economic behaviour are different from the case of government entities providing ancillary services and/or artificial subsidiaries (both not being institutional units) which mainly perform some tasks exclusively for the government controlling unit (or possibly for several units of the same

[86] ESA 2010 explains that 'artificial subsidiaries' are wholly owned by a parent corporation and provide some services to it or to other corporations in the same group. Such entities usually do not satisfy the definition of an institutional unit. They are close to entities providing ancillary services, except for the scope of the types of activity carried out.

[87] However, if an entity obviously lacks decision-making power, even for its daily activities, appearing as a kind of accounting tool or functioning as 'auto-pilot', the entity is not recognised in national accounts as an institutional unit and is automatically included in its controlling unit.

[88] The term 'parent' must be understood in a broad sense as the controlling unit. Entities having the features of captive financial institutions controlled by government must not necessarily be owned directly by government or be created by government in order to be classified in the general government sector (S.13).

[89] Even in cases they would hold a banking license and would be included in the MFI list held by the ECB.

[90] The captive financial institutions and moneylenders subsector (S.127) then includes all captive financial institutions, which are not controlled by government (or not directly controlled by government). There may be captive financial institutions whose parent would be a public corporation. Such captive financial institutions should normally be classified in the subsector S.127, except if this unit performs some tasks for public interest and in fact acts on behalf of government and not for the benefit of its public parent. In this latter case, this would trigger a classification to government sector.

nature) and for which most of their assets do not take the form of claims on other sectors than government.

**Constraints on the assets side**

44. Constraints on the assets side mean that the parent/controlling unit imposes the conditions in which the unit may act, without the possibility of changing them (or very marginally) by its own initiative, as referred to, for instance, the nature of the assets it can hold, the type and size of its intervention, the return on some assets, the characteristics of the beneficiaries of the activity of the unit and other conditions which are precisely defined by the controlling unit with no room for manoeuvre, or very little, if any, left to the unit.[91] This would also include cases where an *ex-ante* authorisation would be required on a significant part of the activity of the unit (such as the granting of loans or acquisition of shares). For example, if most of the loans (in number or in principal amounts) granted by such unit (or of its investments in other financial instruments) need an *ex-ante* authorisation from the controlling unit, the assets are considered to be under the control of the latter and the unit would actually have features similar to a captive financial institution.
45. An example may be for instance a government controlled entity, which have been entrusted by government to carry out activities in the context of public policies, generally limited to some precise tasks related to them, such as granting loans under more favourable conditions than the markets, or investing in some specific units or sectors (as a leverage tool).[92] Examples of such policies are economic development, regional policy, new technology, climate change mitigation and adaptation, social integration, access to real estate ownership, access to tertiary education, etc. As mentioned above, the government-controlled unit would be obliged to conduct its interventions within a narrow framework defined by government, even if government would not necessarily have to formally approve/determine every single allocation of assets to every single beneficiary, which however may be frequently the case for operations of a significant size.

**Constraints on the liability side**

46. The influence exerted on the liabilities side of the entity means that the unit would not be able to borrow without the authorisation of the parent unit, or would mainly be financed by the parent unit or, in some cases, would have most of its borrowing explicitly guaranteed by its parent unit. Under these conditions, the unit would not be in a position to decide by itself on the resources that could allow it to extend the scope of its activities or reorganise its interventions.
47. To summarise, a unit engaged in financial activities and controlled by government would have the features of a captive financial institution and thus would be classified in the government sector, and not in the financial corporations sector (S.12), if at the same time the following conditions would be met:
    1) the unit would carry out a limited range of activities in narrow conditions set by government (in the framework of public policy objectives),
    2) government influence or constraints would be evidenced simultaneously on both:
        - assets side and
        - liabilities side of the unit, and
    3) the unit would not behave like a 'normal' commercial entity (e.g. no expectation of a market rate of return on equity).
48. For instance, a unit controlled by government and acting in narrow limits defined by government but financing itself directly on the market without support from government (i.e. without a need for government guarantees or subsidies), would not have (all) the features of a captive financial institution. However, when this influence or constraints would be evidenced on both assets and liabilities, the entity in fact would act mainly on behalf of the controlling unit (government).
49. Some examples of captive financial institutions are given in ESA 2010 paragraph 2.99; however, they do not explicitly refer to cases of captive financial institutions controlled by government. Nonetheless, these

[91] In this regard, there is for instance a significant difference between a bank affiliate specialised in a category of credits (corporate, real estate) having a large autonomy to carry out this activity (for instance, just with some profitability objectives/benchmarks set by the parent) and a unit which would be imposed by its banking parent to grant loans, on its own name, only to a precise category of agents (level of income, size of a firm, types of products, parameters, etc.), with a given margin, etc.

[92] However, there may cases where government has entrusted the unit to intervene in different areas of public policy, such as providing support to some enterprises (notably SME), and at the same time to households for social housing. This is carried out by distinct departments within the unit and, in some cases, by dedicated affiliates. The main point is nevertheless that for all these kinds of activities (or the majority of them), it should be assessed whether the unit has a limited room of manoeuvre, as explained above.

examples provide interesting information on some aspects of such entities. Notably, ESA 2010 paragraph 2.99 (d) deals with the case of *units which provide financial services exclusively with own funds, or funds provided by a sponsor, to a range of clients and incur the financial risk of the debtor defaulting*. This case deserves a particular attention when such entities are controlled by government, which, in addition to a narrow control of most of their activity, as described above, would provide most of their resources under different possible financial instruments (such as equity, deposits, loans, securities). An important feature, as already mentioned above, is that generally government does not provide the funds with the aim to get a market rate of return (see for instance chapter 3.2 Capital injection into public corporations), but gives priority to the fulfilment of some of its own policy objectives.[93] Under these conditions, the government-controlled unit would not have to ensure a sufficient rate of return for facing a market cost of borrowing, as a 'normal' financial institution would do.

**Some specific cases**

50. In the framework of the general rules described above and summarized in the previous paragraph, there may be some additional aspects to be considered. For example, it may happen that government is not the only provider of funds (sponsor), other units (such as banks) may be also involved. A classification as a government unit would apply regardless of the proportion of the funds provided by government if all the funds received by the unit would not receive a market rate of return (such as the return on equity required by normal private shareholders or the usual commercial rate of interest).[94] There could also be cases where the other resources providers would act as 'normal' investors and would require a rate of return close to the usual market rate. Nevertheless, due to the fact that government would exert a decisive influence on the entity (as described above) and would not require a similar rate of return, compared to the other providers of funds, this would also trigger a classification as government unit in all cases where government would provide to the unit more than 50 % of the total resources (excluding accounts payable), under any form (equity, deposits, loans, securities, guarantees).

51. Government may also provide an explicit guarantee on financial instruments issued by the entity, which will allow the entity to receive funds at better conditions (normally benefiting from the rating of its guarantor) or even to have an access to funds market. This would be assimilated to the direct provision of funds if the guarantee would cover a majority of the non-government borrowing of the entity, would be unconditional and might be activated by creditors 'at first demand'. *De facto*, the unit would not be placing itself at risk and the cost of borrowing would not reflect the level of risk of the unit that, due to the influence of government, would have only limited profits, if any. In such cases, the unit should be classified in the general government sector.

    Finally, there might be cases where the unit could borrow on the markets but without any explicit government guarantee on its debt instruments. However, due to the narrow control of government on its activity and because of the crucial role of the unit in the context of important government policy, it is likely that the investors would have no doubt on a government support if needed and would 'price' this situation. In case the unit would not cover the market cost of its borrowing without permanent support from government (which would appear in form of subsidies for off-setting the gap between asset interest and liability interest, compensating some administrative costs, covering losses, etc.), this unit should be classified in the government sector.

## 1.6.7 Central stock-holding entities (CSE)[95]

52. According to the Directive from 2009[96], a central stock-holding entity may be established in EU Member States to ensure the maintenance of emergency crude oil and/or petroleum stocks to be used in the event of a crisis. Governments may manage directly the emergency stocks or confer these powers to a CSE set up or nominated by government. In addition, the Directive foresees that, for a specified period, CSEs or government may delegate tasks relating to the management of emergency stocks, with the exception of sale and acquisition of specific stocks. Such tasks can only be delegated to 1) another EU

[93] There might be cases where government would initially expect a rate of return not too far from market benchmarks (for instance, at least the cost of its long-term borrowing). However, in case the unit would not be in a position to ensure it, it is unlikely that government would approve a change in the general policy, or even the exit from it, as it would be frequently observed for private investors.

[94] It could be questioned why such private investors (normally profit-oriented) could be involved in an entity having such features. One reason may be that they could, in this way, capture some other profitable activity with the beneficiaries of the interventions of the unit. Another reason could be that they have entered into partnership with government that should be appreciated in a global way as regards the final profitability of all related operations and not simply at the level of this unit.

[95] See details in Eurostat's guidance note: Classification of Central Stockholding Entities (CSEs) in ESA 2010, published in August 2014.

[96] Council Directive 2009/119/EC.

Member State within which territory such stocks are located, or 2) the CSE set up by that EU Member States government, or 3) the economic operators[97].

53. The Directive specifies that the establishment of a CSE is not compulsory, but in case EU Member States decide to set up one, they should respect the following conditions: no EU Member State may set up more than one CSE, it shall take the form of a body or service without profit objective and acting in the general interest and its main purpose shall be to acquire, maintain and sell oil stocks for the purpose of the Directive. Payments by the operators for the services of the CSE shall not exceed the full costs of the services rendered and may not be required until the stocks are constituted.

54. The main activity of CSEs is limited to the acquisition, maintenance and selling of oil stocks for the purpose of the Directive, which is a matter of national public policy of EU Member States. CSEs are not supposed to make any profit from their activity and may even be loss making.

55. The activities of CSEs, the objective and the characteristics and use of the emergency stocks are strictly regulated by EU and national law. These limitations are foreseen so as not to jeopardise the availability, physical accessibility and use of these stocks in the event of crisis. These limitations should be taken into account when considering other indicators of government control. Given the strategic nature of the emergency oil stocks, there is always an element of government control in the CSEs via excessive regulation (see ESA 2010 paragraph 20.309 (h)).

56. In practice, four basic cases of a CSE may be distinguished:

- a CSE is part of the general government sector (e.g. a budgetary or an extra-budgetary unit, etc.),
- a CSE is a public corporation (i.e. controlled by government),
- a CSE is an NPI/association whose members are the economic operators,
- a CSE may be a private corporation owned by private economic operators.

57. In the first and the second case, government controls the CSE's general policy (ESA 2010 paragraph 20.18).

58. In the third case, the main issue is whether government is effectively controlling the CSE when it is an association/NPI whose members are the economic operators. Control is usually exercised by holding the majority of voting rights, keeping veto powers or appointing the majority of members of the board. In other cases, government controls the CSE through other means such as limiting the activities that the CSE can pursue, controlling the use of the emergency stocks and deciding on the provisions of the statute of the CSE. Sometimes it is also foreseen that the loans of the CSE are guaranteed by government (ESA 2010 paragraph 20.309). If the only, or more preponderant, activity of the unit is to comply with the obligation imposed by government, the unit should be seen as acting *de facto* as an agent of government and it should be classified within the general government. However, if the unit undertakes other activities than just to comply with the stockholding requirements imposed by government, it could be concluded that government does not determine the general policy of the unit. In this particular case, the unit could be classified outside the general government sector.

59. As described by the fourth case, the CSE may be a private corporation owned by private operators. This is currently not a common case, as the Directive foresees that the CSE shall take the form of a body or service without profit objectives and acting in the general interest. Therefore, in this case it should be thoroughly checked whether government is controlling the CSE by other means. If there is no indication of government control (see ESA 2010 paragraph 20.309), the CSE could be considered as a private unit and then classified in the non-financial corporations sector (S.11).

60. A government controlled CSE should be classified in the general government sector (S.13) due to its specific nature (as outlined in the Directive). If a CSE is government controlled, the CSE's activities related to the emergency stock maintenance should be in principle considered as non-market production because the stockpiling level required by government goes beyond the stockpiling undertaken for commercial purposes[98]. All the payments made by the economic operators to government controlled CSEs should be considered as taxes on products (D.21), (even if they may not be considered as such in the national legislation). The fees, the operators have to pay, are set by government or using an agreed formula, which means that the stocking unit does not react to market signals (changing the price, adjusting product capacity, etc.) as would be the case for a market activity.

---

[97] 'Economic operator' means any person, body or entity that is obliged to hold emergency stocks for the purposes of the Directive. This stockholding obligation might be delegated partly or fully to a CSE or other economic operators.

[98] The imposition of a certain level of oil stocks is mainly a matter of national policy (and thus government imposes the level of payments exercising its sovereign function) and not something which the operators would need to do for commercial considerations. In addition, the Directive effectively prohibits the CSE from profit-seeking behaviour, thus a classification of any output as market output would require very careful consideration.

61. If the CSE is privately controlled, the nature of the payments made by the economic operators to the CSE should be analysed. If all the payments from the economic operators to the CSE are on a voluntary basis and the economic operators can choose on how to store the emergency stocks (i.e. they can fully decide between storing the emergency stocks themselves, through the CSE or by delegating the obligation to another economic operator), these payments could be considered as sales of services. If the CSE is privately controlled, it should be classified in the non-financial corporations sector (S.11). In this case, government has delegated its obligation of maintaining emergency stocks to a private entity. If the privately controlled CSE is receiving mandatory payments from the economic operators, these payments are to be considered as taxes and rerouted through government accounts (S.13), as it is through the delegated authority of government that the CSE is collecting these payments. However, in case a privately controlled CSE receives voluntary contributions/payments from the economic operators, these payments can be treated as sales of services.

62. A CSE classified in government sector (S.13) may still have some marginal market activity but this should not have any influence on the unit's sector classification.

# 1.7 Government debt management offices

## 1.7.1 Background

1. The functions of government debt management agencies or offices, frequently observed at the level of central government, vary from country to country. These functions can cover a range of financial activities. The more frequent of them are issuing securities, possibly incurring other forms of borrowing, hedging risks, managing government's liquidity (notably through repurchase agreements). They are generally set up in order to benefit from special financial expertise and ensure closer relations with market areas. In some cases, they may grant lending to other public units (for instance for emergency liquidity support or for long term, notably to foreign governments). In some countries, the national central bank might perform some of these tasks for government where they are in other EU Member States directly carried out by the Ministry of Finance (Treasury) or by the authorities in another subsector.

## 1.7.2 Treatment in national accounts

2. When public debt management offices are separate institutional units, they should be classified in the general government sector as they act on behalf of general government. They appear to be simple agencies and their activity is very similar to an auxiliary activity.
3. They should not be classified as financial corporations as they do not perform financial intermediation. The proceeds of borrowing by debt management offices are transferred to government and they are generally not held on the debt management body's balance sheet but in an account of the government unit, they are servicing. Similarly, the repayment of the borrowing is provided by the government unit from its resources or by rollover of the debt through new issuances carried out by the debt management office.

# 1.8 Joint ventures

## 1.8.1 Background

1. The case of joint ventures where government units are involved is covered in ESA 2010, chapter 20 Government accounts. ESA 2010 paragraph 20.49 mentions that 'many public units enter into arrangements with private entities or other public units to undertake a variety of activities jointly, on market or non-market basis'. Three types of arrangements are foreseen: jointly controlled units ('joint ventures'), jointly controlled operations and jointly controlled assets. This chapter does not refer to joint ventures that would be arranged by market public corporations with private sector.[(99)]
2. In the case of joint ventures, a unit is set up (as corporation, partnership or any other legal form) which is clearly an institutional unit, i.e. meeting the criteria as defined in ESA 2010 paragraph 2.12, i.e. entering into contracts in its own name and possibly raising finance for its own purpose. Joint ventures are not restricted to the case of only two partners as there may be arrangements that are more complex. In addition, a joint venture may be set to carry out activities in a non-resident territory and rules similar to the case of non-resident SPE might apply. A joint venture may also be set up in the context of PPP projects and, in this case, rules stated in chapter 4.4 should apply as far as the classification of the partner is concerned.[(100)]

## 1.8.2 Treatment in national accounts

3. If the joint venture is owned by an exact equal percentage of ownership by a government unit and a private unit, it is recommended to consider other indicators of control than ownership, as mentioned in ESA 2010 paragraph 20.307. It may happen that government holds some rights higher than for the private partner(s), such as veto power or priority rewards, or bear more risks. In these cases, the rule mentioned in paragraph 5 should apply.
4. In case the joint venture is owned by a government unit and a private unit in equal percentages, and that there is no evidence of some superiority of control by either party, ESA 2010 paragraph 20.320 states that if the joint-controlled unit does not satisfy the criteria to be classified as a market producer, it must be fully allocated to the general government sector. If it is recognised as a market producer, the unit would be included in the non-financial corporations sector S.11 but should be split, one half being considered public-controlled public corporation and the other half allocated to the private sector.
5. If the joint venture is not owned by exactly equal percentages of ownership, by each of the public or private parties, the unit must be allocated to the party that holds the majority. If it is the government unit, the unit will be classified within the government sector if the joint venture has a predominant non-market activity and as a public corporation if the unit is recognised as a market producer. It is, however, recommended to check whether some other provisions related to rights and decision power are not de facto giving a different view as far as the effective control of the joint unit is concerned.
6. When a joint venture involves only units classified in the public sector (for instance a joint venture between a public corporation and a government unit), the sector allocation of the unit will depend on its market/non-market nature. Non-market units are recorded in the government sector and market units within the public corporations subsector (S.11).
7. For the other arrangements which are not run by a separate institutional unit, but involve only some assets, it must be determined which unit owns the asset on the basis of which unit is exposed to the majority of risks and rewards allocated to the assets. Both expenses and revenues, recorded on gross basis, are nevertheless re-allocated according to the arrangement (ESA 2010 paragraph 20.49).

## 1.8.3 Rationale of the treatment

8. In case a separate unit is jointly set up to carry out an activity, the single criterion of the percentage of ownership may not be sufficient to decide on the sector classification of the unit. Other features of

(99) Normally, according to the share in control, the joint venture could be classified in the private sector, in the public sector or in both. However, if the public corporation would no longer be a market producer, the joint venture should be classified within the government sector.

(100) It is assumed that there is no issue for possible (but rather hypothetical) joint ventures for financial intermediation (or financial auxiliary services) as, by definition, such entities should be classified within the financial institutions sector (S.12).

control need to be analysed. In many cases, government has de facto more influence than the private partner(s) and taking more advantage of it. The exact purposes of the creation of the unit, notably the importance of public interest reasons, should be closely considered.

9. For other types of arrangements involving assets but without any separate unit jointly, any asset in national accounts is allocated to only one controlling unit and thus to its institutional sector.

# 1.9 European entities related to the euro area sovereign debt crisis

## 1.9.1 Background

1. The European sovereign debt crisis, which started in 2010, has led to the creation of new entities or structures with the objective of providing intergovernmental financial support to EU Member States. As a first step, the euro area Member States[101] agreed to grant bilateral loans to Greece in the context of a new European Financial Stabilisation Mechanism (EFSM) involving also both the European Commission and the IMF. These financial supports are recorded without difficulty in Government Finance Statistics as loans incurred by borrowing countries directly from the euro area Member States (bilateral), from the Commission (EFSM) and from the IMF. However, it quickly appeared, because of contagion, spill-over and overshooting effects on euro area debt markets, that there was a need to set up specialised institutional bodies.
2. In this regard, the European Financial Stability Facility (EFSF) was created by the euro area Member States following the decisions taken on 9 May 2010 by the ECOFIN Council with the aim of providing financial assistance to euro area Member States requesting financial support under the condition of a macro-economic adjustment programme. The EFSF, created in October 2010 as a temporary mechanism providing support until 2013 but continuing to function after this date until the time of redemption of all bonds and loans, issues bonds or other debt instruments (bills and notes) on the capital markets. Furthermore, it has been decided that the EFSF could also intervene in the primary and secondary bond markets[102], act on the basis of a precautionary programme[103], recourse to more original tools (see below) and provide resources to governments for financing recapitalisations of financial institutions in non-programme countries.
3. Also, in October 2010, it was decided to create a permanent rescue mechanism, the European Stability Mechanism (ESM), based on a specific Treaty signed on 11 July 2011. After the ratification procedure came to an end, the Treaty entered into force on 27 September 2012, the ESM was 'inaugurated' on 8 October 2012 and started its operations in December 2012. It is currently the mechanism used to finance any new support programmes and is enabled to provide support under various tools similarly to the EFSF.[104]

## 1.9.2 Treatment in national accounts[105]

**European Financial Stability Facility**

4. As explained in Eurostat's decision of 27 January 2011 on the EFSF, the EFSF is not considered an institutional unit, from a conceptual point of view, because it does not possess all the normal characteristics of an institutional unit under ESA 2010. It has no capacity for initiative and no autonomy of decision in the exercise of its primary function, providing loans to countries in difficulty and their financing. Decisions related to this primary function are in practice subject to the prior approval, usually unanimous, of the Eurogroup[106] members taking part in a support operation. Moreover, the EFSF cannot be regarded as an international financial institution on its own, as it has none of the usual characteristics. It could not be consolidated with any of the European institutions established by the Treaties, at time of creation. Finally, the EFSF is *de facto* an accounting and treasury tool to enable the same conditions for access to borrowing for members of the euro area, acting exclusively on behalf of them and under their total control. EFSF's very low capital base compared to the size of its balance sheet reinforced the notion that the EFSF was mostly an artificial entity created as an accounting tool.

---

[101] Several other EU Member States also took part it this bilaterally based support.

[102] The EFSF has also granted support by delivering its own bonds or notes, without raising funds on markets. In some cases, these 'cashless' operations are only temporary while in other cases the EFSF debt instruments will be kept by holders until maturity and may be used as collateral in repo transactions.

[103] Such precautionary lines are treated as contingent assets until actual drawing down by the beneficiary country.

[104] For detailed information on these bodies, and notably all relevant documents, see https://www.esm.europa.eu/efsf-overview and http://www.esm.europa.eu.

[105] See also relevant decisions on Eurostat website: http://ec.europa.eu/eurostat/web/government-finance-statistics/methodology/decisions-for-gfs.

[106] The Eurogroup is the term for informal meetings of the finance ministers of the euro area.

5. As a consequence, from a theoretical point of view, the EFSF operations would have to be allocated to or consolidated with, in national accounts tables, the institutional units to which it belongs, in this case, the governments of the euro area Member States.
6. For practical reasons, the Eurostat decision nonetheless prescribed to reroute the EFSF loans through guarantors, therefore implying recognising the EFSF as a statistical unit to be classified in the government sector of the EU institutions, by analogy with the ESM. The 2012 Eurostat decision indicated that the operations of the EFSF should be allocated to the guarantors, although only partially (meaning that the consolidation is based on some assets held by the EFSF only and not on the totality of its balance sheet for technical reasons, as explained below). As a basic activity, the EFSF borrows on markets with the guarantee of Member States, according to a contribution key linked to their share in ECB's capital.[107] Initially, up to December 2011, to obtain a better credit rating, one part of the proceeds of market borrowing was not transferred to the borrowing countries under the form of loans but invested into high rated debt instruments. This was known as the Loan Specific Cash Buffer (LSCB). The EFSF debt used for the 'LSCB' is not recorded in national accounts as imputed debt of the Member State guarantors. Thus, only the asset side of the EFSF corresponding to actual support to the euro area Member States is rerouted to the guarantor Member States.
7. The loans, which nonetheless include the Cash Reserve[108] not disbursed but to be repaid by the borrowing countries, initially exactly matched the borrowing conditions (interest rates and maturities) obtained by the EFSF.
8. Whether in the form of loans or government bonds, the EFSF lending to beneficiary Member States is recorded as loans granted by the EFSF to the MS guarantors who, as a result incur a corresponding increase in their gross debt but hold an equal claim in loan assets against the beneficiary country. For the borrowing country, this is only a change in geographical allocation of its borrowing.[109]
9. Furthermore, in the course of 2011, following decisions in Euro Summits, the EFSF support framework was amended, with the disappearance of the LSCB (grossing-up of guarantees by 165 % on the funding instruments), a significant reduction in Cash Reserve (no longer including the margin), the diversification and pooling of resources (short term instruments), completed by intervention tools other than loans.[110]. It must also be pointed out that the EFSF set up a liquidity buffer which is not reallocated to the MS guarantors.[111]
10. Under these conditions, a part of the debt actually raised by the EFSF is not imputed as debt of the MS guarantors.

**European Stability Mechanism**

11. The ESM is treated as an institutional unit, more precisely a European Union international organisation (S.212), on the basis of the converging analysis of several factors, notably: a permanent basis, an establishment by Treaty, an international legal framework, a significant amount of capital, including 80 billion of paid in capital[112], and an autonomy of decision due to a governance structure similar to that observed in some other international institutions in the financial area. The ESM is to be classified in the government sector of the EU institutions — that is with S.1315 as defined in Chapter 19 of ESA 2010, paragraph 19.09.
12. As a result, in contrast to the EFSF, all its support operations have no impact on the debt of the euro area Member States subscribers, other than those which are benefitting from them. No loan or other kind of intervention is rerouted/reallocated to the members of the euro area. The only impact on the debt of these members is linked to the indirect need to borrow the cash for any tranche of paid-in capital — which is only a part of the amounts lent — although the ESM debt should in principle be reported as government debt of the EU or euro area debt, given that in principle these aggregates should include and consolidate all the transactions and instruments of the sector S.1315 of the EU institutions.

---

[107] For rating purposes, the guarantee of each EU Member State was initially grossed up by 120 % and the key is adjusted in order to take into account the share of countries which are not in a position to provide guarantees (notably when benefiting from bilateral loans or EFS's support).

[108] 'Cash reserve', corresponding to an up-front service fee and capitalisation of a margin added to the EFSF cost of borrowing.

[109] The possible purchase of bonds by the EFSF is also rerouted for the amount paid on markets.

[110] In addition to purchase of bonds on primary or secondary markets, precautionary lines, bank recapitalisation, the EFSF, through a vehicle, could provide credit enhancement to bonds issued by euro area governments (certificates covering first losses) and could enlarge its sources of funding by a Co-Investment Fund opened to investors.

[111] As far as the impact on net lending/borrowing of the MS guarantors is concerned, it related to mainly to the existence of an interest margin. However, if the guarantors agree upon a debt cancelation to the benefit of a borrowing country, a capital transfer would be recorded as expenditure for these EU Member States.

[112] For comparison, the ESM has a subscribed capital of 700 billion (of which 80 were paid in five instalments over 2012–14), for a lending capacity of 500 billion, while the EFSF has only a capital of 30 million, for a lending capacity of 440 billion.

13. For the EFSF, should the guarantors agree upon a debt cancellation to the benefit of a borrowing country, a capital transfer would be recorded as expenditure for these Member States. For the ESM, the effective payment of the initial paid-in capital is considered to be increase of equity, while the callable capital is considered a contingent liability. The impact on government accounts of an actual call would be treated as a capital transfer only if it were to cover losses of the ESM or shortfalls in payments by a debtor country to the ESM.

## 1.9.3 Rationale of the treatment

14. Looking at the EFSF, there is evidence that it could not be considered an actual financial intermediary as it does not transact with the public at large on both side of it balance sheet and as it does not bear any risk due to the guarantee arrangement. In addition, there is no significant risk to the shareholders, the capital having just a formal role, as mentioned above. Also, the EFSF could not be considered an international organisation, despite resulting from an inter-governmental agreement. This is due to its status of private company and, more importantly, to the ex-ante approval by the Eurogroup for its main decisions.
15. The crucial point is that the EFSF has no autonomy of decision in carrying out its principal function. The decision to enter into a financial rescue operation is in the hands of the Eurogroup which represents the euro area Member States. Unanimity is required for most of the related decisions. Similarly, the EFSF has a restricted power of initiative regarding the liabilities incurred on its name, conditional to decisions taken by the euro area Member States. It may borrow funds only with de facto approval of the guarantors. The room of manoeuvre in this respect is limited (choice of maturities, size and investment of the liquidity buffer, for instance). Thus, the EFSF does not show a capacity for independent action comparable to what is normally observed for a financial intermediary or other financial institutions. However, the EFSF could not be consolidated in the Eurogroup. Its financial statements could also not easily be proportionally split into the euro area Member States owning it because of practical difficulties (change in contribution key, retained borrowing proceeds and, since December 2011, pooling of resources). The rerouting of the EFSF's interventions to the guarantor Member States is the solution employed in order to reflect the nature of the entity.
16. The EFSF has the legal form of a limited corporation in Luxembourg, submitted to the normal reporting requirements. However, for statistical purposes, its operations are treated as mentioned above. The EFSF is treated similarly to the ESM, implying a classification in S.13 of S.212. This subsectorisation is based on the similarities with the ESM as a non-market lender.
17. Eurostat provides the Member States with the relevant information on a monthly basis in order to record the EFSF's activities according to the classification decision. In addition, Eurostat publishes information on intergovernmental lending in EU, which includes the rerouted lending of the EFSF.
18. The ESM is judged to meet the full attributes of an institutional unit, and more precisely that of an international organisation, as mentioned above. It is permanent (as such international units normally are), created by an EU Treaty (high rank in legal norms), it has an international organisation status and has a large amount of paid-in capital and a significant amount of callable capital securing its interventions. The size of capital, together with the veto rights of EFSF members, clearly plays a significant role in the recognition of the difference between the EFSF and the ESM, regarding its recognition as an institutional unit. Even though the Eurogroup exerts a strong influence, which is a normal feature linked to its genuine specific function, the ESM has similar governance to that observed in other international institutions: a Board of Governors, a Board of Directors and a General Manager entitled with noticeable powers. Finally, some decisions, which cannot be regarded as having a negligible impact, do not need unanimity as in the case of the EFSF. Thus this entity meets the usual ESA 2010 criteria of an institutional unit.
19. Only the borrowing country will record an increase of its debt. However, if the ESM would participate directly in the recapitalisation of banks of one country, no debt would be recorded for the country's government, provided that it has taken no commitment vis-à-vis the ESM as regards the assets/claims held by the ESM on the banks.
20. In summary, the ESM is an institutional unit while the EFSF, conceptually, is not. Neither can be considered either a financial intermediary or a captive. However, despite their differences, they are sectorised equally.
21. Under ESA 2010, the ESM is classified, in the accounts of all EU countries, as a non-domestic euro area resident, within the rest of the world sector (S.2), under the subsector S.21 (the European Union) and among the institutions of the EU (S.212). In the accounts of the European Institutions (seen as a separate 'Member State'), the ESM is classified as part of general government (S.13) being a public non-market operator.

22. The ESM does not meet the financial intermediation criteria because (following ESA 2010 paragraphs 2.56 and 2.61) it does not transact predominantly with the public at large on each side of its balance sheet (it lends only to Member States in difficulty). It is not a market producer of financial services (it lends at rates close to its costs and does not price its lending according to risks). Thus, the ESM cannot be considered an entity of the S.125 sector — and, accordingly, any FISIM calculation on ESM lending to Member States would not be appropriate.
23. The ESM cannot be considered a financial captive in the S.127 sector of the EU institutions either, being a non-market operator. Likewise, the EFSF cannot be considered (for practical purposes, but also on accounts of its operational restrictions) as a financial captive, given that it cannot independently decide on its own to whom it lends to and what it borrows (and for this very reason it cannot be deemed to be an institutional unit — ESA 2010 paragraph 2.23).
24. All units classified in S.12 (financial corporations) must be market producers (except for the central bank which is classified by convention in S.121), although the market producer character is not necessarily established on the basis of the 50 % test. The interest charged by the ESM (close to costs) cannot be considered meeting the economically significant price definition, as neither the supply of, nor the demand for, ESM loans is driven by it (ESA 2010 paragraph 20.19).
25. The classification of the EFSF and the ESM should be applied consistently throughout macro-economic statistics. In practice, the impact of the EFSF/ESM classification is essentially limited to counterpart sector breakdowns (such as for securities holding statistics, securities issuance statistics, and detailed breakdown of Monetary Financial Institutions balance sheets or of BOP/IIP statistics). In practice, this also implies the exclusion of both entities from the calculation of FISIM flows on the lending to guarantors (with impact on the GNI aggregate).[113]

[113] A similar problem arises with the sectorisation of the IMF (and the possible associated FISIM).

# 1.10 Keywords and accounting references

| | |
|---|---|
| Captive financial institutions | ESA 2010, 2.298-2.299 |
| Control | ESA 2010, 2.37-2.38 and 20.309-20.310 |
| Defined-benefit pension schemes | ESA 2010, 17.57 |
| Defined-contribution pension schemes | ESA 2010, 17.54 |
| Economically significant price | ESA 2010, 20.19-20.22 |
| Employer pension schemes | ESA 2010, 17.49 |
| Financial intermediation | ESA 2010, 2.57-2.62 |
| General government sector and subsectors | ESA 2010, 2.111-2.117 |
| Holding company, head office | ESA 2010, 2.14 and 20.35-20.37 |
| Institutional unit | ESA 2010, 2.12-2.13 |
| Market output | ESA 2010, 3.17-3.19 |
| Market/non-market | ESA 2010, 3.32-3.37 and 20.19-20.34 |
| Non-market output | ESA 2010, 3.23 |
| Non-profit institution | ESA 2010, 2.129-2.130 |
| Pension fund | ESA 2010, 2.105-2.110 |
| Public/private producer | ESA 2010, 20.303 |
| Quasi-corporation | ESA 2010, 2.13 (f) |
| Rearranged transactions | ESA 2010, 1.75-1.78 |
| Social assistance | ESA 2010, 4.105 |
| Social insurance schemes | ESA 2010, 4.88-4.90 |
| Social security fund | ESA 2010, 2.117 |
| Social security schemes | ESA 2010, 4.88 |
| Special purpose units of government | ESA 2010, 2.27-2.29 |

# 2 Time of recording

## 2.1 Overview

1. According to ESA 2010 paragraph 1.101, flows are recorded on an accrual basis; that is when economic value is created, transformed or extinguished, or when claims and obligations arise, are transformed or are cancelled. Thus, output is recorded when production occurs, not when a good or service is paid for by a purchaser. The sale of an asset is recorded when economic ownership of the asset changes, not when the corresponding payment is made. Interest is recorded in the accounting period when it accrues, regardless of whether or not it is actually paid in that period. Recording on an accrual basis applies to most flows, monetary as well as non-monetary and intra-unit as well as between units.
2. The time of recording of transactions has an impact on government net lending/borrowing (B.9). However, over a long period the differences between accrual and cash recording are eliminated since the accrual recording simply shifts the cash transactions into a different period. The financial instrument category other accounts receivable/payable (AF.8) is used to bridge the time difference between transactions and their early or late corresponding cash flows. An AF.8 recording has no impact on government debt[114] because accounts payable (the category that accounts for the differences between accrual and cash) are excluded from this definition.
3. However, in some cases it is necessary to show flexibility as regards time of recording. There is one deliberate adaptation from the general principle concerning the recording of taxes and social contributions. As this type of government revenue is often recorded on a cash basis in public accounts and basic source information, it needs to be converted to an accrual basis. Specific rules regarding the recording of taxes and social contributions were devised, so that the net lending/borrowing (B.9) of general government (and of counterpart sectors) does not include amounts of taxes and social contributions unlikely to be collected. Two recording options are available and described in section 2.2.2 of this Manual, with the aim to avoid recording as government revenue amounts that will never be collected.
4. In determining the correct time of recording on an accrual basis, economic events, and in some cases judicial and administrative events, have to be considered. For example, economic activity can generate a liability to pay taxes but the amount of tax might only be determined after the economic activity took place when a specific document is sent requiring the payment at a future date. ESA 2010 paragraph 4.82 specifies that for some economic activities, transactions or events, 'the amounts to be recorded are determined by the amounts due for payment only when evidenced by tax assessment declarations or other instruments which create liabilities in the form of clear obligations to pay on the part of taxpayers'.
5. The time at which the tax liability is created may differ for different types of taxes. National accountants need to decide on which moment to record each tax and social contribution and they must fully reflect the fact in practice that some amounts will never be collected.

[114] See Part 8 Measurement of general government debt.

# 2.2 Recording of taxes and social contributions

## 2.2.1 Background

1. Taxes and social contributions in the European Union represent the main source of government revenue. Their recording in national accounts is particularly crucial in the context of the Excessive Deficit Procedure. Methods for recording them must be transparent and the impact on government net lending/borrowing (B.9) comparable. In addition, unpaid taxes and social contributions must imperatively not be recorded as government revenue and, as a matter of principle; in the long run there must be full convergence between accrued and paid amounts.
2. ESA 2010[115] states that taxes and social contributions accrued (or assessed as due) but unlikely to be collected, for various reasons (such as bankruptcy of companies, lack of efficiency of the tax collecting system, disappearance of individual taxpayers, etc.), shall not be included as government revenue and hence shall have no impact on general government net lending/borrowing.
3. ESA 2010 paragraph 4.82 and ESA 2010 paragraph 4.95 state that taxes and social contributions recorded in the accounts may be derived from two sources: amounts evidenced by tax assessments and declarations or cash receipts.
   a) If tax assessments and declarations are used, the amounts of revenue shall be adjusted by a coefficient reflecting assessed and declared amounts that will be never collected. As an alternative treatment, the revenue may be recorded gross and a capital transfer to the relevant sectors recorded equal to the same adjustment. The coefficients shall be specific to different types of taxes and employers' and households' actual social contributions.[116]
   b) If cash receipts are used, they shall be time-adjusted so that the cash is attributed to the accrual time (when the underlying activities, transactions or other events took place to generate the tax liability, or when the amount of tax was determined, in the case of some income taxes). The time adjustment must be based on the average time difference between the activities, transactions or other events (or on the determination of the amount of tax) and the effective cash tax receipt. It can differ between taxes. This method is labelled 'time-adjusted cash'.
4. In addition to the time of recording of taxes and social contributions, this section also provides guidance on other tax issues such as the time of recording of tax refunds, tax amnesties and tax credits. Finally, Box 1 (included at the end of this chapter) furnishes the main highlights of Eurostat guidance on the treatment of deferred tax assets (DTAs) in national accounts and the recording of specific tax credits related to DTAs.

## 2.2.2 Treatment in national accounts

**General principles**

5. Time of recording must, as prescribed in national accounts rules, focus on economic substance over legal form, i.e. when the economic activity took place that generated the tax liability or, in the case of some income taxes, when the amount of tax due is determined with certainty by the government, creating an obligation for the taxpayer.
6. Any of the methods described above in section 2.2.1 paragraph 3 (a) and (b) may be chosen by the national statistical authorities, provided that it is the best way for recording revenue according to the accrual principle: either based on assessment and declarations corrected for reliable estimates of the amounts unlikely to be collected or based on a time-adjusted cash approach. Eurostat closely analyses such methods and might ask for a change in the method, if the method chosen by the statistical authorities is deemed as not appropriate or as providing unsatisfactory results. For practical reasons, the use of a time-adjusted cash approach may be preferable when there are some difficulties to make

[115] ESA 2010 references on time of recording of this revenue are paragraphs 4.26–4.27, 4.82, 4.94–4.95, 4.98, 4.100–4.101, 4.150, 20.171–20.175. By analogy, ESA 2010 paragraph 4.95 applies also to the case of D.613.

[116] In particular, it is crucial that the coefficients (or the amount of capital transfer) must reflect without delay the impact of business cycles or some exceptional events which may have a strong effect on the actual collection of taxes and social contributions, upwards as well as downward, notably when rather sophisticated models are used.

reliable estimations for amounts unlikely to be collected or when there are no reliable assessments available. In such cases, the time-adjusted cash is an acceptable proxy for accruals.[117]

7. If the recording of tax revenue is based on assessments and declarations, there are two options in order to exclude amounts that will never be collected:

   a) assessed amounts can be adjusted by a coefficient reflecting the amounts that will never be collected. The coefficients should be estimated on the basis of past experience and current expectations in respect of assessed amounts never collected. The coefficient should be updated when relevant in order to reflect economic reality.

   b) amounts assessed as due are recorded as government revenue and the gap between this theoretical amount and the actual cash receipts (which is estimated) is recorded as a capital transfer (government expenditure) to the defaulting taxpayers.

8. Otherwise, if cash amounts are used for the recording of tax revenue, they shall be time-adjusted so that they are attributed to the period when the activity generating the liability took place. For instance, if there is a 1–2 month lag between VAT being accrued and it being paid by corporations to the tax authorities, then the cash received in the first 1–2 months of the year will be allocated to the previous year.

**Recording of tax refunds**

9. For some taxes, there can be regular prepayments by taxpayers (on a monthly or quarterly basis) and the final tax settlement is established in a later period, once the tax declarations are submitted and assessed by tax authorities[118]. This final adjustment may imply a further payment by the taxpayer or, on the contrary, it may entitle the taxpayer to obtain a tax refund. This right to obtain a tax refund, and the amount concerned, must always be assessed or approved by the tax authority and are normally linked to tax declarations and final tax settlements.
10. Tax refunds should be analysed on a case-by-case basis for each country, taking into account data availability and national deadlines for presenting tax declarations. The recording of tax refunds should be based on solid data, with minimal estimation and with a low likelihood of subsequent revisions. Unusual tax patterns or events that would result in an unusual trend in the series should be closely monitored to ensure the correct time of recording.
11. ESA 2010 paragraph 4.82 allows some flexibility for the recording of final tax settlements for current taxes on income, if the liability could only be determined in a later accounting period than that in which the income accrues. In such cases, a recording of tax refunds when the liability is determined by government is accepted. Instead of carrying out estimations for the tax refunds, if there is no reliable information at the time the estimation is made, it would be preferable to record tax refunds later on, using the time of recording when the tax refund is determined.
12. It should be underlined that practices such as a cash recording for tax refunds — where a method based on assessment and declarations is used for the recording of tax revenue — should be avoided, as not only would it be methodologically inconsistent, but it might also create a considerable time difference in the moment of recording of the two amounts.

**Recording of tax amnesties**

13. A tax amnesty is a limited-time opportunity for a specified group of taxpayers to pay a defined amount, in exchange for forgiveness of a tax liability relating to previous tax periods and without fear of legal action by government.
14. Tax amnesties normally result from a law or a decree, which is issued by government to forgive tax debts of taxpayers for previous years. Through this measure, government provides a benefit to taxpayers and, at the same time, collects revenue on a one-off basis that, in the absence of the tax amnesty, might be collected much later or perhaps never collected.
15. The benefit provided to taxpayers can take two forms:
    - the possibility to disclose information about previous tax periods (non-declared previous taxes or taxable assets not previously disclosed),
    - the possibility to pay past tax arrears.

[117] In case of employers' actual social contributions (which are paid on behalf of households in line ESA 2010 paragraph 1.74), the use of D.995 is methodologically more sound as imbalances between S.11 and S.12 and S.14 are prevented. However, the availability of reliable data sources will also be a decisive practical consideration. For this reason, time-adjusted cash may still be appropriate for the recording of D.611.

[118] This concerns mainly income taxes. There can be other types of tax refund. For instance, VAT is due on goods/services, but can be reclaimed by corporations through VAT refunds. Also in this case, amounts are assessed through a tax declaration.

In both cases, the disclosure of taxes (or taxable assets) and the payment of tax arrears, which release taxpayers from any further legal action by government, may be made under various conditions, possibly without penalties and even at lower tax rates than the standard case.

16. Tax amnesties are usually established for a fixed period and may be related to outstanding tax debts over a given period. They can concern all kinds of actual taxes and social contributions.

17. Concerning the time of recording, each case should be carefully analysed. In this regard, estimations of amounts to be paid are not the best option for the recording of tax amnesties, as government is unlikely to provide reliable data sources in assessment of amounts likely to be declared and paid since it has no knowledge of undeclared taxes. Using data on collection of taxes is preferable, regardless of the method used for the recording of tax revenue. In this sense, the use of pure cash recording is more appropriate.[119]

18. If a method based on assessments and declarations is used for the recording of tax revenue, the coefficient for amounts unlikely to be collected should be re-assessed after a tax amnesty takes place.

**Recording of tax credits**

19. ESA 2010 paragraph 4.81 and ESA 2010 paragraphs 20.167–20.168 describe the treatment of tax credits. A tax credit is a form of tax relief subtracted directly from the tax liability due by the beneficiary after the tax liability has been computed in opposition to any mechanism (such as tax allowance, exemptions or deductions) which impact the tax base, before the application of the tax rate.

20. ESA 2010 distinguishes two categories of tax credits:

    1) 'non-payable' tax credits (also known as non-refundable or 'wastable'), which are those limited to the amount of the tax liability during the fiscal year (or several fiscal years when carry forward is allowed). All amounts of tax credit that exceed the taxpayer's liability in the period in force are 'lost'.

    2) 'payable' tax credits (also known as refundable or 'non-wastable'), which are those in which the full amount is paid out to the beneficiary in any case, including the payment of the excess when the tax relief is greater than the tax liability. In a payable tax credits system, payments are awarded independently of the size of the tax liability (even if no tax liability exists). Payable tax credits are non-contingent government liabilities; they represent an obligation for government.

21. ESA 2010 instructs that non-payable tax credits are recorded as a reduction of tax revenue and therefore they reduce the 'tax burden' and total revenue. On the contrary, for payable tax credits, the whole amount of tax credit is recorded as government expenditure and there is no reduction of the tax revenue. This recording has an impact on the tax burden, total revenue and total expenditure, and their corresponding ratios to GDP.

22. ESA 2010 does not specify the expenditure category to be used for recording payable tax credits since there can be different possibilities. This category could be part of current expenditure, in which case it could be subsidies (D.3) or social benefits other than social transfers in kind (D.62), depending of the nature of the beneficiary, or even miscellaneous current transfers (D.75). Payable tax credits could also be recorded as capital expenditure, in this case as investment grants (D.92) or other capital transfers (D.99).[120]

23. As concerns the time of recording of tax credits, it should be noted that the right to pay less taxes or to receive a payment must always be assessed, controlled, certified or approved by government (or by a tax authority) and this is normally done following the submission of tax declarations or of some kind of formal document.

24. It should be noted that tax credits are frequently linked to income taxes and tax authorities should normally assess them when taxpayers submit their tax declarations. As non-payable tax credits reduce tax revenue, their time of recording should normally be similar to the one of the tax on which they are granted — this applies for both assessment and time-adjusted-cash methods. When assessments and declarations methods is used, if the moment of the determination of the tax liability is taken as a proxy point of accrual, the time of recording should be established when the tax liability is assessed and not at the time of the effective settlement of this liability by the taxpayer.

25. Payable tax credits represent unconditional claims of beneficiaries on government and therefore, government has to recognize a liability at some stage. The formal recognition of the liability by the tax authorities is a proxy point of accrual in the case of payable tax credits. This proxy is the best option for the time of recording, as a pure accrual time of recording for payable tax credits would lead to recording

[119] As tax amnesties might generally show some original features, the details of the treatment should be discussed on a case-by-case basis with Eurostat.

[120] This list is non-exhaustive. Other categories of expenditure may be appropriate in some cases.

amounts before they are determined with certainty, and therefore, in practice, estimations with uncertain reliability would be needed as well as subsequent revisions of government revenue, expenditure and net lending/borrowing (B.9). This time of recording when the tax authorities recognize the liability should be applied regardless of the expenditure category chosen for the payable tax credit.

26. The time of recording of the expenditure should be when government recognizes the claim for its whole amount, regardless of the exact time in which the payable tax credit will be used in order to decrease the amount of taxes to be paid and regardless of the exact time the tax credit could be paid back in its totality to the beneficiary. Thus, the impact on government net lending/borrowing (B.9) would take place in one single year instead of being spread over a number of years, when the payable tax credit would be used.

27. Any time lag between the time of recording of the expenditure and the time of use, under the form of a reduction of the tax liability or cash from government, gives rise to an entry in other accounts receivable/payable (AF.8).

28. The treatment of payable tax-credits is different from the case of non-payable tax credits. Since the latter are treated as negative tax revenue and not as expenditure, they will be recorded when they are used to reduce the tax liability, impacting the accounts for the exact amount used each year, instead of recording the whole amount in one single year, as will be the case for payable tax credits.

## 2.2.3 Rationale of the treatment

29. As a fundamental principle, the impact on general government net lending/borrowing (B.9) of taxes and social contributions recorded in the system shall not include amounts unlikely to be collected. The underlying reasoning is that, when there is evidence that some of the taxes and social contributions that have been assessed will never be collected, the difference between assessments and expected collections represent a claim that has no real value and should not be recorded as government revenue. The impact on general government net lending/borrowing (B.9) of taxes and social contributions recorded in the system on an accrual basis should be equivalent, over a reasonable period, to the corresponding cash amounts actually received.

30. As far as tax refunds and tax amnesties are concerned, the treatment in national accounts should not depend on estimations and be the cause of significant revisions that affect the credibility of the data on government revenue.

31. ESA 2010 defines different recordings for tax credits according to their payable or non-payable nature. Non-payable tax credits are limited to the size of the tax liability. Consistent with the recording of tax allowances, exemptions and deductions, non-payable tax credits are recorded as reducing the tax liability and thus they are treated as reducing tax revenue, impacting government net lending/borrowing (B.9) when they are used to reduce the amounts of taxes to be paid.

32. By contrast, under a payable tax credit system, amounts exceeding the tax liability will be paid to the beneficiary and payments can be awarded to both taxpayers and non-taxpayers. This means that payable tax credits are not exclusively part of the taxation mechanism, even if they are assessed in the context of tax declarations or other documents. As payable tax credits are unconditional claims on government, representing an obligation for government, they must be recorded for their full amount as such in national accounts (AF.8).

33. The counterpart is government expenditure for the full amount at the time the liability is recognized by the tax authority, independently of the moment in which the tax credit will be used to reduce the amount of taxes to be paid or the moment in which amounts may be paid out to the beneficiary. Although in practice the payable tax credit may be used over a number of years (including the year they are recognised by government), the full amount will affect government net lending/borrowing (B.9) in one single year. The use of the tax credit is a financial transaction, by a reduction in government other accounts payable (AF.8), with no impact on government net lending/borrowing (B.9). When the tax credit is used, data sources should be corrected, if needed, in order to avoid to record this either as a reduction in government expenditure or as part of government expenditure.

## Box 1 – Treatment of deferred tax assets (DTAs) in national accounts and recording of tax credits related DTAs

The introduction of Basel III has induced some countries to enact specific changes in legislation allowing the conversion of deferred tax assets (DTAs) into payable tax credits that constitute a direct claim on government. At the same time, ESA 2010 has introduced clear provisions for the recording of tax credits. In the absence of guidance concerning DTAs in national accounts (DTAs are not treated in ESA 2010), Eurostat drafted a guidance note to provide specific guidance on the treatment of DTAs in national accounts and the recording of tax credits related to DTAs. This box summarizes the main highlights of Eurostat's guidance note on the issue.

Deferred tax assets are defined as amounts of income tax recoverable by corporations in future periods provided that there will be sufficient future taxable profits. DTAs are related to past transactions, which, according to IAS12 can be grouped in the following 3 categories:

- deductible temporary differences
- carry-forward of past losses
- carry-forward of unused tax credits

DTAs represent a potential claim of corporations against government, as they may possibly reduce the taxes to be paid by corporations on their future profits.

The origin and use of DTAs varies across countries and is normally set in national legislations for income taxes.

The recognition and use of DTAs is conditional on a number of factors, such as the existence of likely sufficient future profit or the possible reversal of deductible temporary differences (for instance, reversal of provisions).

DTAs shown in business accounting on the balance sheet of a corporation may give the right to pay less tax in the future, but a DTA is not a tax credit until such a right exists and is applicable for a certain amount. From a practical point of view, it should be considered that a DTA becomes a claim with the features of a tax credit at the time in which an amount can be established with certainty and can be used to reduce taxes to be paid, as the right to pay less tax would become effective and not only theoretical.

In national accounts, DTAs are contingent assets for corporations (and thus contingent liabilities for government) and therefore no government liabilities are recorded in the financial accounts. DTAs would be recorded in national accounts only in cases where they give rise to claims with the features of a tax credit, in which case ESA 2010 rules for the recording of tax credits are to be applied (see paragraphs 24–33 above).

DTAs could give rise to a claim with the nature of a tax credit in the following cases:

a) normal offsetting of taxes because the corporation is profitable and deductible temporary differences are reverted, etc.;

b) tax credits that were carried forward;

c) changes in legislation allowing the conversion of certain DTAs with little likelihood of recovery into fully recoverable tax credits, under specific circumstances (for instance in case a corporation reports losses, in case of liquidation, etc.).

In case a), the claim originated from a normal offsetting of taxes would be assimilated to a non-payable tax credit, with no possibility for amounts exceeding the tax liability to be paid to the corporation. Therefore, under ESA 2010, these tax credits would have to be deducted from tax revenue.

In case b) the recording of payable and non-payable tax credits, as detailed in ESA 2010, should be followed. If the tax credit carried forward is payable, it would be recorded only once, at the time of recognition by the tax authorities and no amounts would be subsequently recorded if the amounts not used in each period to pay less tax are carried forward, even if in business accounts a deferred tax asset is recorded in the balance sheet. On the contrary, if the tax credit carried forward is non-

payable, the amount effectively used to pay less tax in each accounting period would be recorded as reducing tax revenue, the remaining amounts being carried forward and recorded as reducing tax revenue in subsequent accounting periods.

In case c), the tax credits originated will be payable by definition and the rules set in ESA 2010 for payable tax credits should apply. This would imply the recording of government expenditure every time an amount of DTAs is converted into a tax credit, at the time the tax authorities recognize the liability and for the full amount converted. The recording for such cases should be clarified on a case-by-case basis and bilaterally discussed with Eurostat based on Eurostat's specific guidance note on the issue. It is to be underlined that other national accounts rules (such as those for capital injections) might also be applicable in case of legislations affecting DTAs with features different from the ones examined and described in the specific Eurostat guidance note.

# 2.3 Changes in the due for payment dates

## 2.3.1 Background

1. Sometimes governments change the due for payment dates for taxes, subsidies, compensation of employees, social contributions and benefits, which are generally the last moment the liable units can pay without incurring additional charges or penalties.
2. The time of recording is defined in ESA 2010 for the different transactions. As a rule, the system records flows on an accrual basis, that is, when economic value is created, transformed or extinguished, or when claims and obligations arise, are transformed or are cancelled (ESA 2010 paragraph 1.101).
   - Wages, salaries, employers', and employees' actual social contributions are recorded in the period during which the work is done. However, ad hoc bonuses or other exceptional payments, 13th month, etc. are recorded when they are due to be paid (ESA 2010 paragraph 4.26).[121]
   - Taxes on production and imports are recorded when the activities, transactions or other events occur which create the liability to pay taxes (ESA 2010 paragraph 4.26).
   - Subsidies are recorded when the transaction or the event (production, sale, import, etc.) which gives rise to the subsidy occurs (ESA 2010 paragraph 4.39).
   - Current taxes on income, wealth, etc. are recorded at the time when activities, transactions or other events occur which create the liabilities to pay (ESA 2010 paragraph 4.82).
   - In some cases, the liability to pay income taxes can only be determined in a later accounting period than that in which the income accrues. Some flexibility is therefore needed in the time at which such taxes are recorded. Income taxes deducted at source, such as PAYE taxes and regular prepayments of income taxes, may be recorded in the periods in which they are paid and any final tax liability on income can be recorded in the period in which the liability is determined (ESA 2010 paragraph 4.82).
   - Social benefits in cash are recorded when the claims on the benefits are established (ESA 2010 paragraph 4.107).

## 2.3.2 Treatment in national accounts

### 2.3.2.1 FOR MOST DISTRIBUTIVE TRANSACTIONS

3. The time of recording refers to an 'accrual basis': the amounts to be recorded in year (n) should then include amounts due in respect of transactions realised from 1 January (n) to 31 December (n), that is, amounts in respect of transactions realised during the 12 months of the year.
4. An example is the reduction of the time lag for VAT payment granted by the State to enterprises: this time lag is for instance reduced from 2 months to 1 month. The due for payment date for VAT is therefore brought forward by one month. The State budget on a cash basis will then record 13 months of VAT receipts during the year when this time-lag reduction takes place.
5. However, VAT recorded as revenue in national accounts should not include the additional cash receipts of the thirteenth month and remains based on a twelve-month year. In this case, only financial accounts should be affected, cash (F.2) and other accounts receivable (F.8).
6. Any change in the due for payment date, although it does affect the cash amounts in public accounts, should not have an impact on the calculation of the taxes recorded in national accounts on accrual basis.
7. As already mentioned, taxes and social contributions recorded as government revenue can be derived from two sources: cash receipts or amounts evidenced by assessments and declarations. If cash receipts are used, they should be time-adjusted so that the cash is distributed when the activity took

[121] The time of recording of stock options is normally spread over the period between the grant date and the vesting date (from which point the option may be exercised).

place to generate the tax liability (except for the cash of some taxes on income). This adjustment can be based on the average time difference between the activity and cash tax receipts. Therefore, in the example given above, the cash receipts would be adjusted in order to take into consideration the reduction of the time lag for VAT, and the additional receipts of the thirteenth month would be neutralised.

8. For most distributive transactions, any change in due for payment dates thus have no impact on the government net lending/borrowing (B.9) which is measured on an accrual basis according to ESA 2010 rules.

#### 2.3.2.2 EXCEPTIONS

9. Exceptions to the general rule are allowed for some distributive transactions such as: ad hoc bonuses or other exceptional payments, 13th month, etc. paid by the employer to his employees; and certain income taxes, social contributions by self-employed and non-employed persons for which the liability to pay can only be determined in a later accounting period. Therefore, changes in the due for payment date (for instance forward payments) for these kinds of transactions could affect the government net lending/borrowing (B.9).

10. For instance, corporations pay income taxes in several instalments in year (n+1) following the year (n) of reference for the income. It is assumed that they are required to pay in advance, at the end of year (n) the first instalment. When should this forward payment be recorded? In year (n) or in year (n+1)? More precisely, under which circumstances could the due for payment date be considered to be changed.

#### 2.3.2.3 RULE CONCERNING THE CHANGE IN THE DUE FOR PAYMENT DATE

11. Any change in the due for payment date, which affects the amounts cashed by government, resulting from a law or a simple administrative decision and expected to be permanent, i.e. not applicable only one-off, has an impact on the amounts recorded in non-financial accounts and thus on the general government net lending/borrowing (B.9).

12. On the contrary, when a change in the due for payment date resulting from a law or a simple administrative decision, is expected to be temporary (by evidence announced as a one-off measure with a unique application) and would affect the cash amounts received by government, it should not be taken into account under an accrual recording. Consequently, there should be no impact on the general government net lending/borrowing (B.9).

# 2.4 Recording of interest

## 2.4.1 Background

1. Recording interest on an accrual basis is a general principle in national accounts, introduced in international statistical standards in the 1990s.

## 2.4.2 Treatment in national accounts

2. General ESA 2010 accounting rules include:
   - all financial instruments bearing interest are to be recorded on an accrual basis;
   - interest is accrued on the basis of the 'debtor approach';
   - accrued interest can be calculated by simple or compound interest methods;
   - accrued interest is exclusively reinvested under the instrument[122];
   - all instruments issued at a discount are treated in a similar way;
   - arrears are kept under the instrument.
3. Rules applied to specific instruments or transactions include:
   - stripping has no effect on the amount of accrued interest;
   - adjustments may be necessary in the case of instruments with floating rates and fungible issues (including savings premiums);
   - interest in the context of lottery instruments is also recorded on an accrual basis;
   - the accrual recording of interest applies to index-linked bonds;
   - there are no specific rules in the case of short-term negotiable instruments;
   - accrued interest is recorded during grace periods;
   - accrued interest on instruments denominated in foreign currencies gives rise to an adjustment in the revaluation account;
   - early redemption of debt instruments (including exchange) may give rise to nominal holding gains.

## 2.4.3 Rationale of the treatment

### 2.4.3.1 FULL COVERAGE

4. The accrual principle covers all financial instruments bearing interest. In ESA 2010, chapter 4 Distributive transactions, all kinds of debt instruments are mentioned: deposits, loans, debt securities and other accounts payable (when applicable). ESA 2010 paragraph 4.50 states that 'interest is accruing continuously over time on the amount of principal outstanding'. No exception is specified for applying this rule.
5. Recording interest on an accrual basis is a general principle which must apply to all financial instruments bearing interest, independently of any specific arrangement possibly observed at national level.

### 2.4.3.2 'DEBTOR APPROACH'

6. From a general point of view, interest can be accrued according to three possible treatments that could be called:

[122] This is not applicable to the valuation of government (EDP) debt at face value.

- **'Debtor'** or **'original cost of borrowing principle'**, based on the rate or yield prevailing at the time of creation of the financial instrument, applied to the principal outstanding amount or the issue price;
- **'Acquisition principle'**, based on the 'historical' rate or yield prevailing at the time the creditor records for the first time the financial instrument in the balance sheet, applied to the purchasing price;
- **'Market approach'** (also referred to as the 'creditor approach' in ESA 2010), based on the rate prevailing at each point of time applied to the current market price of the instrument observed at the same time.

7. ESA 2010 paragraph 20.180 specifies that interest is accrued from the point of view of the debtor.
8. ESA 2010 focuses on the financial burden, the cost of borrowing, that was anticipated when the debtor raised funds through the issuance of financial instruments. Secondary market transactions have no influence on the accrued interest to be recorded.
9. From a theoretical point of view, under these three approaches, the total flows resulting from the contractual arrangements would be similar during the whole life of a financial instrument. But there would be a difference in the split between transactions and other flows. Some changes in the price of a financial instrument can be recorded as nominal holding gains/losses. The concept of a price change must distinguish between genuine price changes due to market movements and changes in the value of an instrument due to a change in its volume. For example, ESA 2010 paragraph 6.54 specifies that accrued interest does not generate holding gains as it gives rise to a non-financial transaction and simultaneously a financial transaction under the form of 'the acquisition of an asset which is added to the existing asset'.

### 2.4.3.3 METHOD FOR CALCULATING ACCRUED INTEREST

10. The choice for recording accrued interest is between 'simple interest', applied only on the principal outstanding amount, and 'compound interest', which takes into account the amount of interest previously accrued. The choice depends on whether the accrued interest is actually paid to the creditor within the accounting period. Unpaid accrued interest is considered in ESA 2010 paragraph 4.50 as 'an acquisition of a financial asset by the creditor and an equal acquisition of a liability by the debtor', on which interest is theoretically charged. At least conceptually, interest should be calculated in a compound way. Actual payments of interest are financial transactions.[(123)]

### 2.4.3.4 REINVESTMENT OF ACCRUED INTEREST UNDER THE INSTRUMENT

11. ESA 2010 paragraph 5.242 states that *interest accrued and arrears are recorded with the financial asset or liability on which they accrue, and not as other accounts receivable/payable*. However, that paragraph also mentions that the interest could be classified in other accounts receivable/payable 'if the interest accrued is not recorded as being reinvested in the financial asset'. It is not specified under which conditions this could be the case.[(124)] Therefore interest accruing from an instrument should be recorded in all cases in the related instrument category, possibly under a sub-item of that instrument. This is the only possible solution for zero-coupon bonds, or short-term securities issued at a discount because, unlike other kinds of debt securities,

    accrued interest linked to the discount is not identified separately from the value of principal when a transaction occurs.

12. ESA 2010 paragraph 4.46 (b) specifies that bonds issued at a discount may have two interest components. One is for the discount accrued over the life of the bond and one is for the coupon regularly paid. They must be treated in the same way as far as the reinvestment of accrued interest is concerned.
13. In the case of transactions on secondary markets, the amount of accrued interest is simultaneously exchanged with the principal. It cannot be separately negotiated. The transaction must be considered as a whole. The buyer pays to the seller the amount of accrued interest. All the value of the transaction is to

[(123)] Note that for instruments with regular (annual or semi-annual) coupon payments, the difference between both methods is relatively small, so that in practice the simple interest method is acceptable. This would not be the case for deep-discounted (including zero-coupon bonds) instruments issued for long maturities.

[(124)] ESA 2010 paragraph 5.243 indicates that interest under securities lending and gold loans must be recorded under other accounts receivable/payable for consistency reasons.

be recorded in the financial accounts, with no entry in property income. This transaction has no effect on the compilation of accrued interest from the point of view of the issuer. In the accounts of the new holder, interest is accrued from the date of entry into its portfolio. Later, if the new holder has kept this asset, the actual coupon payment would be recorded only in the financial account (the non-financial account has already recorded interest accruing continuously), and can be considered a sale back to the issuer of the accrued interest acquired when the asset was purchased plus any interest accrued since that day.

14. A similar treatment should apply in the case of issuance of debt securities under the form of tranches[125]. In such cases the sale price will reflect interest that has accrued since the issuance of the first tranche and could include accrued interest on unpaid coupons. ESA 2010 paragraph 20.183 specifies that *these sold coupons are neither government revenue at time of sale nor treated as premium. They are instead a financial advance*. They should be recorded under the financial instrument that is issued and so are not to be netted with the interest expenditure, in accrual terms.

### 2.4.3.5 NON-NEGOTIABLE INSTRUMENTS

15. For deposits (**AF.22 and AF.29**), ESA 2010 paragraph 7.65 only mentions that they are recorded in the balance sheet at nominal value, which is defined in ESA 2010 paragraph 7.39 as follows: *nominal value reflects the sum of funds originally advanced, plus any subsequent advances, less any repayments, plus any accrued interest*. This definition covers both sight deposits and saving deposits, where the deposited amounts may vary during the course of the accrual period, as well as term deposits when theoretically the amount is locked during the accrual period.

16. For **loans**, ESA 2010 paragraph 7.70 states that *the values to be recorded in the balance sheet of both creditors and debtors are the nominal value irrespective whether the loans are performing or non-performing*. This implies that interest must always be added to the remaining amount of the principal of the loan.

17. Recording accrued interest under deposits and loans should not be linked to the national practice nor to the own views of the transactors. For deposits, interest is frequently added to principal only under certain arrangements (at the end of a given period). For loans, the contract between debtor and creditor mentions explicitly a value of principal (due capital) that excludes interest. In addition, payments of interest and repayments of principal are not necessarily concomitant. However, as ESA 2010 explicitly states that accrued interest is assimilated to the acquisition of new amounts of the instrument, the reinvestment of accrued interest must analytically be considered to be principal. In the case of deposits, the payment of accrued interest is thus, from a conceptual point of view, a partial liquidation whereas payment of interest on loans is integrated in the amortisation process.

### 2.4.3.6 INSTRUMENTS ISSUED AT A DISCOUNT

18. Bills and other short term instruments (generally with a maturity not exceeding one year) are issued with a discount or a premium, which means that interest is equal to the difference between the issue price and the redemption value at the end of its maturity period, normally at face value. This interest has to be accrued over the lifetime of the instrument and for transactions on a secondary market there must be a clear distinction between the effect of a change in the market price of the instrument (recorded as holding gain/loss) and the accumulated amount of accrued interest which is exchanged by parties. Conceptually, there is no difference in this regard between short-term instruments and zero-coupon bonds that are issued for longer term maturities (generally at least 5 years). This issue is covered in ESA 2010 paragraphs 4.45–4.46 and ESA 2010 paragraphs 20.184–20.186. There is no reason to make a distinction between deep-discounted bonds and other bonds issued at discount say in the case of fungible bonds issued in tranches. The treatment should be the same for any size of discount. This is confirmed in ESA 2010 paragraph 20.184. This is consistent with the recommendations of this Manual since its first edition.[126]

[125] These bonds (also referred as to 'fungible' or 'linear' bonds) are a largely common practice for central government bonds. All tranches have the same nominal interest rate, coupon payment date and final maturity. Each tranche is issued at a specific price according to the prevailing market conditions. As far as accrued interest (expenditure) is concerned, each tranche should be identified separately.

[126] In practice, when the discount is very small (less than 0.5 %) and when the remaining maturity is rather short (no more than 1 year) the accrued coupon could not be split over the life of the instrument but recorded in the issuance year.

### 2.4.3.7 ARREARS OF INTEREST RECORDED UNDER THE INSTRUMENT

19. Arrears of interest arise when interest is not paid on its contractual payment date. They are recorded with the instrument in the same way as the reinvestment of accrued interest as discussed above. Both are recorded under the instrument until they are effectively paid or, in some cases, cancelled[127] (which is therefore a kind of debt cancellation to be treated according to normal rules).

### 2.4.3.8 STRIPPED BONDS

20. There is in ESA 2010 paragraph 5.96 (d) a reference to stripping which is a way to transform a 'normal' (or conventional) bond into a set of zero-coupon bonds, at the initiative of the holders. Traditionally, it results in the creation of separately tradable certificates representing future payments of interest and a future repayment of principal or, in the case of 'fungible certificates', all flows related to a given maturity. This operation is neutral for the issuer in terms of streams of effective payments. Stripping concerns mainly bonds issued by central government.

21. As stripping is operated on a voluntary basis by investors, the conversion takes place only for a part of the total outstanding amount of a bond. In most cases, stripping is a permanent option that can be exercised at any time and is reversible, i.e., a bond may be 'reconstituted' under its original form at any time by combining a complete set of strips, generally by an investor. Where strips are fungible for a maturity date, this allows the creation of synthetic new bond from certificates issued from different original bonds. The sum of the strips' values are actuarially equal to the total streams of flows, including principal redemption and regular payments of interest of the original bond at time of stripping.

22. Strips should not be recorded as new debt instruments different from the original instrument. Where the debt is recorded (in issuers' books and for the Excessive Deficit Procedure) at face value, there is no change in recording the primary debt when a bond is stripped (see sub-section 8.2.2.1). When debt is recorded at market value, a stripping operation does not change the total market value of the debt either.

23. As a result, stripping does not change the cost of borrowing and provides no additional funding to the issuer. This has no impact on accrued interest expenditure which must still be based on the rate prevailing at the time of the issuance of the original bonds following the debtor principle.

24. When government acquires strips, compilers should carefully assess the impact of the transactions on government deficit and debt, partly due to consolidation (see also sub-section 8.2.2.1). If the acquisition is made by another unit than the one which had issued the bond, the acquisition of the strip should be recorded as an acquisition of a financial asset which would need to be consolidated when presenting consolidated accounts (but not when presenting non-consolidated accounts). When the acquisition is done by the issuer of the bond, the acquisition of the strip is recorded as a redemption of a liability.

25. There are two possible methods to do this consolidation depending on whether the unit has sufficient strips to reverse the transformation or not:

    a) the consolidation impact of D.41 expenditure of individual strips (for example when the government has separate strips which cannot be combined to replicate a bond) should be done considering the average yield per strip of a given duration to be calculated following the debtor principle and applying the general rules for consolidation of D.41: that is, using a similar logic of the rule applicable for the normal repurchase of a bond;

    b) when a unit has sufficient strips to reverse the stripping[128], the consolidation can follow the normal rule and is done by reducing debt by the 'face value' of the synthetic bond which can be created by combining strips. As a result, government expenditure on interest (D.41) is reduced by the consolidation in a similar manner that when government acquires the bond in question.

    However, in the case of reconstitution of a bond, it is noted that the application of method (b) would not exactly produce the same results as the application of method (a) to all the strips of a given bond. Thus, compilers may want to perform specific adjustments to this effect.

---

[127] In practice, when the discount is very small (less than 0.5 %) and when the remaining maturity is rather short (no more than 1 year) the accrued coupon could not be split over the life of the instrument but recorded in the issuance year.

[128] It is common to use the term 'reconstitution' of a bond to refer to the combination of strips to replicate an existing bond. However, the term 'reconstitution' is not so widely used as the term 'strip' and compilers should assess the nature of the operation rather than the term used in the national context (for example the terms 'reconstruction' or 'unstrapping' refer to the same concept).

26. In summary, compilers treat individual strips (which cannot be combined to replicate an existing bond) as a separate debt instrument which generates D.41 in terms fixed at inception following the debtor principle (that is, when the original debt instrument was issued using a unique yield for each strip originated from a given bond/tranche[129]. As an example, if the market interest rate when the bond was issued was 5 % (considering its duration), each strip is considered to have a 5 % interest rate. This approach, would allow compilers to differentiate, in the value of each strip, the portion represented by accrued interest, debt repayment and if applicable, revaluation impact.

### 2.4.3.9 FLOATING RATES AND ASSIMILATED ISSUES (INCLUDING SAVINGS PREMIUMS)

27. Debt instruments can be decomposed into three types of instruments:

    a) Fixed interest rate instruments

    b) Variable interest rate instruments:

        1) index-linked instruments

        2) other variable interest rate instruments

28. Fixed interest rate instruments comprise instruments with constant coupons over the period, as well as instruments with non-constant coupons that are fixed (i.e., known) at inception, such as stepped rates. Sub-section 2.4.3.13 explains that, in the latter case, a constant yield is calculated over the life of the instrument, erasing the step-up or step-down or any other more complicated profile foreseen in the fixed coupons of the instrument.

29. Variable interest rate instruments (ESA 2010 paragraph 5.98) can either be index-linked instruments (see sub-section 2.4.3.11), or floating rate instruments.

30. Floating rate debt instruments do not raise any special conceptual issues for the recording of interest on accrual basis. The interest to record (D.41 and, where appropriate, FISIM) varies according to a predetermined formula.

31. In the case of mixed interest rate instruments, where various fixed and/or floating rates are combined, two (or more) different instruments must be considered. As an example, a bond paying Euribor plus a margin has to be decomposed, in case the margin is fixed but not constant over the life of the bond — and for the sole purpose of the compilation of interest — into a Euribor bond and a fixed rate bond.

32. ESA 2010 paragraph 5.102 refers to cases of 'mixed interest rate' debt securities, where the interest is made of two fixed/floating components, simultaneously or successively. Accrued interest rules are thus different for each component. When the two components are simultaneous, the compilation method used corresponds to the one described in the previous paragraph. When the two components are sequential, this requires a more complex approach than simply identifying two instruments, in so far as a common internal rate of return must be calculated over the whole life of the instrument.

33. In the case of securities, there is usually a link between the nature of the rate index and the frequency of interest payments. Quarterly indexed interest is normally paid every quarter with a delay of one quarter. Thus, the exact amount paid to the holders is known in advance. Interest is said to be as 'pre-determined'.

34. However, interest may be 'post-determined'. For instance, annual interest may be indexed on an average over the previous twelve months. The exact coupon is known just a very short time before the actual payment. Provisional estimates of accrued interest could differ from the actual amount and so must be corrected when the actual amount is known.

35. As regards loans and deposits, where no compilation on an individual basis is practicable, global information must be used, notably for deposits. Under these conditions, interest would be accrued on the basis of estimates of the most probable rate that would be effectively paid.

36. Saving premiums are not mentioned in ESA 2010. Such premiums are paid under conditions generally regarding the length of time the instrument is held as a reward for stability. It is additional property income and not a nominal holding gain. A saving premium must be treated as interest and, thus, must

[129] Although in pure financial terms, at inception each strip has a different interest rate (according to the existing zero-coupon interest yield curve) which results, when combined, in the observed bond market interest rate, the debtor principle requires to use for each strip the same yield at issuance.

be recorded on an accrual basis. Under some schemes, the premium is acquired only at the end of the whole saving period and the exact total amount paid cannot be known with certainty before the end of a given period. However, in most cases, only a very small minority of holders do not get the additional remuneration, as the majority would behave rationally to maximise their return on saving. Therefore, interest should be accrued on a 'maximum basis', i.e. including the premium. When the exact proportion of 'rationale' savers is known with certainty, a revision can be made to past periods. Under other schemes, the 'reward' takes the form of an increase in the interest rate for holders who have not reduced their saving the previous year(s). In this case, if there is no information on the expected proportion of savers earning the higher rate, the interest should be accrued at the higher rate with a final adjustment when the exact information is available.

### 2.4.3.10 LOTTERY INSTRUMENTS

37. The payments of lottery instruments, where such payments are paid as prizes to randomly selected holders, should be treated as interest (ESA 2010 paragraph 4.49 (c)) and not considered to be a holding gain for the holder. Although individual holders do not know what they will receive, the issuer does know the total amount to be paid out in prizes and so the interest can be recorded using the usual rules applying to the debtor principle.

### 2.4.3.11 INDEX-LINKED INSTRUMENTS

38. Some units in general government may issue debt instruments, generally in the form of bonds, which include a clause specifying that all or part of the remuneration depends on a published economic index number. This remuneration may apply only to the coupon, similarly to variable interest financial instruments. Alternatively, it may concern only the value of principal, the coupon being affected through the rate applied to the principal. In other cases, principal and coupons follow the same index.

39. 2008 SNA has clarified — in paragraphs 11.70 and 17.274 to 17.282 — the recording prescribed for interest on index-linked instruments, which was only briefly and somewhat ambiguously referred to in SNA 1993 paragraph 11.78.

40. Accordingly, the ESA 2010 was also adapted compared to ESA 1995. ESA 2010 paragraphs 4.46 (c) and 6.56 make a distinction between 'general price index' and 'narrow index'[130]. The first case is, for instance, a consumer price index or commodities index, whereas the second refers to a particular price of a commodity or a stock. For some governments, inflation-linked bonds are a significant proportion of their debt. The 'narrow index' category is not observed as frequently but, as witnessed in the past, there might be an indexation on gold.

41. ESA 2010 paragraph 4.46 (c) states that, in the first case, the change in value of the instrument due to the index during an accrual period is treated as interest accruing in that period, in addition to the 'normal' interest (i.e. the 'coupon') accrued over the period (which may also be index-linked).

42. For the second case, the holder might be motivated by potential holding gains. Nevertheless, the change in the value of the instrument should be recorded as interest. The amount of interest accrued should include the expectation of holding gains linked to the reference level of the index at inception — using market expectations at inception, observable through forwards or futures, etc. — to be spread over the life of the contract. Later on, any deviation from these expectations would be recorded as positive or negative revaluation effects. This procedure thus transforms the indexed debt security to the equivalent of a fixed-rate instrument, from the point of view of property income. Property income comprises the expected future coupons (themselves possibly indexed) with the expected gain in the indexed principal.

43. As a result, a narrow index instrument is generally subject to nonzero cumulated holding gains/ losses over the whole life of the instrument, contrary to general price index instruments, and generally to debt instruments (see example B compared to example A in Box 1).

44. Although ESA 2010 chapter 20 — The government accounts — does not distinguish between narrow and general price indices, ESA 2010 paragraph 4.46(c) is clear about the possibility of recording holding gains/losses.

45. As an application of the narrow index case, when a debt instrument (denominated in domestic currency) is linked to a foreign currency exchange rate, and there is no clear market evidence on how the rate will

[130] The recording prescribed in ESA 2010 paragraph 4.46 c is consistent with an old Eurostat decision issued in March 1997 (under ESA 1979).

change over the life of the instrument, any change in the value of the instrument related to the variation of the rate of exchange is to be recorded as a holding gain or loss, and not as interest. This is consistent with the treatment of instruments denominated in foreign currency.

## Box 1: Example A – Calculation of interest accrual on an index-linked bond: broad-based index

A 5-year bond is issued on 1 January, Year 1 at a price 1 000, with no coupons, indexed to a broad price index. The index value at the beginning of the period is 100.

This index and bond values, with the derived interest and revaluations are as follows:

| | Broad Price Index | | | Bond |
|---|---|---|---|---|
| | End of Period | Interest | Revaluation | 31-Dec |
| Year 1 | 107.0 | 70 | -12 | 1,058 |
| Year 2 | 113.0 | 60 | -17 | 1,101 |
| Year 3 | 129.0 | 160 | 58 | 1,319 |
| Year 4 | 148.0 | 190 | 10 | 1,519 |
| Year 5 | 140.3 | -77 | -39 | 1,403 |
| Years 1-5 | | 403 | 0 | |

Notes:

- The total increase in value over the five years (i.e. 403) is determined by the movement of the index (i.e., 40.3 percent increase)
- Since this is a bond, revaluations also arise from changes in market conditions, such as changes in market interest rates, credit ratings, and expectations about the future path of the index. However, they are zero over the life of the bond when it is repaid at its indexed value.
- Negative values of interest can arise in the periods when the index declines.
- The corresponding entry to the interest accrued is an increase in debt securities in the financial account.
- Fluctuations in market interest rates cause changes in the value of the bond, but the calculation of interest is unaffected.

## Box 1: Example B – Calculation of interest accrual on an index-linked bond: narrow index

A 5-year bond is issued on 1 January, Year 1 at a price 1 000, with no coupons, indexed to a narrow index. The index value at the beginning of the period is 100. Market interest rate is 8 percent at the time of issue.

The index and bond values, with the derived interest and revaluations are as follows:

| | Narrow Price Index | | | Bond |
|---|---|---|---|---|
| | End of Period | Interest | Revaluation | 31-Dec |
| Year 1 | 107.0 | 80 | -22 | 1,058 |
| Year 2 | 113.0 | 86 | -43 | 1,101 |
| Year 3 | 129.0 | 93 | 124 | 1,318 |
| Year 4 | 148.0 | 101 | 100 | 1,519 |
| Year 5 | 140.3 | 109 | -225 | 1,403 |
| Years 1-5 | | 469 | -66 | |

Notes:

- The total increase in value over the five years (i.e. 469 – 66 = 403) is determined by the movement of the index (i.e., 40.3 percent increase)
- According to the debtor approach, the interest in each period is fixed according to the interest rate at inception. The interest for Year 1 is 80 (8 percent of 1 000), for Year 2 is 86 (8 percent of 1 000 + 80), for Year 3 is 93 (8 percent of 1 000 + 80 + 86), and so on.
- The revaluation for the whole life of the bond is due to the difference between the increase in the index and the compound increase that would have occurred at the market rate of interest. (Revaluations also arise for individual periods during the life of the bond because of changes in market conditions, such as changes in market interest rates, credit ratings, and expectations about the future path of the index.)
- Fluctuations in market interest rates cause changes in the value of the bond, but the calculation of interest is unaffected.

### 2.4.3.12 SHORT-TERM NEGOTIABLE INSTRUMENTS

46. ESA 2010 annex 5.1 Classification of financial transactions, in 5.A1.14 strictly defines short-term maturity as a maximum of one year. Maturity here means the term of the instrument or the notice period where instruments can be repaid on demand at the request of the creditor. Most central governments issue treasury bills within this limit. As already mentioned, these instruments are issued at a discount (or premium) which is treated at interest accrued over the life of the instrument. Generally, the total amount issued by government under these short-term instruments may vary significantly from one year to another, because of volatility in market conditions. It is thus important to be in a position to correctly allocate accrued interest to the relevant fiscal year, or quarter in short-term government finance statistics..

### 2.4.3.13 INSTRUMENTS WITH STEP-UP INTEREST AND INSTRUMENTS WITH GRACE PERIOD

47. A special arrangement concerns instruments with ‘step-up interest’. Government may hold or issue securities or other debt instruments where the coupon or the contractually defined profile of interest payments at regular dates shows a ‘step-up’ (or reversely ‘step-down’) profile based on series of fixed interest rates set up at inception over successive periods (e.g. x % over years 1–4, then x+1 % over years 5–8, etc.). In addition, such instruments may be issued with a discount, which is considered to be interest spread over the life time of the instrument (see ESA 2010 paragraph 4.46 and above sub-section 2.4.3.6 Instruments issued at a discount).

48. As mentioned in ESA 2010 paragraph 20.180, as well as MGDD sub-section 2.4.3.2 Debtor approach, accrued interest is based, in ESA 2010, on the debtor approach with reference to the ‘cost of borrowing’

as observed at the time the instrument is created. As a consequence, interest must be accrued using the market rate (yield-to-maturity) observable, or the implied contractual internal rate of return at the inception of the instrument. Interest not actually paid in a given period is nonetheless accrued and considered reinvested on the instrument. Thus, in that way, the instrument bears the same rate of interest (see above sub-sections 2.4.3.3 and 2.4.3.4) independently of the moment when the coupons are actually paid (see Box 2 'Step-up and grace periods' below).

49. Some financial instruments may include an interest grace period, usually over the first years, during which no interest is paid by the debtor to its creditor(s). The instruments involved are typically government financial assets such as loans but cases where such a grace period applies to a government liability have also been observed in the EU, although rather infrequently. This case is mentioned in ESA 2010 paragraph 20.241 but the recording of interest is not specified.

50. As a general rule, the debtor approach implies that interest, both for assets and liabilities, must be accrued over the full lifetime of the instrument, including the grace period, on the basis of the relevant market rate observed at inception (yield-to-maturity) or the contractual rate available at inception (see Box 2 'Step-up and grace periods' below).

51. Thus, the grace period is to be assimilated as a simple and particular case of a 'step up' debt instrument where the first coupons paid are equal to zero.

52. However, exceptionally, no interest should be accrued during the grace period if both of the following conditions are strictly and jointly met:

    a) during the grace period, the issuer/debtor is entitled to redeem the principal amount of the instrument (possibly including pro rata payment of discounts). No additional payment should be foreseen for this early redemption, aside from the usual anticipated redemption fees or penalties that will be considered to be a form of remuneration (see sub-section 2.4.3.16);

    b) after the grace period, there is no observable compensation by the debtor for the absence of interest payments during the grace period. Such compensation may take the form of an increase in the regular interest payments for the amounts previously not paid, or a higher coupon rate by comparison to similar instruments without grace period issued at the same time.

## Box 2 – Step-up and grace periods

This example covers at the same time the issues raised in paragraphs 50 to 51. The case of loans is mentioned in a second part.

A 15-year debt security is issued by government for value 100 at the end of year 0. It has the following pattern of coupons: a grace period with no payments for the first five years, 4 % during years 6–10, and 10 % during years 11–15. Let us suppose the two conditions of paragraph 52 are not met.

At time of issuance the market interest rate is a little over 4 % (4.0165 %). For reasons of simplicity the value of 100 will also be the redemption value (no discount or premium) and remains constant over the whole 15-year period. For reasons of simplicity, we assume that the market only moves with respect to interest. As a result, the market value of the bond only moves with respect to accrued interest. According to the 'debtor approach' (see sub-section 2.4.3.2), the market rate at inception (which is different from the 'coupon rate') must be used for accruing interest over the life time of the security.

The market value (or net present value) to be recorded in the government ESA balance sheet, in this simplified example, equals the issue value plus interest accrued (similarly to the reinvestment of an existing coupon) but not paid at each period, in the absence of any change in the market rate for similar bonds issued by this unit.

In this case, the accrued interest recorded each period in ESA does not equal the coupon payments. The coupon payments are financial transactions in the underlying instrument because the accruing interest is recorded as being reinvested in the instrument. The method of interest used is compound interest because it is a long-term debt security.

The table below shows in column AF.32 (liabilities) the 'market value of the debt security at the end of each year, the value recorded in the ESA balance sheet of government. Interest (D.41) is the

amount that government becomes liable to pay to the holder of the debt security in an accounting period without reducing the amount of principal outstanding. This is a general principle which applies to any financial instrument.

Therefore, interest (D.41) for debt securities (F.3) has in each accounting period two components (ESA 2010 paragraph 4.46 (b)):

- the interest payable by government from coupon payments in the respective accounting period;
- the amount of interest accruing in the respective accounting period attributable to the difference between the redemption price at the end of its maturity period and the issue price, calculated in the same way as for zero-coupon bonds, i.e. on a debtor approach.

In this context, the interest accrued (D.41, payable) in each period is equal to the sum of the coupon paid plus the change in the market value of the debt security in the period.

**Example of grace period / step up interest for a security**

Principal: 100 (issue and redemption value)

Market interest rate at inception: 4.0165 % (constant over the whole the period)

Coupons: 0 % in the years 1–5; 4 % in the years 6–10; 10 % in the years 11–15.

D.41, payable is obtained as the sum of the coupon plus the difference between the market value of the instrument at the end of the current period and the previous period.

| Year | Coupon | D.41 payable | F.32 | AF.32 |
|---|---|---|---|---|
| 0 | | | | |
| 1 | 0 | 4.02 | 4.02 | 104.02 |
| 2 | 0 | 4.18 | 4.18 | 108.19 |
| 3 | 0 | 4.35 | 4.35 | 112.54 |
| 4 | 0 | 4.52 | 4.52 | 117.06 |
| 5 | 0 | 4.70 | 4.70 | 121.76 |
| 6 | 4 | 4.89 | 0.89 | 122.65 |
| 7 | 4 | 4.93 | 0.93 | 123.58 |
| 8 | 4 | 4.96 | 0.96 | 124.54 |
| 9 | 4 | 5.00 | 1.00 | 125.55 |
| 10 | 4 | 5.05 | 1.05 | 126.59 |
| 11 | 10 | 5.09 | -4.91 | 121.68 |
| 12 | 10 | 4.89 | -5.11 | 116.58 |
| 13 | 10 | 4.69 | -5.31 | 111.26 |
| 14 | 10 | 4.48 | -5.52 | 105.74 |
| 15 | 10 | 4.26 | -5.74 | 100 |
| **Total** | 70 | 70 | | |

### 2.4.3.14 ACCRUED INTEREST ON INSTRUMENTS DENOMINATED IN FOREIGN CURRENCIES

53. For these financial assets and liabilities, the normal rules for accruing interest should be applied but specific attention must be given to the issue of the conversion into the national currency. In ESA 2010 paragraph 10.27 the nominal holding gains and losses (K.7) — realised or not — on an asset are the increases or decreases in the asset's value accruing to its economic owner as a result of increases or decreases in its price, including exchange rate movements. ESA 2010 paragraph 6.64 specifies:

    - 'nominal holding gains may therefore occur from both changes in the price of the asset and the exchange rate';
    - 'the value of assets and liabilities denominated in foreign currency is measured by their current market value in foreign currency converted into national currency at the current exchange rate'; and
    - 'transactions in assets and liabilities denominated in foreign currency are converted into the national currency using the exchange rates at the time the transactions occur'.

    As a consequence, nominal holding gains and losses may appear due to differences in exchange rates used for transactions and for balance sheets.

54. Where interest is denominated in foreign currency, it must be converted into the national currency by the exchange rates prevailing at the time it accrues. Ideally, interest should be accrued daily, and so using a daily exchange rate. In practice, the calculation is made over a period on the basis of the average exchange rate observed during the period (but not using a 'spot' exchange rate, observed at only one specific point of time). Where interest is accrued by means of a compound method, theoretically this average should be weighted by the amounts of accrued interest at each point time during this period. However, a simple arithmetic average may be an acceptable proxy.

55. The actual payment of interest is a transaction in the underlying instrument with a counterpart in currency and deposits (F.2) and uses the exchange rate at the actual date of the payment. Although the amounts of accruing interest are perfectly equal in foreign currency in each period, the amounts of accrued and paid interest may diverge in national currency, due to exchange volatility. So an adjustment is needed in the revaluation account for the difference between the 'spot' exchange rate observed at this time (used for the conversion of outstanding amounts) and an average rate used for interest accrued during the last period or the 'spot' rate observed at the end of the previous period for interest previously accrued but not paid during the last period.

56. Conceptually, the exchange rate effect is different from the case of instruments with a variable interest rate for which a correction in the amount of interest, accrued and reinvested, is made when the exact interest rate is known. In the case of instruments denominated in foreign currencies, the adjustment is not due to a wrong estimate but comes from the fact that transactions occur at different points in time. Later, when the effective payment of this interest occurs, there is a new adjustment in the revaluation account due, on the one hand, to the gap between the exchange rate at this time and the rate used at the end of the last period, and, on the other hand, to the difference between the rate used for accruing since the beginning of the period and the rate at the time of payment.

57. On some occasions — for example when compiling annual accounts for interest paid every three or six months or for discounted instruments of shorter maturity — there is no 'overlapping' between the accruing period and the period of payment. In principle only one adjustment is necessary, as mentioned at the end of the last paragraph. In this case, interest is fully accrued and paid during the same period of compilation. The new claim/liability resulting from the reinvestment of accrued interest is created and extinguished during the same period. In this time-scale, the concept of accrued interest may be seen as rather theoretical. Thus, for simplification, it could be acceptable to enter directly in the property income the amount of the effective payment converted into the national currency, avoiding any adjustment.

58. These entries are fully meaningful from an economic point of view. More generally, such adjustment is frequently observed for financial instruments denominated in foreign currency for which transactions with opposite signs (as creation/extinction of a liability) of equal amounts in original currency may not be offset after conversion into national currency.

### 2.4.3.15 INCOME OF MUTUAL FUNDS

59. Units classified within the general government sector may hold shares issued by mutual funds. The income received by the mutual fund is recorded on an accrual basis according to ESA 2010 rules as described in this chapter. The amount and timing of this income is also recorded as the income of the mutual fund shareholders/investors, for the same amount and timing, less any mutual fund service charge. This income for the shareholders is to be recorded as being reinvested in the mutual fund. Any actual payments by the mutual fund to shareholders/investors are to be recorded as financial transactions: a withdrawal of invested funds by the shareholders/ investors. The mutual funds service charge is to be recorded as a sale of a service (shareholders' consumption) and not as a distributive transaction or a financial transaction.

### 2.4.3.16 EARLY REDEMPTION OF DEBT INSTRUMENTS (INCLUDING EXCHANGE)

60. A debtor may have the right to break the initial contract and offset the debt before the maturity date agreed at inception. In some cases, a specific period of notice must be given. The creditors are normally entitled to compensation.

61. For securities, an early redemption may take the form of repurchases on the market by the issuer. It may also be the result of an exchange of securities. The issuer calls for some specific bonds and provides in exchange a new security or a new tranche of a security previously issued. A difference, sometimes called a premium, is observed between the nominal value and the effective redemption value. Where the

difference is positive, it is a holding gain for the holder and a holding loss for the issuer, recorded in the respective revaluation accounts. Under ESA 2010, some types of financial instruments are valued at current prices, notably for debt securities. Thus, the gain/ loss is equal to the difference between the value of the outstanding amount at the end of the previous period and the price of the exchange. The treatment of these exchanges of bonds is very similar to transactions of bonds on secondary markets between holders of securities.

62. In the exchange, the market value of the amount bought back by the issuer and the new amount issued are the same — with possibly a cash payment for any marginal difference in value. For bonds with regular interest payments, there is, in addition, a payment by the issuer for the accrued coupon. Such exchanges may happen in the context of special operations aiming to reduce the nominal debt. Whatever the procedure of the exchange, there is no effect on net lending/borrowing (B.9) at the time of the exchange.

63. An early redemption can also occur for loans. The debtor may be allowed to reimburse a loan before the final maturity and frequently the creditor is legally entitled to ask for compensation. The latter cannot be considered in national accounts as a capital transfer. The issue is whether this compensation is income for the creditor (debtor expenditure) or should enter the financial accounts (reflecting the settlement of a holding loss by the debtor).

64. ESA 2010 paragraph 20.228 suggests that fees or penalties on early redemption of a loan are income, without detailing the type: *When early redemption leads to the payment of a penalty or fee to the lender as foreseen in the contract, the amount shall be recorded as income of the lender*. This sentence is notably aiming at underlining that such penalties are not capital transfer expenditure, given that the preceding sentence is: *When debtor governments offer to repay the debt in anticipation, at a value below the principal value which includes interest in arrears, the event leads to an entry in the capital account with an impact on the government net lending/net borrowing, as a grant by the creditor is presumed.* This last sentence concerns in particular government-to-government lending. The early (or late) repayment fees or penalties are common examples of explicit charges amongst financial services.

65. The ESA 2010 paragraph 20.228 reference to *foreseen in the contract* requires some interpretation. One may wonder why the debtor would agree to pay a penalty outside and above what is foreseen in the contract. If this is nonetheless the case, one can presume that this corresponds even more to an income flow benefiting the creditor — a sort of payment for a service provided by the creditor to the debtor. In addition, in some jurisdictions, the fees may be regulated by laws or statutes, such that contractual clauses are either unnecessary or void. Overall, one may presume that this reference merely aims at recalling that contracts typically allow such early repayments against a fee.

66. The last sentence of ESA 2010 paragraph 20.228, *In the case of securities, a buyback on the market leads to an entry in the revaluation accounts, unless the early redemption is imposed on the securities holder*, contrasts voluntary settlements of debt securities, which should enter the financial accounts (these are holding losses/gains, see paragraph 61 above) from settlement of other debts or from imposed settlements. The reason for treating loans and securities acquired on the market differently is that, in the case of loans, the debtor has to negotiate with the creditor to extinguish the liability. This is not the case for securities, as the debtor can acquire in the market the securities it wishes to extinguish (the seller merely agreeing to sell the securities at a certain price, while not necessarily agreeing with the ultimate objective of the acquirer, that is: the extinction of the liability).

67. A compensatory payment that is designed to reflect changes in discount factors, such as risk-free rates, may be treated differently though. As an example, ESA 2010 paragraph 20.231 makes an exception to the recording foreseen in ESA 2010 paragraph 20.229, when the loss reflects *changes in market interest rates, and not a change in credit worthiness*.

68. Finally, loans can include a separable derivative (see sub-section 2.4.3.17) or may be indexed on a narrow index (see sub-section 2.4.3.11). In such cases, the settlement payment may merely reflect the fair value of the derivative in question, or of the impact of the index, at time of renegotiation. In this case, the part of the payments reflecting the latter value would enter normally in the financial accounts.

69. In the light of all this, the correct treatment of any amount paid in excess of the principal and accrued interest outstanding ('due amount'), whatever the payment is called (fee, penalty, compensation, or otherwise), depends on the type of loan:

    a) when the loan is of a regular or standard type, which is by far the most frequent case — fixed rate, floating rate, or indexed on a general price index — the amount is to be recorded as income

payments (explicit service charges), unless it can be established that the compensation (or a part) reflects fluctuations in general 'market interest rates' (e.g. pure risk-free rates, or, at least, rates not reflecting individual 'changes in credit worthiness' — ESA 2010 paragraph 20.231);

b) when the instrument contains a loan and a derivative that is separable (see sub-section 2.4.3.17), the amount is recorded as a holding loss (in derivatives), unless the penalty exceeds the fair value of the derivative outstanding, or unless the penalty is a predetermined payment expressed either as a lump sum or as a fixed percentage of the principal outstanding. In those two latter cases, the debtor records expenditure for the excess of the fee over the fair value of the derivative, or for the fixed amount;

c) When the loan is indexed on a narrow index (see sub-section 2.4.3.11), the amount is recorded as income when foreseen in the contract and unrelated to the index. Otherwise, consistently or by analogy with the previous case of separable derivatives, the payment reflects a holding loss of the debtor (holding gain of the creditor) in loans.

70. The compensation fee that enters the non-financial accounts cannot be considered in national accounts as a capital transfer and should be considered a service charge (P.1) or when the creditor is a financial institution a compensation transfer (D.75).

71. Penalty fees on renegotiations are similar to fees on early redemption. Indeed, it can be argued that a renegotiation/restructuring is not different from a simultaneous termination of one contract and the entry into force of a new one. In line with the previous paragraphs, renegotiation fees should be recorded when paid. Exceptionally, for example in cases where the renegotiated terms are not market terms at that time (and thus, it can be presumed that the renegotiation fee also includes a compensation for the off-market terms), a portion of the fee may need to be spread over the duration of the instrument. In this case, there would be a need to split the fee into two components, one which represents the compensation for the early redemption and another which represents the value of the difference between the market terms at the time of renegotiation and the newly agreed terms, with the former recorded when agreed and the latter spread over the new period.

72. For some time or saving deposits, a given rate of interest may be paid only under the condition of a minimum holding period. An early liquidation, if contractually allowed, is balanced by a reduction in the rate of interest paid to the holder. For recording interest on an accrual basis, the rate of interest taken into account is the maximum rate that the depositor could receive in the normal course of the contract, i.e. respecting the arrangements about maturity or notice. When it is not the case, the amount of interest accrued previously is corrected on the basis of the final rate. As this amount is in all likelihood globally very small compared to the total interest on deposits, for practical reasons, the correction for the total amount can be recorded in the latest period only.

### 2.4.3.17 RECORDING INTEREST WHEN THERE IS A DERIVATIVE IN A DEBT INSTRUMENT

**General principle**

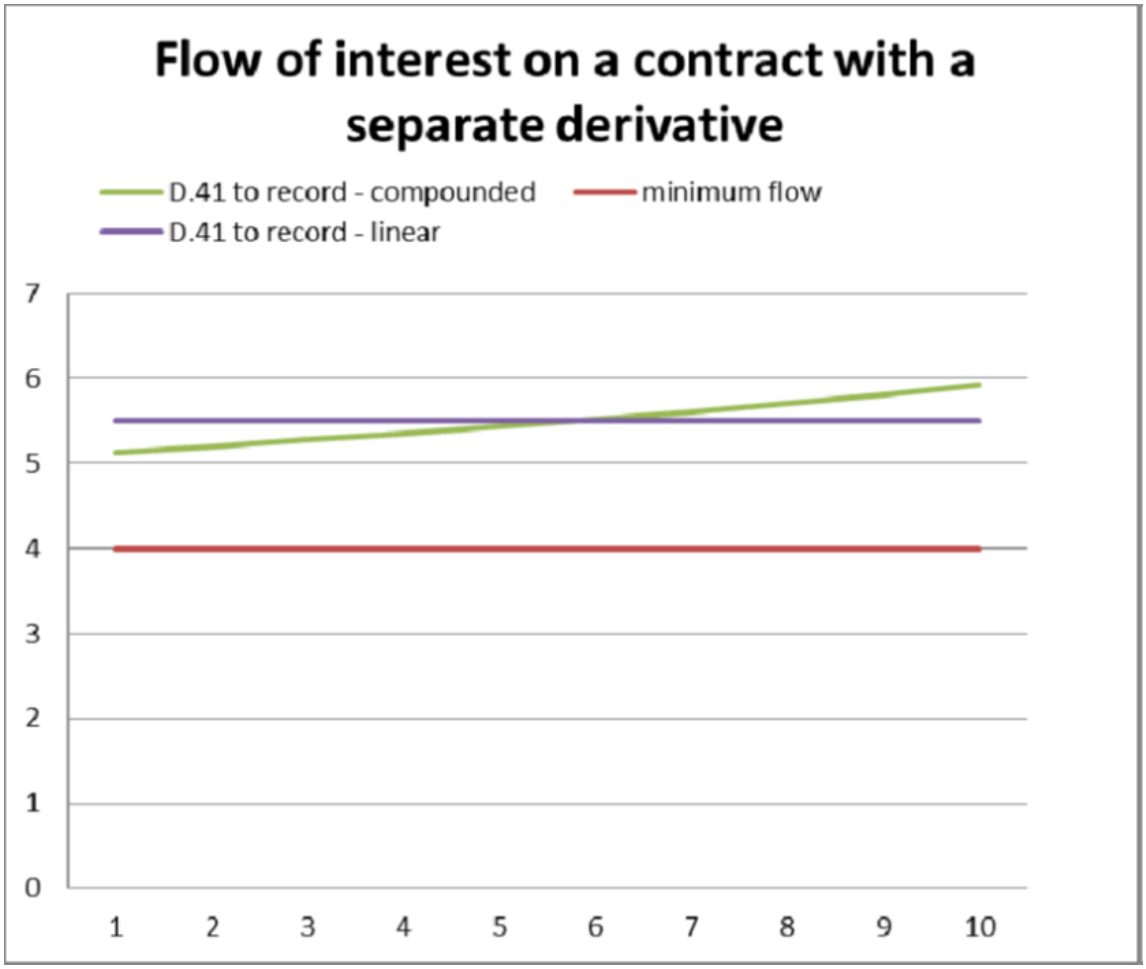
73. When a debt instrument[131] is deemed to contain a separable derivative, interest accrued should reflect two components: (a) a component calculated on the debt instrument excluding the derivative, according to the nature of the resulting instruments after carving out the said derivative, and (b) another component capturing the fair value at inception of the said derivatives. These two components are spread over time according to the accrual principle.

74. The derivative in question may be of a forward type or of an option type. Options-type derivatives can be simplified into an (asymmetric) forward type when volatility shrinks to zero.

75. Let us assume a 10-year borrowing contract of 100 paying a fixed 4 % a year, together with additional amounts that are conditional on some formula replicable by an option or a basket of options (the debtor has the selling position). Let us assume that the options being off-settable, have a fair value observable of 15. The overall 'interest' (D.41 plus FISIM) to record on the instrument in national accounts is then 55

[131] This subsection refers to the recording of interest in the case of one single debt instrument containing a separable derivative. The subsection does not apply to the recording of loans which have been signed together with a swap as in this case there are two contracts/instruments, sometimes signed with different parties. The derivative embedded in a debt instrument may take different forms, although it is often found in the interest formula in the form of a cap or floor on the interest rate. In more complex cases, the derivative would imply changes to the spread, amortization periods or other terms which are triggered by some events.

= 4 x 10 +15. This is equivalent to 5.5 a year, if linearly spread, or to a somewhat lower amount in the first year (approx. 5.13) growing over time (to 5.93 in the 10th year), if using a present value/compounded interest approach. The present value/compounded approach can be seen as arising either from the fact that the receivable earns interest or that the debt liability grows over time (see 'accounting for a derivative' below). The yield on the debt instrument is approximately 6.04 % (6.04 % x (100–15) = 5.13) – significantly different from the first approximation of 5.5 %




**Recognition of a derivative**

76. ESA 2010 paragraph 5.220 (b) recognises the case of 'structured debt securities' that combine a debt security with a derivative. When the two are 'separable', each is classified accordingly. When the two are not separable, the instrument is classified according to the relative size of the 'principal initially invested' compared to the 'prospective return'. When this relative size is small, the instrument is classified as a derivative.

77. Although ESA 2010 paragraph 5.220 (b) only refers to debt securities, the principle of substance over form suggests we should separate a derivative for other instruments, such as loans, as well — if the criteria are met. However, in case the derivative is not separable, it is presumed that a loan instrument cannot be reclassified as a derivative since it is not tradable (and not off-settable).

78. ESA 2010 paragraph 20.133 prescribes the recording of off-market swaps, partitioning the instrument between a loan component (AF.4) and a normal swap (AF.7) (see sub-section 2.4.3.18 below).

79. To recognise a derivative, the latter has to meet the definition set out in ESA 2010 paragraph 5.199: *financial derivatives are financial instruments linked to a specified financial instrument or indicator or commodity, through which specific financial risks can be traded in financial markets in their own right. Financial derivatives meet the following conditions:*

*(a) they are linked to a financial or non-financial asset, to a group of assets, or to an index;*

*(b) they are either negotiable or can be offset on the market; and*

*(c) no principal amount is advanced to be repaid.*

80. For practical reasons, when no information is available to the compiler, the derivative is deemed non-separable. The ability to separate requires off-settability and accordingly a high level of information (e.g. micro data).

**Link to index-linked debts**

81. Index-linked debts, whose treatment is prescribed in sub-section 2.4.3.11, can be seen as similar (from the point of view of the instrument return) to a type of debt with a derivative, with the latter having the specific characteristic of containing only forwards and no leverage.

82. When the index is of a narrow type, ESA 2010 and SNA 2008 take into account the speculation motive, and recognise holding gains and losses over the lifetime of the instrument (the corresponding unexpected return). This is consistent with structured instruments with separable derivatives, where holding gains and losses will arise over the whole life of the combined instrument and reported as revaluation of derivatives.

83. When the index is of a narrow type, the interest to accrue on the indexed instrument will be the same as the interest to record on an instrument with a separable derivative (forwards type), using a crystallisation method (see also paragraphs 71-73).

**Accounting for a derivative**

84. When the derivative identified is of a forward type, the fair value of the derivative at inception is zero, otherwise an off-market swap (or other derivative) is to be recognised (see sub-section 2.4.3.18 on off-market swaps).

85. When the derivative identified is an option type, the fair value of the option is recorded on the liability side of the borrower (AF.7) matched by an entry within other accounts receivable (AF.8) rather than by a reduction in the amount borrowed (AF.4 liability):

a) the D.41 to record (before FISIM if any) corresponds to the interest rate on the AF.4 component of the instrument using the conventional method, plus the reduction in AF.8 spread over the life of the contract;

b) in concept, the AF.8 would generally be seen as accruing interest itself (revenue of government) for declining amounts over time, along with the gradual liquidation of the AF.8 position. However, a simpler recording is to neglect accruing interest on the AF.8 side, and instead net those amounts off on the expenditure side, that is: record a growing interest expenditure flow, as time passes, similarly to an instrument issued at a discount;

c) the Maastricht debt remains the amount of debt to be redeemed.

***Ex-post* recognition of a derivative**

86. A consistent treatment is required when the compiler observes *a posteriori* the existence of a derivative within the contract. A change in recording is applicable when all conditions apply:

a) the income flows are revised over the whole life of the contract;

b) all similar contracts are treated in the same manner;

c) some 'micro-information' is available, concerning specific contracts, at least for a representative sample of these.

87. When the compiler is not in a position to ensure this, no separable derivative is deemed to be recognised. The instrument is thus treated as a variable rate instrument of the floating rate type. Coupon payments would follow cash actually paid every year (adequately apportioned between consecutive years when applicable). For example, if the derivative was an option type and is not exercised, the low fixed coupon payment of the contract is recorded; but when the option is exercised the higher coupon paid for that period is recorded in that period (apportioned when applicable).

### 2.4.3.18 INTEREST ON OFF-MARKET SWAPS

88. Instruments that are financial derivatives do not accrue property income. As a result, streams of payments related to swaps: interest rate swaps (IRS), cross currency swaps (CCS) or FRAs, etc., enter the financial accounts (F.7) and not interest (D.41).

89. However, ESA 2010 paragraph 20.133 prescribes that lump-sums received on an off-market swap should be recorded as debt (loan, AF.4). The off-market swap is to be partitioned into a loan component and an 'at-the-money' swap component.

90. The loan component itself accrues interest, based on a fixed rate at which the borrower would be able to borrow for the same duration of the swap. In the absence of any plausible information, compilers may use a long-term market rate. It is not appropriate to use the fixed rate of the swap itself (when it exists), or the variable rate, because precisely these rates are just notional and can be totally artificial — the swap being off-market. This remark is also valid for plain vanilla swaps (when the swap is not off-market): the formula used for any leg can be reduced or increased by any amount, given that what is required is only that the same is done on the other leg (see section 8.3.3 paragraph 34).

### 2.4.3.19 INTEREST ACCRUED ON INTERGOVERNMENTAL LOANS IN DISPUTE

91. Interest is accrued according to the 'debtor approach', using the interest rate initially agreed between the debtor and the creditor, so this approach applies for loans provided by governments to other countries, mainly in the context of development programmes and co-operation.

92. Due to various reasons, the calculation of the accrued interest might later on be contested by the debtor, for example a dispute over the application of simple or compound interest.

93. As a matter of caution, in case of a dispute on the calculation of interest on intergovernmental loans, the accrued interest (D.41) that is recorded in national accounts is the interest recognised by the debtor, rather than the one expected by the creditor (which might be higher), pending the final agreement between the two — assuming the debtor has a solid basis for the analysis.

94. At the time of final agreement, the value of the claim is recalculated backwards if necessary, including the correction of interest accrued on the principal. This recording implies no impact on the government net lending/borrowing (B.9) at the moment of final agreement, aside from the correction of interest in that particular period, nor any other change in volume for the claim.

95. The situation when the method of interest calculation is disputed by one of the parties should not lead to an inconsistent recording of accrued interest in accounts of both the creditor and the debtor. The treatment envisaged here, applied for the time until a final agreement is reached, implies the recording of accrued interest revenue in the creditor's accounts only for amounts that are recognised by the debtor and are, therefore, likely to be received.

### 2.4.3.20 INTEREST ACCRUED ON INTERGOVERNMENTAL LOANS UNLIKELY TO BE REPAID

96. Particularly in the case of intergovernmental loans, there might be loans not being repaid for an extended period, thus being severe cases of non-performing loans. Typical examples are loans provided by government to third countries (including those provided within the former Council for Mutual Economic Assistance (CMEA)), and loans negotiated in the context of the Paris Club, where the expectation of recovery is generally low.

97. Interest revenue (D.41) accrued on intergovernmental claims considered unlikely to be repaid is neutralised through recording a capital transfer payable (D.99) for those amounts, analogous to cases of debt cancellation. Thus, the following four off-setting entries would be recorded in national accounts with no overall impact on net lending/borrowing (B.9) and balance sheets. These are:

- interest accrued (D.41) by the debtor to the creditor;
- the creditor is deemed to reinvest the interest in further lending to the debtor thus increasing the value of the loan (F.4) in the balance sheets of the creditor and debtor;
- capital transfer (D.99) from the creditor to the debtor equal in size to the accruing interest;

- the debtor is deemed to be using the capital transfer to repay the loan by an amount equal to the size of the capital transfer, thus reducing the value of the loan (F.4) in the balance sheets of creditor and debtor.

98. The treatment applies from when the claim is first considered unlikely to be repaid and continues until there is strong evidence that the claim is performing again as evidenced by regular loan repayments (in any form) by the debtor. The trigger to start the recording might for example be evidenced by one of the following indicators:

- absence of three consecutive (annual) repayments in a row from the debtor in any form (cash or in kind);
- low expectation of repayment signalled by the recording of provisions for losses in public accounts;
- qualified expert assessment on the low expectation of recovery;
- unsuccessful long-lasting negotiations on claim settlements.

99. Each indicator may not necessarily be sufficient, by itself, to determine that the claim is unlikely to be repaid. A combination of indicators might often be needed to provide sufficient evidence.

100. Later on, in a situation of debt forgiveness, the capital transfer (D.99) is thus deemed to cover (part of) the stock existing in the financial accounts: the principal, not settled, and the amount of accrued interest that was accumulated after recording the neutralisation of the interest revenue through expenditure.

101. The rationale for the recording of a capital transfer that offsets the interest being accrued is to prevent a practice of accruing interest increasing the stock of intergovernmental loans unlikely to be repaid without having received any cash repayments or similar settlement from the debtor. By this, the net lending/borrowing (B.9) is not impacted by the accrued interest revenue that might not finally end-up being collected from a debtor.

102. If the debtor resumes repayments after a period of non-payment, the repayments by the debtor are deemed to repay the nominal value of the claim (principal and accrued interest booked in the balance sheet) first. Any excess recoveries are then recorded as a capital transfer receivable (D.99).

## 2.4.4 Accounting examples

**Instrument issued at par and regular coupon/interest payments**

On 1 July in year 1, central government issues a bond of 1 000; an annual rate of interest of 5 % paid every year on that date; a maturity of 10 years; and a full redemption at that time. At end of year 1, the market price is 1 045 (including 25 of accrued interest not yet paid). At end of year 2, the market price is 1 075 (including 25 of accrued interest not yet paid).

**YEAR 1**

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 25 (24.3) | | |
| | | B.9 | –25 (–24.3) |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | +1 000 | F.32 | +1 025 (1 024.3) |
| | | B.9F | –25 (24.3) |

**YEAR 2**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 045 (1 044.3) (EDP: 1 000) |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 50 | | |
| | | B.9 | –50 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | -50 | F.32 | +25–50+25 |
| | | B.9F | –50 |

**Revaluation account**

| ΔA | | ΔL |
|---|---|---|
| | AF.32 | +20 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | AF.32 | 1 045 (1 044.3) |

**Revaluation account**

| ΔA | | ΔL |
|---|---|---|
| | AF.32 | +30 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | AF.32 | 1 075 (1 074.3)<br>(EDP:1 000) |

**Instrument issued at a discount with regular coupon payments**

On 1 October in year 1, central government issues a new tranche of a bond (principal 1 000, rate of interest 5 %, maturity 10 years, payment date on 1 July, and redemption in fine). The issue price is 95 % (roughly a yield of 6 %). The discount of 50 is spread for 1 in the first year, 4 in the second year and 3 in the tenth year. For simplification, the bond is always quoted 100 % at ends of period (figures are rounded).

**YEAR 1**

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 13.5 (12.5 +1) | | |
| | | B.9 | –13.5 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | +962.5 | F.32 | 950+12.5+13.5 |
| | | B.9F | –13.5 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | AF.32 | 976<br>(EDP: 1 000) |

**YEAR 2**

**Opening balance sheet**

| A | | L |
|---|---|---|
| | AF.32 | 976 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 54 | | |
| | | B.9 | –54 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | -50 | F.32 | +4+36.5-50+13.5 |
| | | B.9F | –54 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | AF.32 | 980<br>(EDP: 1 000) |

**Instrument issued at a discount without regular coupon payments**

Central government issues on 1 July a zero-coupon bond for 3 years for 75 (nominal value is 100). The implicit interest rate is 10 % (figures are rounded, no change in the market interest rate).

## YEAR 1

### Non-financial account

| U/ΔA | | R/ΔL |
|---|---|---|
| D.41 | 3 | |
| B.9 | | |

### Financial account

| ΔA | | ΔL |
|---|---|---|
| F.22 | +75 | F.32 +75 +3 |
| | | B.9F –3 |

### Closing balance sheet

| A | | L |
|---|---|---|
| | | AF.32 78 |

## YEAR 2

### Opening balance sheet

| A | | L |
|---|---|---|
| | | AF.32 78 |

### Non-financial account

| U/ΔA | | R/ΔL |
|---|---|---|
| D.41 | 8 | |
| B.9 | –8 | |

### Financial account

| ΔA | | ΔL |
|---|---|---|
| | | F.32 +8 |
| | | B.9F –8 |

### Closing balance sheet

| A | | L |
|---|---|---|
| | | AF.32 86 (EDP: 100) |

## YEAR 3

### Opening balance sheet

| A | | L |
|---|---|---|
| | | AF.32 86 |

## YEAR 4

### Opening balance sheet

| A | | L |
|---|---|---|
| | | AF.32 95 |

## YEAR 10

### Opening balance sheet

| A | | L |
|---|---|---|
| | | AF.32 1 022 |

### Non-financial account

| U/ΔA | | R/ΔL |
|---|---|---|
| D.41 | 28 | |
| | | B.9 –28 |

### Financial account

| ΔA | | ΔL |
|---|---|---|
| F.22 | –1 050 | F.32 –1 022 |
| | | B.9F –28 |

### Closing balance sheet

| A | | L |
|---|---|---|
| | | AF.32 0 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 9 | | |
| B.9 | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.32 | +9 |
| | | B.9F | –9 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 95 |
| | | | (f: 100) |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 5 | | |
| B.9 | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | –100 | F.32 | –95 |
| | | B.9F | –5 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 0 |

**With change in market rate**

At the beginning of the following year, the rate of interest increases up to 15 % for a maturity of 2 years and a half (and does not change any more). The price on the market falls to 70 (figures are rounded).

**YEAR 2**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 78 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 8 | | |
| B.9 | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.32 | +8 |
| | | B.9F | –8 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | AF.32 | 81–86 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 81 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 0 |

**YEAR 3**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 81 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 9 | | |
| B.9 | –9 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.32 | –9 |
| | | B.9F | –9 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | AF.32 | 93–90 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 81+12 |

**Strips**

Central government has issued the following bond: fixed rate of 15%, principal of 1 000, redemption at maturity, payment date on 1st July. At a remaining maturity of three years, it is decided to create a set of four strips.

**On the basis of the original interest**

As the interest rate is unchanged, the market price of the bond is equal to the nominal value. Three coupon certificates for each annual interest payment (valued respectively 99, 113, 130 on the basis of price equal to 65.8 %, 75.7 % and 87 % for a nominal of 150) and one certificate for the final repayment of principal (valued at 658 as the price is 65.8 % for a nominal of 1 000) are created. The total market value of the four certificates is always equal to the nominal value. Accrued interest may be calculated on the basis of the previous from % of the bond or, from the time of stripping, as the difference in the market price of the zero-coupon securities (no other factors intervening), i.e. the sum of 49, 10, 9 and 7. At the end of the year, 1 075 is the sum of the market values of four certificates: 707+106+122+140 or is the sum of 1 000 (principal) and 75 (accrued interest on six months). This example covers clearly the case of government (EDP) debt, recorded at nominal/face value and, thus, ignoring by definition any effect of stripping on the original debt (figures are rounded).

**YEAR 1**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 075 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 150 | | |
| | | B.9 | –150 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | –150 | F.32 | +15–150 |
| | | B.9F | –150 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 075 |

During the second year, again, accrued interest is unchanged compared to the previous form of the bond. It is also equal to the differences in the prices of the certificates between the beginning of the year and the time of redemption for the first coupon certificate, and the end of the year for the other three (10, 106, 16, and 18). At the end of the year, 1 075 is the sum of the market values of three certificates (813, 122, 140) and is still equal to the sum of 1 000 (nominal) and 75 (accrued interest on six months).

**YEAR 2**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 075 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 150 | | |
| | | B.9 | –150 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | –150 | F.32 | +150–150 |
| | | B.9F | –150 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 075 |

**With a change in interest rate**

Stripping is implemented in new market conditions, for instance when the market rate has fallen to 10 %. The current price of the bond is 1 125. At this time, the values of the strips are 113, 124, 136 and 752 (on the basis of prices in percentage 75.2, 82.7 and 90.8). At the end of the year, the sum of market values of the four certificates is 1 182 (790, 119 130, 143), which is also the market value of the nominal (1 107), or clean price, and accrued interest (always 75).

There would be no asymmetry in recording the asset and liability sides. But this example shows clearly that the differences in market prices cannot be used for accrued interest (the sum would be 57 for half the year, against 75 at the original rate). Thus, accrued interest must be estimated on the basis of the previous form of the bond and cannot be based on the information from the holders. The adjustment is entered in the revaluation account. The loss (the current price of the liability is higher than the 'theoretical one) is a gain in the accounts of the counterparts.

**YEAR 1**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 075 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 150 | | |
| | | B.9 | –150 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | –150 | F.32 | +150–150 |
| | | B.9F | –150 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | AF.32 | 1 182–1 075 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 182 |

There is no change from the previous year concerning estimation of accrued interest. 1 143 is the sum of the market values of the three remaining certificates (869, 131, 143) and also the market value of principal (1 068) incremented by accrued interest on six months (75). The adjustment in the revaluation account is now a gain for the issuer and is estimated only from current prices at beginning and end of the period.

**YEAR 2**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 182 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.41 | 150 | | |
| | | B.9 | –150 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.22 | –150 | F.32 | +150–150 |
| | | B.9F | –150 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | AF.32 | 1 143–1 182 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.32 | 1 143 |

# 2.5 Military expenditure

## 2.5.1 Background

1. Military expenditure is a particular category of government expenditure which frequently involves specific procurement contracts (including sometimes the leasing of high value equipment).
2. By its nature, military equipment usually includes sophisticated technology. This has three consequences. First, military equipment may be constructed from a large variety of components that are often produced by different suppliers. Second, the production process may be spread over several years. Third, contracts frequently also cover the provision of service maintenance in order to keep the equipment under operational conditions. Therefore, this chapter deals in particular with the time of recording of government military equipment expenditure in national accounts.

## 2.5.2 Treatment in national accounts

### 2.5.2.1 IDENTIFICATION OF MILITARY EQUIPMENT

3. ESA 2010 makes a clear distinction between 'weapons systems' and the other goods used by military forces. ESA 2010 (see chapter 7 and annex 7.1) defines weapons systems (AN.114) among fixed assets, as 'vehicles and other equipment such as warships, submarines, military aircraft, tanks, missile carriers and launchers, etc.' This list is not exhaustive but it gives an indication of the nature of such equipment. Many of the weapons that the systems deliver are classified as military inventories (AN.124) but others, such as ballistic missiles with highly destructive capability, that are judged to provide on-going deterrence against aggressors, are classified as fixed assets. The rationale is that they are expected not be used (and thus destroyed) and instead provide an on-going service of deterrence.
4. As a consequence, the acquisition of weapons systems is recorded as gross fixed capital formation and is subject to consumption of fixed capital, similarly to any other fixed asset acquired by military forces. ESA 2010 (see chapter 7 and annex 7.1) specifies that 'machinery and equipment other than weapons systems acquired for military purpose are included' under machinery and equipment (AN.113), but not separately identified in the classification as such. The military gross fixed capital formation (GFCF, P.51) also includes expenditure for the improvement of military fixed assets, such as 'major repairs' that lengthen their lifetime and 'retrofits' for modernisation. The category of military inventories (AN.124) is exclusively for stocks of 'ammunition, missiles[132], rockets, bombs and other single-use military items delivered by weapons or weapons systems'. When military inventories are used, they are recorded as a reduction in inventories (P.52) and intermediate consumption (P.2), thus not impacting on government net lending (B.9).

### 2.5.2.2 THE TIME OF RECORDING OF MILITARY EQUIPMENT EXPENDITURE: GENERAL RULE

5. Using general national accounts principles, the time of recording of government expenditure for equipment is the time of their delivery, which is deemed to mark a change in economic ownership. This is not specific to military equipment.
6. The delivery is assumed to take place when the military forces take possession of the equipment from an economic point of view, i.e., bearing the risks and rewards of economically owning the equipment. This applies whatever the operation to be effectively carried out with the equipment, such as training or actual military missions. After delivery, military forces are normally in a position to use the military assets for any operation and without any restriction. For some equipment, there is a period of testing, notably for equipment using high-level technology, often with deliveries spread over a long period of time during which significant improvements of the equipment are made (frequently referred to as 'standards'). The tests generally take place on military premises but normally the constructor is still responsible for the equipment. However, it may also exceptionally happen that the equipment has to be improved in the

[132] Excludes some types of missiles with highly destructive capability (see AN.114).

constructor premises and, therefore, is returned to the manufacturer (or assembler). As a practical rule, the time of delivery should be determined as the moment when the military forces take, for the first time, responsibility for the equipment[133], which would usually be after a first period of testing and after possible adjustments/adaptations. This does not exclude the possibility that the constructor could be asked to introduce further modifications, after the initial official acceptance of the equipment, and for which its responsibility could again be engaged through a warranty. A relevant criterion to determine the time of recording is the insurance arrangement as military equipment in effective use is commonly self-insured by government. The time of delivery may be different from the moment of the corresponding cash flows. Generally, in this respect, expensive 'heavy' equipment is not fully paid for at time of delivery. It is also frequent that advances are paid by government before delivery.

7. For various reasons (such as increase in unitary costs, delays in deliveries, etc.) it may happen that contracts for equipment delivered over a long period, are renegotiated and amended. It can also be the case where equipment represents noticeable innovations. The total value of a contract may be revised after some equipment has been already delivered. In such cases, the expenditure already recorded in national accounts in the past should not be revised. The difference between the initial and the new value of the contract shall be allocated proportionally to the remaining future deliveries. Sometimes the number of items to be delivered is decreased such that the average price of the items to be delivered in the future needs to be changed. There would be no revision of past data in national accounts.

8. When the supply of the equipment is accompanied by the provision of services, simultaneously or later, the expenditure on services must be separately identified and recorded as intermediate consumption, at the time the service is delivered. This does not apply to the costs of ownership transfer incurred by the new owner as defined in ESA 2010 paragraph 3.133. The coverage of these costs is rather restrictive and it does not include for example the costs of testing and tuning needed by highly sophisticated military equipment..

### 2.5.2.3 THE TIME OF RECORDING OF THE EXPENDITURE ON MILITARY EQUIPMENT IN THE CONTEXT OF LONG-TERM CONTRACTS

9. Contracts signed by government authorities to acquire military equipment often contain following features:

   - many items are delivered over a number of years;
   - services (such as maintenance) are provided for a number of years;
   - the delivery of final components is needed to make the complex equipment fully operational for military missions. Examples are electronic equipment and arm systems for fighters, frequently delivered by firms other than the main supplier and assembled in military premises. This case must be clearly distinguished from the assembly by a constructor/manufacturer of components from numerous sub-contractors but which will give rise to a single delivery (and single invoice) to government.

10. The time of recording of government expenditure, impacting government net lending/borrowing (B.9), is as follows:

    - where long-term contracts include deliveries of identical (or 'basically' identical as in the case of 'standards' for aircrafts) items over a long period of time, government expenditure should be recorded at the time of the actual delivery of each item;
    - where long-term contracts also cover the provision of services over a long period of time (such as maintenance and technical monitoring), government expenditure should be recorded at the time of the provision of the services. Standard analytical accounting techniques allow for apportioning the expenditure in relation to the goods and services delivered within contracts;
    - where long-term contracts involve complex systems from different suppliers, government expenditure should be recorded at the time of delivery of the individual and operational (in the sense that the individual piece of equipment meets all the necessary specifications to be fully functional when connected to other elements of the complex system) pieces of equipment that compose the systems, and not when all pieces under the contract have been delivered. An example is a ship, where the hull

[133] Even if the equipment is not yet fully operational for military missions, this means that in case of damage, it would be at the cost of the military forces.

and motors are provided by a shipyard and more specific military equipment by other specialised suppliers, possibly in other locations;

- where spare parts for maintenance and repairs are delivered simultaneously with the equipment, they are recorded at the same time as the main gross fixed capital formation. If spare parts are part of an identifiable maintenance contract, they are recorded when they are separately delivered to military forces. It may happen that, under a global long-term contract, there would be no detailed information on the exact time of delivery of these spare parts for which the actual amount may vary in each delivery. In this case, as a proxy, the delivery of the spare parts could be recorded according to the same time pattern as for the main military equipment being delivered.

### 2.5.2.4 MILITARY EQUIPMENT BUILT OVER MANY YEARS

11. Military assets that take many years to build, such as large ships or submarines, are to be treated as fixed assets. In this regards, there is no reason to apply specific rules other than those in ESA 2010 for fixed assets. In ESA 2010 the general rule for construction of fixed assets is that unfinished goods are part of work in progress, which is recorded in the inventories of the producer and are reduced when the production process is complete and economic ownership is transferred to the clients (see ESA 2010 paragraph 3.148).

12. There is an exception for 'uncompleted structures' (covering buildings and other immovable assets, other than dwellings) acquired under a contract of sale agreed in advance. This must be treated as the gross fixed capital formation of the purchaser. The rationale is that the latter has taken the commitment to take over the structure provided it complies with required specifications. In this case, the transfer of ownership is assumed to take place progressively. In practice, the gross fixed capital formation would be recorded according to milestone payments or, in their absence, to other indicators such as the cost incurred by the constructor during a given year. The rationale is that it is very likely that the structure will be acquired by the ordering unit.

13. The rule above does not apply to 'uncompleted other fixed assets'. ESA 2010 paragraph 3.148 mentions ships as an example. It therefore does not foresee any exception for military equipment recorded as assets. In this case, work-in-progress is recorded in the inventories of the producer until the transfer to the purchaser. Under these conditions, the military equipment would be recorded at the time of the transfer of ownership, on a delivery basis, like any other fixed assets not covered by the exception.[134]

### 2.5.2.5 THE TREATMENT OF LEASES RELATING TO MILITARY EQUIPMENT

14. Some manufacturers of military equipment (sometimes at government's initiative) will arrange contracts that make the equipment available under a lease. This has been observed in the case of fighters in several EU Member States. The question is then whether such leases should be considered in national accounts as financial leases or as operating leases?

15. Leases of military equipment should be considered to be financial leases, and therefore recorded as an economic acquisition of the equipment by the government (as lessee) with the incurrence of a matching government liability to the lessor, as stated in ESA 2010 paragraph 20.192.

16. Thus, there is an impact on government net lending/borrowing (B.9) at the time when the equipment is put at the disposal of military authorities, under the conditions specified below, and not at the time of payments relating to the lease. As the corresponding liability is an imputed loan, government debt is also impacted at that time. Payments are considered debt servicing, and partitioning into interest and repayments of the imputed loan.

17. Some lease contracts cover civilian equipment that may also be used to support, military activities, possibly through quick addition of light technical tools. Examples are air tankers and cargoes. Often it is not possible to distinguish them from the similar assets used by civilian units. They can be treated as operating leases only where there is evidence that the majority of their use over time is for purely civilian purposes. However, if the equipment is permanently for the sole use of military forces it should be recorded as a finance lease. For instance, if a given number of pieces in a fleet are permanently at the

[134] In other words, the strong specificity of military equipment is not sufficient to result in a specific treatment as regards work in progress. It is true that, in many cases, it seems very unlikely that government could renounce to it, as illustrated by examples where, in spite of substantial delays and large over-costs, governments confirmed their intention to acquire the equipment. Moreover, very often, the construction/manufacturing of the equipment takes place under a very close and permanent control of the military authorities, so that government is thoroughly involved in the production process, much more than what could be observed in the case of other fixed assets, although this would be not, as such, a criterion for national accounts.

unique disposal of military forces (using them fully at will) and are at risk, for example when they are mainly used as support in military missions (fighters' refuelling, troops transportations to combat zones). This rule also applies to transport and communications (including satellites) equipment that could be used for civilian purposes.

### 2.5.2.6 RECORDING OF MILITARY RESEARCH AND DEVELOPMENT

18. ESA 2010 involved a significant change from previous versions as regards research and development (R&D). ESA 2010 paragraph 3.127 states that R&D is part of gross fixed capital formation …*including the production of freely available R&D*. However, it is specified in ESA 2010 (in chapter 7 and its annex 7.1) that: *Research and development that will not provide a benefit to the owner is not classified as an asset and is instead recorded as intermediate consumption*. The question is therefore whether research and development expenditure related to military purposes carried out by government is a benefit to government? This would be true for research and development of 'innovative' equipment and weapons systems, notably at an earlier stage of a programme which might be stopped afterwards. This would need a case-by-case analysis.

19. If the R&D is realised independently of the final product or is not foreseen to be reimbursed in the absence of 'successful results' and, *de facto*, not exclusively related to specific military equipment to be delivered, the corresponding expenditure is recorded when the research and development work takes place[135]. Concerning the recording under GFCF, several cases should be distinguished.

20. Where the R&D expenditure does not imply any manufacturing of equipment[136], at least at this step of research:

- either, there is evidence of 'appropriation' of the benefits by government (which has a possible exclusive benefit of them) or is, by 'altruism', made freely available for any other unit (which seems rather unlikely in highly sensitive R&D); the expenditure is considered GFCF in intellectual property products (AN.117) and recorded at the time of the payment;
- or, the possible benefits from government-funded R&D is fully and exclusively appropriated by the unit undertaking the R&D (with potential 'spin-offs' for their products or through patents); as there is no benefit for the paying government, the expenditure has to be recorded as an investment grant (D.92) in government accounts, as it results in the acquisition of intellectual property (AN.117) for the unit undertaking the R&D, at the time the payment is to be made.

21. In other cases, all or a part (clearly identified) of the R&D expenditure is strictly related to a contract for the manufacture of a given number of identical items on the basis of an outright order of military equipment (even if possibly revised). In this case, the corresponding expenditure has to be apportioned to the deliverable assets and recorded later. If government pays for the R&D at a time that is different to when the equipment is delivered, the difference should be accounted for as a loan (AF.42) in case of long-term contracts or as trade credits and advances (AF.81) in case of short-term contracts.[137] At the time of delivery of each single pieces of the equipment, a proportionate part of the AF.42/AF.81 is transferred to the value of the asset in weapons systems (AN.114) acquired by government.[138]

22. If in the initial contract it was agreed that some of the R&D expenditure would not be included in the prices of the single items to be delivered in the industrial phase of the contracts, then this part should be recorded as GFCF in intellectual property products (AN.117).

23. It may happen that the R&D is actually linked to the provision of future military equipment but covers several different projects with no individual identification in public accounts, so that it is not possible to

---

[135] Or information is available, when a cash transfer is made by government to finance it.

[136] This may imply the production of prototypes on the basis of which government could take the decision to enter in a new contract to deliver equipment derived from this research.

[137] A specific case is where the payment is used for R&D purposes but does not contractually oblige a definitive purchase of military goods, and instead gives a right to future purchases at a reduced price, uncertain at the time of the expenditure, and then a transfer is recorded at the time of the payment. If an eventual acquisition of military goods occurs, this is recorded at full market value, as if acquired by a third party not subject to the reduction, and a capital transfer receipt is imputed for the difference.

[138] A very specific case should also be considered when a government decides to cancel a military equipment programme for which some R&D expenditure has already been undertaken. This expenditure was recorded as a loan or as a financial advance, 'amortised' by effective deliveries. As the later will not take place (or only partially), it should be examined if the advance should be returned by the corporation to government. If this is the case, there will be a new financial transaction. If this is not the case, it should be recorded a capital transfer or an investment grant if the corporation could take some advantage of the past R&D expenditure for itself. This should be recorded at the time of the final decision of cancellation.

establish a direct link between the deliveries of military items and the corresponding R&D. In this case, the expenditure in R&D could be recorded as gross fixed capital formation, on an accrual basis.

## 2.5.3 Rationale of the treatment

### 2.5.3.1 THE TIME OF RECORDING OF MILITARY EQUIPMENT EXPENDITURE: GENERAL RULE

24. As a general rule, in national accounts, the time of recording of the acquisition of goods is the time when economic ownership changes. In the case of long-term contracts for military equipment, there are several events that might correspond to a change of economic ownership, such as: the time of contract signature (as it is very likely that government will eventually take delivery of the equipment or at least ensure the financing of the corresponding research and development costs), the specified time of delivery, the time of cash payment, or the time of contract completion (when the equipment becomes the responsibility of the military).

25. In some limited cases, ESA 2010 specifies recording expenditure in advance of the complete delivery of the goods such as for construction projects in the framework of a sale contract agreed in advance and own account construction. For machinery and equipment (AN.113), the time of recording is at the change of ownership, which is the economic concept of delivery (possibly different from the time of the 'physical delivery'), even when their production is spread over several accounting periods. The fact that military equipment, as specifically defined, is a *sui generis* category of assets, classified as weapons systems (AN.114), with high specificity, a quasi-certainty of actual taking over by the ordering government unit, means that the equipment in progress should not be considered to be transferred to government before the entire completion.

26. Pre-payments on deliveries (which may partly cover R&D related to the programme) of military equipment and other goods must be recorded as financial transactions (loans (F.42) or financial advances (F.81) asset of government, depending on whether long-term or short-term respectively), while subsequent deliveries are recorded as expenditure with a counterpart financial transaction reducing the government financial asset.

27. For post-delivery payments for military equipment, government expenditure is recorded at delivery and is matched by a financial transaction (F.42 or F.81 liability of government, depending on whether long-term or short-term respectively). When the cash settlement occurs later, this is recorded as financial transactions (i.e., one in cash and one that reduces the government liability).

### 2.5.3.2 TIME OF RECORDING OF GOVERNMENT EXPENDITURE ON MILITARY EQUIPMENT IN THE CONTEXT OF LONG-TERM CONTRACTS

28. Contracts often foresee staged deliveries of similar items over many years. Examples are fighter planes delivered in batches over a given period or a series of warships to be delivered over several years.

29. The application of the accruals rule for recording the acquisition of military goods implies that such staged deliveries should be recorded as gross fixed capital formation by government when they occur. Standard analytical accounting techniques should allow identification of the value of partial deliveries. Confidentiality should not be a major issue, as the precise nature of the equipment is not revealed in national accounts data. Thus, the moment of impact on government net lending/borrowing (B.9) is not at the completion of the contract, or at the time of payment, but according to the pattern of deliveries. The rationale is that each piece (or a given set delivered together) must be considered separately as regards the risks and rewards attached to it.

30. Delivery of sophisticated military equipment is often associated with the provision of training and related services. As the maintenance of specific high technology equipment requires sophisticated skills, there is a growing tendency to closely associate supplying firms to these tasks, often under a single contract covering both the supply of equipment and its subsequent maintenance. The accruals principle implies that government expenditure on services should be accounted for at the time they are actually provided and recorded as intermediate consumption. Standard analytical accounting techniques also allow the apportionment over time of the expenditure in relation to the services delivered, with the relevant information likely to be found in the contract.

31. In the case of complex systems, some post-delivery tasks need to be performed for the equipment to be fully operational. Military equipment generally require specific preparation, including further components. The equipment may not be fully operational before the completion or assembly of other kinds of equipment (for instance electronic arms systems).

32. Some military programmes, accounting for significant amounts, are based on the combination of several kinds of components that may be completed in different periods so that the expenditure may be spread over several fiscal years before the system becomes fully operational. The issue here is whether post-delivery tasks are under the full responsibility of the authorities/military forces or of the suppliers.

33. Where the post-delivery tasks are under the full responsibility of the supplier, the supplier of the contract has not yet fulfilled its contractual obligations, and the recording of the delivery of the equipment should only be at the point when those obligations are met.

34. Where all these tasks (and notably their timetable) are under the full responsibility of the government authorities/military forces, the supplier of the components is assumed to have fulfilled its contractual obligations. As a result, the time of recording of the delivery of the goods should not be the time of completion of the whole contract, but instead determined according to delivery or, possibly, progressive transfer of ownership.

### 2.5.3.3 THE TREATMENT OF LEASES RELATING TO MILITARY GOODS

35. Military equipment can be leased instead of purchased outright. Whether the lease is labelled as operating or a financial lease in the contract is not important. The question is the appropriate classification of such leases in national accounts.

36. As a reminder, the classification of leases into financial or operating leases in national accounts rests mainly on the transfer of risk (ESA 2010 paragraph 15.05) and is not determined by the legal terminology included in the contract.

37. One issue to consider is if it is possible to record an operating lease or a financial lease on a good that is not a fixed asset in ESA 2010. The answer is that national accounts can record both, whether the good is an economic asset or not. As an example, cars are not economic assets to households, by convention, in the national accounts system, but financial leases on cars are common and recorded as such.

38. Applied to the case of military equipment, the transfer of risk implying a change in economic ownership occurs when military forces take possession of the equipment and are responsible for taking decisions regarding its use. They will bear all the risks that may be associated with the military missions.

39. A specific characteristic of military missions is to put military equipment knowingly at risk, whereas other economic activities usually avoid putting goods at risk or insure against such risks. By its nature, military equipment is used in missions where some parties are likely to try to destroy it or weaken its capacity. Another issue points to the rapid possible obsolescence of such equipment so that replacements are required quicker than expected.

40. Under these conditions, by their nature, risks associated with military equipment lie with the government authorities/military forces, the bodies that have the sole competence to decide if and when to use it during conflicts, thereby knowingly exposing it to potential damage.

41. In this context, any leasing contract on military equipment (as defined above) should be recorded in national accounts as a financial lease, even when the contract is labelled as an operating lease. The time of recording of the acquisition of the military equipment will therefore be when the military forces take full responsibility for its use. The lessees' liabilities under financial leases are classified as loans (F.4), and are hence a component of government (EDP) debt when the lessee is government.

### 2.5.3.4 RESEARCH AND DEVELOPMENT

42. A complication may arise when the contract foresees that expenditure is incurred for research and development purposes in the earlier years of the contract, well before actual deliveries. Here, it is important to examine the nature of such R&D expenditure.

43. As a general rule, if R&D is realised independently of any final product (but may include the realisation of prototypes) or is definitely spent (and not reimbursed in any form) and, *de facto*, not exclusively related to the specific military equipment to be delivered, the corresponding expenditure is to be

recorded, as for any other type of R&D activity purchased by government, when the work takes place or when the transfer is made by government to finance it. As a general rule, it is recorded under ESA 2010 as gross fixed capital formation in the intellectual property products (AN.117). However, it should be recorded as intermediate consumption and not as gross fixed capital formation if there is no expected clear benefit to be kept by government (including possibly making it generally available) or if possible results would be exclusively appropriated by the beneficiary of the expenditure.

44. In some cases the research and development is part of a contract which includes an order for at least a first series of pieces of equipment, notwithstanding the length of research and development step before the launch of the industrial step. As R&D will be integrated to the price of single pieces, this should be recorded as a financial advance for future deliveries of assets in weapons systems (AN.114). This treatment is implemented only if the contract foresees a global expenditure for the equipment to be delivered and not in the cases where the order of the equipment depends on the results of the R&D.

## 2.5.4 Accounting examples

**Example 1**

Government orders a military intermediate good for a value of 100. In year 1, it makes a payment of 45. In year 2, the good is delivered and immediately usable by military forces and government pays 30. In year 3, government pays the residual (for simplicity, the costs of the supplier are not shown).

**YEAR 1**

**General government**

**Non-financial account**

| U | | | R |
|---|---|---|---|
| | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –45 | | |
| F.81 | +45 | | |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.81 | 45 | | |

**Supplier**

**Non-financial account**

| U | | | R |
|---|---|---|---|
| | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +45 | | |
| | | F.81 | +45 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.81 | 45 |

**YEAR 2**

**General government**

**Non-financial account**

| U | | | R |
|---|---|---|---|
| P.2 (or P.52) | 100 | | |
| B.9 | –100 | | |

**Supplier**

**Non-financial account**

| U | | | R |
|---|---|---|---|
| | | P.1 | 100 |
| B.9 | +100 | | |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –30 | | | F.2 | +30 | | |
| F.81 | –45 | F.81 | +25 | F.81 | +25 | F.81 | –45 |
| | | B.9F | –100 | | | B.9F | +100 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| | | AF.81 | 25 | AF.81 | 25 | | |

**YEAR 3**

**General government** **Supplier**

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –25 | | | F.2 | +25 | | |
| | | F.81 | –25 | F.81 | –25 | | |
| | | B.9F | 0 | | | B.9F | 0 |

**Closing balance sheet is empty**

**Example 2**

Government enters into a leasing contract with a supplier for a military equipment good. The contract foresees that the good has a value of 100 and that government will make 10 annual payments of 14, (corresponding to annual interest payments of about 6.6) from the period following the delivery in year 1. The good is usable as soon as delivered (for simplification, the costs of the supplier are not shown). Note also that the interest recorded will actually decrease throughout the period. The capital good has a lifetime of 25 years.

**YEAR 1**

**General government** **Supplier**

**Non-financial account**

| U | | | R | U | | | R |
|---|---|---|---|---|---|---|---|
| P.51g | 100 | | | | | P.1 | 100 |
| | | B.9 | –100 | | | B.9 | +100 |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| | | F.4 | +100 | | | | |
| | | | | F.4 | +100 | | |
| | | B.9F | –100 | | | B.9F | +100 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AN.114 | 100 | AF.4 | 100 | AF.4 | 100 | | |

**YEAR 2**

**General government** | **Market unit**

**Non-financial accounts**

| U/ΔA | | | R | U/ΔA | | | R |
|---|---|---|---|---|---|---|---|
| D.41 | 6.6 | | | | | D.41 | 6.6 |
| P.51c | 5 | (B.101 | –11.6) | | | | |
| - - - - - - - - - - - - - - - - | | - - - - - - - - - - - - - - - - | | B.9 | +6.6 | | |
| P.51c | –5 | | | | | | |
| B.9 | –6.6 | | | | | | |

**Financial account**

| ΔA | | | ΔL | Δ A | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –14 | F.4 | –7.4 | F.2 | +14 | | |
| | | | | F.4 | –7.4 | | |
| | | B.9F | –6.6 | | | B.9F | +6.6 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AN.114 | 95 | AF.4 | 92.6 | AF.4 | 92.6 | | |
| AF.2 | –14 | | | | | | |

**Example 3**

A government orders a military capital good for a value of 100 in year 1 that takes four years to be delivered. Government pays 10 each of the first three years then settles the remaining amount at time of delivery in year 4. The good is assumed to be usable as soon as delivered. For the sake of simplicity the suppliers' costs are not shown.

**YEAR 1**

**General government** | **Supplier**

**Non-financial account**

| U/ΔA | | | R | U/ΔA | | | R |
|---|---|---|---|---|---|---|---|
| | | | | P.52 | +25 | P.1 | +25 |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –10 | | | F.2 | +10 | | |
| F.81 | +10 | | | | | F.81 | +10 |
| | | B.9F | 0 | | | B.9F | 0 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.81 | 10 | | | An.122 | 25 | AF.81 | 10 |

**YEAR 2**

**General government** | **Supplier**

**Non-financial account**

| ΔA/U | | | R | ΔA/U | | | R |
|---|---|---|---|---|---|---|---|
| | | | | P.52 | +25 | P.1 | 25 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –10 | | |
| F.81 | +10 | | |
| | | B.9F | 0 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +10 | | |
| | | F.81 | +10 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.81 | 20 | | |

| A | | | L |
|---|---|---|---|
| AN.122 | 50 | AF.81 | 20 |

## YEAR 3

**General government** **Supplier**

**Non-financial account**

| U/ΔA | | | R |
|---|---|---|---|
| | | | |

| U/ΔA | | | R |
|---|---|---|---|
| P.52 | +25 | P.1 | 25 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –10 | | |
| F.81 | +10 | | |
| | | B.9F | 0 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +10 | | |
| | | F.81 | +10 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.81 | 30 | | |

| A | | | L |
|---|---|---|---|
| AN.122 | 75 | AF.81 | 30 |

## YEAR 4

**General government** **Supplier**

**Non-financial account**

| U/ΔA | | | R |
|---|---|---|---|
| P.51g | +100 | | |
| B.9 | –100 | | |

| U/ΔA | | | R |
|---|---|---|---|
| | | P.1 | 25 |
| P.52 | –75 | | |
| B.9 | +100 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –70 | | |
| F.81 | –30 | | |
| | | B.9F | –100 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +70 | | |
| | | F.81 | –30 |
| | | B.9F | +100 |

# 2.6 Grants from and contributions to the EU Budget

## 2.6.1 Grants from the EU budget

### 2.6.1.1 BACKGROUND

1. The European Institutions make significant transfers from the EU budget to the Member States for various common policies, mainly the Common Agricultural Policy and the Structural Funds. The nature of these flows can be quite diverse, while the final beneficiaries may be non-government units (as it is the case for most transfers under the Common Agricultural Policy) or government units (as it is the case for a large part of transfers under the Structural Funds).

2. In practice there are two significant cases of EU-grants, which need specific attention for recording in national accounts. First, there are the grants paid from the European Agricultural Guarantee Fund (EAGF). These represent mainly subsidies paid to non-government units as final beneficiaries. Secondly, there are the grants paid in the context of the Cohesion policy, from the Structural Funds (and the European Agricultural Fund for Rural Development (EAFRD), Financial Instrument for Fisheries Guidance (FIFG), European Social Fund (ESF), European Regional Development Fund (ERDF) and the Cohesion Fund. These are mainly current or capital transfers paid to both government and non-government units. The current budget of the European Institutions also includes other expenditures. Among them, a growing part is dedicated to supporting research and development in the EU. Usually the beneficiaries of the EU grants are non-government units but they could also be government units.

3. Beside the above-mentioned cases, three important grant types are worth mentioning: the Schengen-facility, the Transitional facility and the Cash-flow facility, which provide temporary financial assistance to EU Member States which more recently joined the EU. In the case of the Schengen and Transitional Facilities, the activities for which they could be spent by EU Member States are defined by the EU. These activities relate to different common EU policies and initiatives (e.g. Schengen area, customs union, but also common agricultural policy national administrative structures), therefore the rules set out in this chapter relate also to these two facilities. The Cash-flow facility, however, is provided by the EU unconditionally and without any specification of areas for which they would need to be spent. The European Institutions do not monitor the way in which the beneficiary Member States uses these funds. The EU also does not have the right to stop their monthly payments or claim any amounts to be repaid to the EU budget, therefore the Cash-flow Facility has rather the nature of current transfers in the context of international cooperation as defined in ESA 2010 paragraphs 4.121–4.124.

4. Transfers are a category of distributive transactions where, often, only two parties are involved, the payer and the receiver. But, in the case of transfers paid by the European Institutions, there might be in practice three or even more parties involved. In addition, in general, payments transit through government even when the final beneficiaries are non-government units (generally in the context of a co-financing procedure, with the European Institutions supporting an investment effort by government but not substituting it).

5. In practical terms, the European Institutions make payments to final beneficiaries on the basis of information that is transmitted by national governments. Most payments are routed through accounts held by governments (some exceptions are observed only in the case of payments related to agricultural policy even if, in this case, national governments are not involved in the economic decision that determines the payment by the EU). The fact that the transfers are paid from EU-funds to specific accounts managed by government units in the countries is of course a positive factor as regards the availability of the information needed by national accountants. In some countries, only one account could be used for all payments from the EU Member State to the European Institutions, and from the European Institutions to the EU Member State. In such cases the impact of inflows from the EU (for example advance payments at the beginning of a multi-year programme) on the net lending/borrowing (B.9) should be correctly assessed.

6. Notwithstanding issues stemming from the divergence between data sources (EU budget, Balance of payments) that would need specific investigation while compiling national accounts, there are two

important issues to be considered: first, the time of recording and, second, the classification in national accounts of the specific transaction.

7. Regarding the classification in national accounts of the specific transaction, this can take one or a mixture of the following transactions:
   - subsidy (D.3);
   - other current transfer (D.7);
   - capital transfer (D.9).
8. For reasons of comparability, as this classification may have consequences on some aggregates or balancing items in national accounts (but not on net lending/borrowing (B.9), which is crucial for EDP purposes), transactions of a similar nature should be classified in the same (above-mentioned) ESA 2010 categories. This chapter does not provide guidance on this classification of transactions.
9. The EU budget rules are complex. They differ considerably in the case of agricultural payments (mostly subsidies) and in the case of cohesion policy payments of structural funds (mostly current or capital transfers), including prepayments, interim and final payments, and these payments are frequently made, as mentioned above, not to the final beneficiary but to a national government agency, which then pays the final beneficiary.
10. The cohesion policy payments are granted in the framework of 7-year long programming periods. Once the compulsory national programmes are adopted, EU Member States receive advance payments for the whole period. During the programming period, the European Institutions make interim payments to reimburse actual expenditure certified by the EU Member States up to a maximum of 95 % (including the advance payment at the beginning of the programming period). The balance of 5 % is paid on the closure of the programme once all documents are submitted and approved by the Institutions.
11. There is an issue concerning the time of recording, which might have a direct impact on net lending/borrowing (B.9). Once the expenditure by the final beneficiary has occurred (and generally with a very short delay), the managing authority sends to the European Institutions all relevant documents in order to be reimbursed for the appropriate (and legitimate) amount. The European Institutions authorise and undertake payments to beneficiaries only after checking compliance with the agreed rules and conditions, on the basis of supporting documentation that has been forwarded. It generally takes a maximum of two months between receipt of the supporting documentation and the authorisation of payment.
12. Under these conditions, imbalances are observed at the end of each year (mostly due to administrative delays), and there have also been cases of a disallowance or a cancellation of an EU transfer, for example in the case of fraud. A disallowance appears when a national government has paid subsidies or other transfers on behalf of the EU, but after an auditing process the EU does not approve part or all of the expenses and refuses to reimburse at least some of them.
13. Some aspects of these payments of EU-grants might have major effects on government net lending/borrowing (B.9). It may happen that governments pay agricultural subsidies in advance (for example during September, year t) while the reimbursement from the European Agricultural Guarantee Fund (EAGF) is made only later (for example during January year t+1). Similarly, the Structural Funds can make prepayments to governments at the beginning of a programme period.
14. This chapter provides guidance for a homogeneous recording of EU-grants in EU Member States and neutralising the timing effect of EU related flows. As government is acting as an agent by delegation from the European Institutions while transferring the grants to the final receivers, the method in use influences not only the accounts of the rest of the world but that of government as well.
15. The appropriate recording of changes in inventories of Market Regulatory Agencies is covered by chapter 1.4 Market regulatory agencies in agriculture, therefore this topic is not analysed in this chapter.
16. Finally, this chapter deals with the contributions of EU Member States to the EU budget (see section 2.6.2).

### 2.6.1.2 TREATMENT IN NATIONAL ACCOUNTS

**General rule**

17. As a general rule, EU transfers shall have no impact on government net lending/borrowing (B.9) at the moment in which they are made. In other words, possible time lags observed between the revenue and expenditure flows, or in the financing of these transactions, should not result in national accounts in improving — or worsening — the net lending/borrowing (B.9) of the general government.

18. The treatment in national accounts depends on the final beneficiary (the unit undertaking the activity which qualifies for an EU grant) of these EU-grants. Grants received by a government unit as a final beneficiary are treated differently from those for which the final beneficiary is a non-government unit.

#### 2.6.1.2.1. The beneficiary of the EU grants is not a government unit

**General rule**

19. When the final beneficiary is not government, the transfer is recorded in the final beneficiary's accounts as appropriate according to ESA 2010 rules, and the related transactions are exclusively recorded in the financial accounts of general government, without any impact on government net lending/borrowing (B.9).

20. In national accounts, these transfers must be recorded as distributive transactions directly between the European Institutions (uses) and the non-government beneficiaries (resources). For subsidies (D.3), the amounts are recorded in the accounting period when the transaction or the event (production, sale, import, etc.) which gives rise to the subsidy occurs. This is a general rule (ESA 2010 paragraph 4.39) that should be met as far as possible. However, in some very specific and exceptional cases, it may be difficult to collect information on the precise period when the relating economic activity took place. By convention, the time of the cash payment (either from the European Institutions or from government as an advance, see below) could be considered a proxy measurement of the period for recording on an accrual basis. Statistical authorities must, however, make all possible efforts to cover with appropriate information, or adequate estimation methods, most of the transactions where the time lag between the economic activity and the payment could lead to an incorrect picture of the government balance.

21. For other current transfers (D.7), the amounts are recorded in the accounting period in which the obligation to pay arises (ESA 2010 paragraph 4.123: *the time the regulations in force stipulate the transfers are to be made in the case of obligatory transfers, or the time the transfers are made in case of voluntary transfers*).

22. For capital transfers (investment grants (D.92)), the amounts are recorded in the period when *the payment is due to be made* (ESA 2010 paragraph 4.162).

23. As an example, consider the case where the European Institutions make a payment, at the time when due, in February of year t+1 to a non-government unit relating to the fourth quarter of year t. If it is a subsidy, it should be recorded in the accounts of year t as a resource of the non-government unit and as a use of the rest of the world (S.2). If it is a capital transfer, whatever the period in which the capital expenditure took place, it should be recorded as revenue of the non-government unit in the year t+1, when the payment from the European Institutions is due.

**Specific case of government advance**

24. Frequently, government makes advance cash payments to a non-government unit that is entitled to receive transfers from the European Institutions (mostly as far as farmers are concerned). This is done for the purpose of reducing the financing burden of the beneficiaries; they receive cash closer to the time when they carried out the relevant economic activity.

25. Any advance cash payment in this respect, whatever its underlying transaction in national accounts (D.3, D.7 or D.9), must be recorded as a financial transaction (creation of a financial asset of government and a matching liability of the rest of the world in the category AF.8) at the time it is made by government, or if a commitment accounting system is used, at the time the payment is ordered by the competent authority.

26. With this treatment, there is no impact on government net lending/borrowing (B.9) because the transfers from the EU institutions are not considered national government expenditure but as EU expenditure. The only expenditure incurred by government consists of the financing costs of the financial advance.

27. **Example**: government makes a payment on behalf of the EU to a non-government unit in September of year *t*. This is recorded in the same accounting period as revenue of the non-government unit received from the rest of the world (it is not to be considered government expenditure). This payment by government gives rise to a financial claim on the European Institutions (AF.89 asset for government). Following the verification procedure, the European Institutions pay government in January t+1. This payment liquidates the government claim at the time it takes place. Thus a government payment to a non-government unit on behalf of the EU is recorded as a financial transaction without any impact on government net lending/borrowing (B.9).

#### 2.6.1.2.2. The beneficiary of the EU grants is a government unit

28. A government unit is the final beneficiary of the EU transfer if the transfer covers an expenditure carried out by that government unit, for any purpose: social assistance, training, education, or increase in fixed assets held by government. The government unit that takes the economic decision (project manager) must be distinguished from the government unit that receives and reallocates the funds from the EU (as cash manager). This is relevant for national accounts if they are in different subsectors.

**General rule**

29. In general, the time of recording of government revenue from the EU matches the time of recording of the government expenditure covered by the EU grant. This is done for practical reasons to ensure that there is no impact on government net lending/borrowing (B.9) arising from these transactions.

30. **Example**: government makes expenditure in October of year *t* for an amount of 100 under a given project. Government then sends the appropriate documents to the European Institution in November of year t. Government records in October a transfer from the rest of the world as government revenue, coded according to the nature of the transaction (which does not influence the time of recording). Government records as a counterpart a claim on the EU in its financial account (F.89 asset). The European Institution then reimburses 100 in February t+1. The claim is liquidated at this time.

31. If the European Institution decides at a later date not to reimburse the government on an individual claim and if the time lag is short (within the year, as is normally the case), the past accounts may be revised to remove the government revenue and other accounts receivable or a part of it.

**Specific case**

32. It might happen that the time of expenditure differs considerably from the time of submission of claims to the European Institutions, since at the time of expenditure the intention of submitting the claim was not known. In this case, the time of submission of claims might substitute for the time of expenditure for the purpose of defining the time of recording, depending on the availability of information on the expenditure, the amount involved and the size of the time lag between the time of expenditure and the time of the submission of claims. Nevertheless, the time of submission of claims can be used as the time of recording only in justified cases.

33. In accordance with paragraph 32, the time of recording is the time of submission of claims, when no reliable information on the date of expenditure is available; or, when amounts involved are very small; or, when amounts involved are big and the time lag between the moment of expenditure and the submission of claims is very small (flexibility option).

34. After sending the claims, in the expectation of the settlement by the European Institution, a counterpart financial transaction of government revenue is recorded in the form of other accounts receivable (a claim on the European Institutions), codified as AF.8. This is liquidated at the time of reimbursement by the European Institutions.

#### 2.6.1.2.3. Initial advance payment by the European Institutions

35. All payments received by governments from the European Institutions at inception of a multi-year programme period are treated as financial advances (AF.8), government liability. Thus, there is no impact on government net lending/borrowing (B.9).

36. This liability is unchanged until total payments by the European Institutions have reached a ceiling calculated as 95 % of the total amount agreed by the European Institutions in all the multi-year periods less the amount of the initial advances. Then, until a ceiling percentage is reached (usually 95 %, since in principle the European Institutions keep 5 % of the total agreed), the reimbursement of final beneficiaries` expenditure is recorded as revenue for the same amount, with a counterpart financial transaction in the form of a reduction in the advance received by government.

37. The remaining part of the expenditure of the project (5 %) has to be pre-financed by the final beneficiary (and treated as other accounts receivable (F.89)) and the EU will repay these expenditures only later (at which time the other accounts receivable will be neutralised).

38. If at the end of the multi-year period, the total government expenditure does not reach the ceiling percentage of the total agreed amount for the period, the part of the advance not 'consumed' by government is reimbursed to the European Institutions, with no impact on government revenue, and with an impact only in the financial accounts.

#### 2.6.1.2.4. Measures taken to deal with deficiencies in EU Member States

**Disallowance**

39. It might happen that the European Institution decides that part of the amount paid to final beneficiaries by government on behalf of the EU was not justified or that a penalty has to be paid by the EU Member State (e.g. for agricultural overproduction). In this case the European Institutions will place a sanction either by withholding the reimbursement in the period following the payments to final beneficiaries or deducting the amount from a future payment. There are three main issues: the time of recording, in which sectors the entries should be made, and what to record.

40. The time of recording is when the Commission takes the decision of partial reimbursement of the amounts paid by the paying agencies of EU Member States to final beneficiaries.

41. The counterpart sector depends on whether the final beneficiary is allowed to keep the payment or not, or, in the case of sanction for overproduction, whether the government is allowed to pay on behalf of the penalised sector or not (for instance in the case in which it would not be considered a distortion of competition in the EU Internal Market).

42. If the beneficiaries should have been definitively able to acquire the advanced payment by government (government would be allowed to complete the aid from the EU), then at the time of the European Institution's decision on the final reimbursement (or non-reimbursement), the original amount must be recorded as a capital transfer (D.9) from government to the final beneficiary, and, at the same time, as transfer from the final beneficiary to rest of the world sector (European Institutions).

43. If the advanced payment by government cannot be kept by the beneficiaries (government would not be allowed to pay more than what is defined by the EU rules), two cases must be distinguished.

44. If the final beneficiary is able to pay back the advanced amount to the government, a repayment must be imputed from the final beneficiary to the rest of the world (RoW) sector for the repaid amount, and the repayment amount enters the financial accounts of the government, at the time of the European Institution's decision.

45. If there is no full repayment from the final beneficiary, and the European Institution penalises the government, the government must record a current transfer from general government to the rest of the world sector (European Institutions), at the time of the European Institution's decision.

**Interruption of payment deadline, suspension of payments, financial corrections**

46. It might happen that the Commission interrupts the payment deadline for a maximum period of 6 months (officially called interruption of the payment deadline), in order to carry out additional verifications on the certified statement of expenditure (a claim sent to the EU). In the national accounts this should have no effect on the recording: the EU Member State would record revenue and claim (F.8) against the EU. However, it might take more time to receive the money (F.2) and extinguish the claim (F.8).

47. The Commission may also suspend all or part of interim payments at the level of priorities or programmes in case there is a serious deficiency in the management or control systems, there is serious irregularity which has not been corrected or there is a breach of its obligations by the EU

Member State (suspension of payments). In case the EU Member State has taken the necessary measures (normally within 2 months), the suspension is lifted. Where the required measures are not taken by the EU Member State, the Commission may adopt the decision to cancel all or part of the community contributions to the operational programme (financial corrections).

48. The suspension of payments, similarly to the interruption of payment deadline has no immediate consequence on the recording in national accounts. However, if the suspension of payment leads to financial correction (meaning the cancellation of funding from the EU), this has to be reflected in national accounts, similarly to the case of disallowances as described in paragraph 39. It must be noted that financial corrections can come to existence even without the suspension of payments.

49. The time of recording of financial corrections linked to past expenditures is the earlier of (1) the acceptance by the EU Member State of a financial correction proposed by the EU or (2) the final Commission decision. If the financial correction also includes the cancelation of funding to future projects, then the time of recording is the time of the actual future expenditure.

50. The counterpart of the government expenditure is the Institutions and bodies of the European Union (S.212).

### 2.6.1.3 RATIONALE OF THE TREATMENT

#### 2.6.1.3.1. Non-government unit as beneficiary

51. Government is not the final beneficiary because either the subsidy is linked to the economic activity of units outside the government sector, or the transfer obviously supports directly the income of a non-government unit, or the transfer covers a capital transaction that is devoted to finance all or a part of the acquisition of non-financial assets by a non-government unit. This includes the case of payments to regulatory units that have been classified as market producers, outside the general government sector (see Part 1 Delimitation of the general government sector). This is mainly the case for the Common Agricultural Policy but it could also concern some payments from other Structural Funds (notably in the case of the Social Fund and the Cohesion Fund).

52. The treatment follows the ESA 2010 rules as regards time of recording, based on an ‘accrual’ approach. Subsidies are recorded when the transaction or the event (production, sale, import, etc.) which gives rise to the subsidy takes place (ESA 2010 paragraph 4.39). The event might be for example agricultural production or export of goods. For other current transfers (in cash), the time of recording is the time the regulations in force (or contractual agreements) stipulate the transfers are to be made (ESA 2010 paragraph 4.123). Investment grants in cash are recorded when payment is due to be made to the unit recording the GFCF expenditure in its own accounts (ESA 2010 paragraph 4.162).

53. In practice, amounts to non-government final beneficiaries usually transit via government accounts. However, these non-financial flows must be recorded directly between the two parties involved (EU and the non-government beneficiary) and government’s role is recorded only in the financial accounts. This is because the ESA 2010 paragraph 4.122 (b) establishes that current transfers made by the European Union to resident market producers are shown as subsidies paid by the rest of the world. A similar principle is established in ESA 2010 paragraph 4.152 for investment grants.

54. As far as the time of recording of the transactions is concerned, there might be a time difference between the moment when the obligation is recognised and the time at which the European Institutions pay. In practical terms, nevertheless, once the European Institutions have taken the decision to pay, there is usually only a very short delay before the funds are effectively transferred. In addition, it seems that for some countries the information is available in direct form only on a cash basis in reporting systems.

55. In the case of an advance by government on behalf of the EU to a non-government beneficiary, from an economic point of view the treatment described in paragraph 254 is justified because the cash position of the final beneficiary is affected at the time when government is paying and it is this, which is relevant for its economic behaviour. Government is here acting ‘on behalf’ of the European Institutions. In national accounts one must record a financial claim of government on the European Institutions.

56. In practice, the amount paid to the beneficiaries by government will be different from the final payment from the European Institutions only in exceptional cases, mainly due to errors and fraud activities. However, it might happen more frequently that the European Institutions ask for additional documentation so that the reimbursement is delayed.

#### 2.6.1.3.2. Government unit as final beneficiary

57. Government units being final beneficiaries can occur in various EU schemes. It is notably the case for Regional Development and Social Funds where a government unit is managing a project under an agreement with the European Institutions but with a certain autonomy as regards the completion of the project. The nature of national government expenditure may be of various types: P.2, P.5, P.7, D.1 and, possibly, other distributive transactions (D.3, D.7, and D.9). It seems that government may, in very specific cases, also acquire shares.

58. Once the expenditure by government has occurred, government sends (generally after a short delay), to the European Institutions all relevant documents in order to be reimbursed. However, the intention of government is not necessarily known at the time of expenditure.

**Specific case when the intention of submitting the claim is not known at the time of expenditure**

59. Only in this latter case, in order to better reflect economic reality, might it be more appropriate for practical reasons to record the revenue for government at the time government sends the documents to the European Institutions.

60. The treatment envisaged here is based on the experience clearly showing that the European Institutions almost always pay what is effectively declared. Effectively, it is extremely rare that the EU does not fully reimburse government (and usually then only for very small amounts in comparison to the total).

61. In the context of the EU agreements, government expenditure by definition must fulfil precise requirements and governments would not try to claim undue revenue. In addition, the European Institutions have imposed domestic controls so that misuse of the funds, non-completion of the programme, frauds, etc. is exceptional. Nevertheless, if the European Institutions do not reimburse government — given that the time lag is normally short — a suitable backward revision of government revenue from the European Institutions would be appropriate.

62. The treatment proposed is also in compliance with ESA 2010 paragraph 4.162 where it is said that investment grants in cash are recorded when the payment is due to be made. The 'due to be made' reflects the expectation of government of reimbursement. If, at the time of expenditure, there is no expectation of the reimbursement, the time of recording of the revenue shall not be the time of expenditure. A government revenue is recorded when a valid expectation of reimbursement arises, which is when the claim is submitted. This corresponds to the principles laid down in the chapter.

**Specific case when the precise amount of the expected reimbursement is not known at the time of expenditure**

63. If the expectation arose at the time of expenditure on the project but the precise amount (the percentage of the amount of expenditure) of the expected reimbursement was not known, a prudent estimate must be made for the expected Initial payment by the European Institutions.

#### 2.6.1.3.3. Initial payment by the European Institutions

64. The initial payment by the European Institutions may only be treated as a financial advance in national accounts, with no impact on government net lending/borrowing (B.9).

65. This treatment is justified by the fact that the EU rules stipulate that it is only when government expenditure has been made that government may ask for the reimbursement by the European Institutions, under pre-determined conditions. Therefore, the advance cannot be recorded as revenue until the occurrence of the corresponding expenditure.

## 2.6.2 Contributions of EU Member States to the EU budget

66. ESA 2010 sets the treatment in national accounts of the different contributions made by EU Member States to the EU budget.

67. Customs and agricultural duties levied at the external frontiers of the European Union are classified as taxes and duties on imports excluding VAT (D.212). They should be recorded according to the rules described in this Manual in chapter 2.2 Recording of taxes and social contributions on a gross basis, which includes collection costs. Customs and agricultural duties are collected on behalf of the EU

Institutions and must not be recorded as government revenue. Only collection costs should be recorded in the Government Finance Statistics[139] and, for practical reasons, it is recommended to record them when the amounts are deducted from the payments to the EU Institutions.

68. Production charges levied on the sugar, isoglucose and inulin syrup quotas held by the producers are classified as 'taxes on products, except VAT and import taxes' (D.214) on a gross basis. The same time of recording principle as for custom and agricultural duties should be followed (i.e. only collection costs should be recorded in the government accounts).

69. VAT-and GNI-based EU own resources (D.76) include payments for the current year of the VAT and GNI resources as well as balances for the previous years and the correction of budgetary imbalances paid by the other Member States to the countries concerned.

70. The payments for the current year of the VAT and GNI resources are settled through monthly payments to the EU budget[140], calculated as 1/12 of the annual amounts included in the original EU budget for the year. The annual amounts in the original EU budget might be increased or decreased (for example when incorporating the surplus of the EU budget of the previous year) in the course of the year through EU Amending Budgets causing a change in the monthly payments. When the EU Amending Budget is approved too late in the year to be reflected in monthly payments, it is the amount in the Amending Budget which should be accrued in the year and not the amounts of the twelve monthly payments.

71. The balances for the previous years are communicated by the European Commission in October and the payment is to be made on the first working day of December. Therefore, the amounts are recognised in the same year they are paid. However, under exceptional circumstances[141], Member States can defer the payment until September of the following year but as the obligation exists and the amount is known, it should be accrued in the current year with a corresponding entry in payables. Given that the EU operates on a balanced cash budget basis, the deferred payments chosen by some Member States decrease the EU cash receipts for the current year and increase the EU cash receipts for the following year. This in turn leads the EU to reduce the refunds (or increase the additional payments) in the current year owed to (by) the other Member States and to refund them in the following year. As a result, the other Member States acquire a receivable on the EU which matches exactly the payables mentioned above.

72. The corrections of budgetary imbalances paid by the other Member States to certain countries should be accrued to the year the corrections are established, independently of the years to which the underlying data used to calculate the corrections refers to.

### 2.6.3 Accounting treatment of the so-called EU 'financial instruments'

73. The EU has been providing measures of financial support from EU structural and investment funds using what it legally describes as 'financial instruments'[142]. These instruments may be 'equity or quasi-equity investments, loans or guarantees' and they are intended to support activities that will generate income, or result in saving on future expenditure. Unlike grants, they do not constitute a gift to the final recipient, which will typically be a small or medium-sized enterprise (SME) since, under normal circumstances, the funds are expected to be repaid to the creditor and produce a return on the investment (such as interest on the loan, or profit on subsequent sale of equity). EU legislation[143] allows for a choice on how the financial instruments are implemented nationally: the Implementing Authorities can choose whether to assign the implementing task to a newly created entity or contract out the management to the EIF/EIB or to existing financial institutions.

---

[139] As payments for non-market output (P.131)

[140] In case of late payments of the monthly instalments, an interest on late payment is charged to the concerned EU Member State.

[141] The overall balance to be settled exceeds half of the aggregated monthly VAT and GNI payments and the balance for a Member State exceeds two monthly VAT and GNI payments for that Member States (Council Regulation (EU, Euratom) No 1377/2014 of 18 December 2014).

[142] 'Financial instruments', as defined in Article 2 of the Regulation (EU, EURATOM) No 966/2012, are '*Union measures of financial support provided on a complementary basis from the budget in order to address one or more specific policy objectives of the Union. Such instruments may take the form of equity or quasi-equity investments, loans or guarantees, or other risk-sharing instruments, and may, where appropriate, be combined with grants*'. Thus, those are not to be confused or assimilated with ESA 2010 financial instruments.

[143] Article 38 of Regulation (EU) No 1303/2013

74. The unit assigned to implement the financial instrument, or to manage the fund of funds, is considered as the 'beneficiary' from the point of view of the B.9 neutrality principle for recording EU flows. The beneficiary is distinguished from the final recipient — the entity receiving financial support from a financial instrument (e.g. a SME granted a loan or receiving a guarantee). It is possible that either, both or neither the beneficiary nor final recipient could be units classified inside general government.

75. If the beneficiary unit is classified outside general government, any funds from the EU that transit through government/Treasury are recorded as financial transactions (F.2 asset for cash flow, F.89 liability its counterpart), without impact on government revenue/expenditure: when the Treasury makes an advance payment or when these funds merely transit via the Treasury or other government accounts. If the flow of the funds does not involve government, either as final recipient, beneficiary or via transiting, no recording in government accounts is needed.

76. If the beneficiary is a unit classified in general government, the cash received to build up the fund for the financial instrument is recorded as a payable (F.89) of the 'beneficiary' towards the EU, not as government revenue. The payable decreases when funds are considered lost (e.g. when loans granted by the beneficiary to the final recipient are cancelled, or a guarantee is called) against a government revenue from the EU (which hence neutralises the capital transfer on the loan cancellation or guarantee call). The payable increases for amounts of accrued interest and fees and dividends received.

77. The AF.89 payable to the EU will remain in the system, pending a decision on the final appropriation of these funds.

78. In cases where the Treasury provides cash in advance to the beneficiary, the transfer is recorded as a receivable (F.8) of the Treasury against the EU, together with the incurrence of a payable (F.8) by the beneficiary towards the EU. At the time of the EU payment, the Treasury receivable is redeemed.

79. Following the above recording, the EU correction is implemented at the level of the beneficiary (i.e., the fund manager) only. Flows to the recipient, using the 'financial instruments', should not be seen as EU structural and investment funds expenditure but instead as financing and recorded using usual ESA rules. This means that if the final recipient is classified inside general government, a B.9 impact is recorded for any expenditure financed by a loan from the 'beneficiary' or interest paid on the loan.

## 2.6.4 Accounting examples

**1. The final beneficiary is not a government unit (case of government advance)**

A non-government producer is entitled to receive 1 000 from the European Institution as investment aid in year *t*. It receives this amount from the national government in year *t* but the European Institution makes a reimbursement payment of 1 000 later in year t+1.

**Year t**

| General government | | | | Rest of the world | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| ΔA/U | | | R | ΔA/U | | | R |
| | | | | | | D.9 | –1 000 |
| | | | | B.9 | –1 000 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | –1 000 | | | | | | |
| F.8 (RoW) | +1 000 | | | | | F.8 (GG) | +1 000 |
| | | B.9F | 0 | | | B.9F | –1 000 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.8 | 1 000 | | | | | AF.8 | 1 000 |

**Non-government producer**

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | D.9 | +1 000 |
| B.9 | +1 000 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +1 000 | | |
| | | B.9F | +1 000 |

**Year t+1**

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.8 | 1 000 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +1 000 | | |
| F.8 | –1 000 | | |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.8 | 0 | | |

**Rest of the world**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.8 | 1 000 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –1 000 | | |
| | | F.8 | –1 000 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | | |

**2. The final beneficiary is a government unit**

A government unit has spent 2 000 (here in the form of gross fixed capital formation) in year t in the framework of a project co-financed to the extent of 50 %. Appropriate documents are sent to the European Institution but the latter reimburses 1 000 only in the course of the following year t+1.

**Year t**

**General government**

**Capital account**

| ΔA/U | | | R |
|---|---|---|---|
| P.51g | 2 000 | D.9 | +1 000 |
| B.9 | –1 000 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –2 000 | | |
| F.8 | +1 000 | | |
| | | B.9F | –1 000 |

**Rest of the world**

**Capital account**

| ΔA/U | | | R |
|---|---|---|---|
| | | D.9 | –1 000 |
| B.9 | –1 000 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |
| | | F.8 | +1 000 |
| | | B.9F | –1 000 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.8 | 1 000 | | | | | AF.8 | 1 000 |

**Year t+1**

| General government | Rest of the world |
|---|---|

**Opening balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.8 | 1 000 | | | | | AF.8 | 1 000 |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | +1 000 | | | F.2 | –1 000 | | |
| F.8 | –1 000 | | | | | F.8 | –1 000 |
| | | B.9F | 0 | | | B.9F | 0 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

**3. Agricultural disallowances when the government are allowed to complement the original payment** (paragraph 42)

Government sends a claim of 1 000 to the European Institutions for reimbursement of subsidies paid in November of year *t*, but the European Institutions only pay 800 in January of year t+1, as 200 is withheld as penalty relating to inappropriate claims of earlier periods (t-1 or earlier). The original subsidy is kept by the final beneficiary.

**Year t**

| General government | Rest of the world |
|---|---|

**Non-financial account**

| ΔA/U | | | ΔL/R | ΔA/U | | | ΔL/R |
|---|---|---|---|---|---|---|---|
| | | | | | | D.3 | –1 000 |
| B.9 | 0 | | | B.9 | –1 000 | | |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –1 000 | | | | | | |
| F.8 (RoW) | +1 000 | | | | | F.8 (GG) | 1 000 |
| | | B.9F | 0 | | | B.9F | –1 000 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.8 | 1 000 | | | | | AF.8 | 1 000 |

**Non-government producer**

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.3 | +1 000 |
| B.9 | +1 000 | | |

**Non-government producer**

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +1 000 | | |
| | | B.9F | +1 000 |

**Year t+1**

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.8 | 1 000 | | |

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.9 (final benef.) | –200 |
| B.9 | –200 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +800 | | |
| F.8 | –1 000 | | |
| | | B.9F | -200 |

**Rest of the world**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.8 | 1 000 |

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.9 (final benef.) | 200 |
| B.9 | +200 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –800 | | |
| | | F.8 | –1 000 |
| | | B.9F | +200 |

**Non-government producer**

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.9 (gov) | 200 |
| | | D.9 (RoW) | –200 |
| B.9 | 0 | | |

**Non-government producer**

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |
| | | B.9F | 0 |

**4. Agricultural disallowances when the government are not allowed to complement the original payment and the final beneficiary is not able to pay back the full amount** (paragraph 45)

Government sends a claim of 1 000 to the European Institutions for reimbursement of subsidies paid in November of year *t*, but the European Institutions only pay 800 in January of year t+1, as 200 is withheld as a penalty relating to inappropriate claims of earlier periods. The original penalty cannot be kept by the final beneficiary, but the final beneficiary is not able to pay it back.

**Year t**

**General government**

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| B.9 | 0 | | |

**Rest of the world**

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.3 | –1 000 |
| B.9 | –1 000 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –1 000 | | |
| F.8 | +1 000 | | |
| | | B.9F | 0 |

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.8 | +1 000 |
| | | B.9F | –1 000 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.8 | 1 000 | | |

| A | | | L |
|---|---|---|---|
| | | AF.8 | 1 000 |

**Non-government producer**

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.3 | +1 000 |
| B.9 | +1 000 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +1 000 | | |
| | | B.9F | +1 000 |

**Year t+1**

**General government**

**Rest of the world**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| F.8 | 1 000 | | |

| A | | | L |
|---|---|---|---|
| | | AF.8 | 1 000 |

**Non-financial account**

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| D.7 | 200 | | |
| B.9 | –200 | | |

| ΔA/U | | | ΔL/R |
|---|---|---|---|
| | | D.7 | 200 |
| B.9 | 200 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +800 | | |
| F.8 | –1 000 | | |
| | | B.9F | –200 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –800 | | |
| | | F.8 | –1 000 |
| | | B.9F | 200 |

# 2.7 Court decisions with retroactive effect

## 2.7.1 Background

1. When there is controversy about claims/liabilities, there might be a need for a Court decision — or any other accepted way of settling the dispute (Arbitration) — to impose a settlement of the dispute and state an incontrovertible right of the claimants against government to a given amount. Such judgment must be definitive and thus directly applicable by the parties, which would have exhausted all the ways of appeal (recourse).
2. Sometimes, amounts could have been due by the government for several years and not paid because of a disagreement. Legal actions may take a long time, considering notably the different levels of recourse that can be activated by the parties.
3. The issue is, thus, at what time these claims and liabilities should be recorded as, from a theoretical point of view, this could take place:
   - at the time they were accruing or supposed to be due, or
   - at the time the Court decision settles the dispute and fixes the amounts irrevocably.

## 2.7.2 Treatment in national accounts

4. ESA 2010 paragraph 20.189 states that, when a Court of Justice rules, as a definitive judgement, that a compensation must be paid, or a transaction reversed, the time of recording of the expenditure or revenue is when the right of one party (and the obligations of the counterpart) is irrevocably established, if the amount to be paid (or retroceded) is precisely fixed. This may be at the time of the decision taken by the Court when it is immediately enforceable. The obligation to pay for government may be set up after a time lag. In some cases the Court has explicitly mentioned in its decision the fractioning of the payments due by or to government.[144]
5. If the Court has only set a principle of compensation without fixing a precise amount, letting it to another decision (for instance another Court) or when the eligibility for compensation must give rise to further checks/validation, notably under the form as a specific application by the plaintiffs (as it may be the case in the context of 'class actions'), then the time of recording the expenditure or revenue is only the time when the amount of the claims/obligations is definitively determined with certainty.
6. To be implemented, the decision of the Court must be considered to be 'final', i.e. when it is no longer possible for parties to lodge an appeal. This includes the different domestic judicial levels, the instances of the EU Court of Justice and in some cases private 'Arbitrage Courts'. It may also apply if the parties in the dispute renounce, openly or *de facto*, to any appeal (which normally must be expressed under strict deadlines). It may be the case that a Court ruled, as definitive decision, a right to compensation, but has left to lower courts to solve the dispute. Such new recourse might be automatic, *de jure*, but it may also result from a voluntary action. In this case, the time of recording would be at the time of the decision(s) of these courts, acting as second resort.
7. In any case, the amount should be recorded in other accounts payable/receivable (F.8) until the time of actual payment in cash. Amounts should not be distributed over the past periods when they accrued, except for that part of the claims that were not the subject of controversy.
8. A simple postponement of payments by the government without government disputing the obligation to pay should not prevent recording the payments at the time they are due (see chapter 2.3 Changes in the due for payment dates) with entries in other accounts payable/receivable (F.8) for the amounts accrued but not yet paid.

[144] The Court may have fixed an amount, which is deemed to be close to the final amount, but not necessarily identical, for technical reasons (but excluding cases covered in paragraph 5). The potential gap should be analysed and if it is very small, the full amount could be recorded immediately, with further slight revisions in the future.

9. The amount of any compensation is generally recorded as other capital transfers (D.99), which relates to amounts that would have accrued over a number of years, but a part could also be considered fines and penalties (D.759).

## 2.7.3 Rationale of the treatment

10. A distributive transaction — and more generally, claims and liabilities — may be recorded in the accounts when established with sufficient certainty, when known and accepted by both parties (even in cases where imposed by law, such as for taxes and social contributions).

11. In some cases — when a new situation is created (new rights and obligations, for instance) — the subject of controversy and dispute can be resolved only by a court decision which creates the obligation to pay, and either specifies the exact amounts to be paid or indicates the conditions in which the latter would be fixed. The date of the obligation to pay is therefore the time when the transactions are to be recorded.

12. This is true also for any penalty or interest charge awarded by the court.

## 2.8 Keywords and accounting references

| | |
|---|---|
| Accrued interest | ESA 2010, 4.50 |
| Arrears | ESA 2010, 5.242 |
| Current international cooperation | ESA 2010, 4.123 |
| Discounted bonds | ESA 2010, 4.46, 5.96 |
| EU subsidies | ESA 2010, 4.31 |
| General accrual principle | ESA 2010, 1.101 |
| Index-linked securities | ESA 2010, 4.46 and 5.100 |
| Instruments denominated in foreign currencies | ESA 2010, 6.64 |
| Interest and financial transaction | ESA 2010, 5.41-5.44 |
| Mutual fund shares | ESA 2010, 5.160-5.166 |
| Nominal holding gains | ESA 2010, 6.27-6.36 |
| Other accounts payable/receivable (AF.8) | ESA 2010, 5.230-5.244 |
| Other capital transfers (time of recording) | ESA 2010, 4.166 |
| Social contributions | ESA 2010, 4.96 |
| Subsidies (time of recording) | ESA 2010, 4.39 |
| Taxes on income and wealth | ESA 2010, 4.80-4.82 |
| Taxes on production (other) | ESA 2010, 4.26-4.27 |
| Time of recording interest | ESA 2010, 4.50 |
| Time of recording of social benefits | ESA 2010, 4.106 |

# 3 General government and entities controlled by government

## 3.1 Overview

1. The classification of a transaction between government and a public entity can be complicated because of the different roles played by government in the economy. The transaction can arise for several different reasons due to the different objectives of government activity. These activities include government's role:
   - as the **owner of financial assets**:
     - seeking a return on investment, similarly to a long-term investor;
     - managing its treasury.
   - **acting for public policy purposes, supporting economic and social policy:**
     - paying subsidies and investment grants;
     - using public units to help deliver public interest policies – such as for public transport;
     - restructuring public units.
   - implementing its **budget**:
     - levying taxes and social contributions;
     - ensuring the optimal financing;
     - facing pensions obligations.
2. In borderline cases, when determining the classification of a transaction, it is necessary to consider which role the government is playing in the transaction and apply a recording that recognises the economic substance of the transaction if this differs from its legal form. In some cases more than one role can apply and it is necessary to consider which role is more significant for the purpose of recording most accurately the economic reality of the transaction.
3. Some activities are undertaken by government and never by market units: government does not act only as a manager of assets seeking a financial return. It may also manage the assets in a way to support economic activity and meet social objectives. Also, the government is the only agent in a position to make massive transfers to other agents of the economy.
4. This means, that flows to and from public corporations are not always recorded in a symmetrical way. For example, an unrequited payment recorded as an 'investment grant', a non-financial transaction ('something for nothing', as stated in ESA 2010, chapter 1 General features and basic principles) might contribute to a significant improvement of the enterprise's wealth in the mid-term. If the public enterprise would then make an exceptional payment out of its own funds, this payment might be recorded as a withdrawal of equity (partial liquidation of assets).
5. National accountants consider carefully the economic context of units and transactions for classifying them. However, it is important sometimes to look through the legal form of an institutional unit or of an

economic flow to report the economic reality. This applies to both the classification of units and the classification of flows.

6.

**Examples are given below:**

a) A unit might undertake some activities that are typical of government units but the unit might not be included in government in public accounts. Such activities might be for example: making unrequited payments to other units; charging levies on particular industries; securitising poor quality loans; giving guarantees on lending; building public infrastructure, and so on. The very first question is whether the unit should be classified to general government (even if it is called a corporation or not normally considered to be part of government).

b) If the classification as a market unit is correct, the next question is whether it is necessary to impute equal and opposite payments through government (also known as rerouting) to show that some of the unit's transactions are carried out on behalf of government. This could apply for example to any unrequited payments (such as subsidies) to other units: these would be recorded as payments by government with an adjustment to other transactions between the unit and government to balance the accounts.

c) Rerouting can be appropriate in cases of indirect privatisation when the proceeds are kept by a public corporation to fund the unrequited payments to other units (see chapter 5.2 Sales of financial and non-financial assets), or to fund loss-making activities within the unit under the instructions of government as part of its economic and social policy (corporations with some non-market activity). In these cases, the payments rerouted through government are shown to be funded by payments from the public unit to government in respect of the indirect privatisation.

d) When classifying a transaction in national accounts, one is not necessarily tied by the denomination the transaction may have either in public accounts or in the book keeping of enterprises. For instance, in some specific cases, what is called a tax in the tax legislation or a dividend in corporation accounts might be more appropriately recorded in national accounts as a financial transaction.

e) On the other hand some flows having the legal denomination of equity injections may be classified, in national accounts, as capital transfers either because no economic return (such as dividends) is actually expected from the equity injection or because it is linked to the acquisition of a fixed asset (which would make it an investment grant). In this respect, an important distinction has to be made between flows channelling income from public corporations to government and other kinds of payment. The first ones undoubtedly have to be classified as non-financial transactions. The second category includes in particular large payments made out of the proceeds of sales of assets by public corporations. They have to be classified as financial transactions (see the decision tree in chapter 3.2 Capital injections into public corporations).

f) In general, the principles concerning transactions between general government and public corporations also apply to transactions between government and private corporations and between government and other governments. Some private companies might be 'too big to fail', or perform some crucial role in the economy such as owning and operating vital infrastructure and utilities, so that government is forced to continue the existence of such companies when dealing with them. In such circumstance, payments to these companies that are presented as financial (injections of capital or equity) might in economic terms be grants.

# 3.2 Capital injections into public corporations

## 3.2.1 Background

1. Analysts in the media commonly refer to 'capital injections' made by the government into a public corporation, when some significant financial support is provided to the corporation in an attempt to capitalise or recapitalise the corporation.
2. The generic expression 'capital injection' is used in the ESA 2010 and in 2008 SNA and, like in the media, it may cover many types of payment from government to a public corporation which in national accounts are classified in different categories, as capital transfers or as financial transactions. For example, the terminology covers transactions that might be described in public accounts as investment grants, capital grants, commutation grants, loans, equity injections, acquisition of share capital. Other forms of support, like debt assumption, cancellation and rescheduling, may also be considered capital injections (see chapter 7.2 Debt assumption and debt cancellation).
3. The payment from the government commonly referred to as a 'capital injection' should be recorded in the national accounts as either:
   - a financial transaction: this would be in the general case an addition to equity — or, in other cases, to loans or securities other than shares — recorded in the financial account, with no impact on the government net lending/borrowing (B.9), or,
   - a non-financial transaction: assuming that this is an unrequited payment, it would be a capital transfer, government expenditure with a negative impact on net lending/borrowing (B.9).
4. In some rare cases, it could be a combination of the two (see chapter 3.2 Capital injections into public corporations, section 3.2.2. Treatment in national accounts).
5. Capital injections are most often made in cash, but can also be made in kind. This chapter deals with injections in cash. Injections in kind are the subject of another chapter (see chapter 3.4 Capital injections in kind). Injections in kind are very specific and do not fulfil some of the characteristics of injections in cash — those recorded as financial transactions — notably a certain degree of freedom of use by the corporation of the funds injected (see also see chapter 3.2 Capital injections into public corporations, section 3.2.3 Rationale of the treatment).
6. This chapter covers only the case of a transaction, i.e. an economic flow that results from the interaction between two institutional units by mutual agreement (or an action within an institutional unit that it is useful to treat as a transaction (see ESA 2010 paragraph 1.66). Therefore, it excludes the case of corporate restructuring, involving a restructuring of assets and liabilities or reclassification of units.
7. This chapter deals with capital injections by government into public corporations (owned, even partially, and controlled by general government), including the central bank. The case of capital injections into public quasi-corporations is covered in the following chapter 3.3. It may also apply to capital injections in corporations not controlled by government but where the latter had or gets a rather significant influence after the capital injection (bigger than any other private shareholder).
8. Government carries out also capital injections in financial institutions, public or private, notably in the context of the financial crisis, in some cases for significant amounts. The basic principles for the classification of such operations are the same. However, they need specific consideration as

   the banking sector (together with the insurance sector) is subject to specific regulations (such as minimum capital adequacy), which is not the case for non-financial corporations.[145]

## 3.2.2 Treatment in national accounts

### 3.2.2.1 GENERAL PRINCIPLE

9. The principle in the general case, also referred to as 'the capital injection test', is the following:

[145] For more details, see: Eurostat Decisions from 2009 and 2013 on Eurostat's EDP/GFS dedicated web page: https://ec.europa.eu/eurostat/web/government-finance-statistics/methodology/decisions-for-gfs

- When the government, acting in the same capacity as a private shareholder, provides funds while receiving contractually something (usually financial instruments, such as shares or debt instruments) of equal value in exchange and expecting to earn a sufficient rate of return on its investment, mostly in the form of dividends and interest, and a higher value of the financial instrument which represents the government's property rights on the corporation, the capital injection is to be recorded as a financial transaction in shares and other equity (see also Box 2 in section 3.2.3 Rationale of the treatment). In national accounting terms, the financial transaction has no impact on the government net lending/borrowing (B.9).
- Often government does not manage funds to acquire profitable assets (like private shareholders do) but to pursue social or collective policy objectives for which private capital might not be available. Acting this way is a management of assets for public policy purposes. Thus, the capital injection is to be recorded as a capital transfer if the funds are provided in one of the following cases:
  - the funds are provided without receiving anything of equal value in exchange;
  - the funds are provided without expecting a sufficient rate of return on investment;
  - the funds are provided to a corporation that has shown a recent series of losses.

10. A capital injection that is recorded as a capital transfer (a non-financial transaction) has an impact on the government net lending/borrowing (B.9), i.e. increasing the deficit or reducing the surplus. A possible change of government's net worth will depend on whether the capital injection gives rise to a revaluation of the corporation's assets (the difference between the assets' valuation on a 'going concern basis' and a 'non-going concern basis'). The value of the government's equity assets will increase accordingly. Considering the specificity of government, a sufficient rate of return expected on funds invested (see also Box 2 in section 3.2.3 Rationale of the treatment) would have to be at least equal to long-term (10 years)[146] government bonds rates[147], or, in some specific cases (notably when government invests together with other investors, by the risk adjusted minimum rates of return (usually referred to as return on equity) normally requested by private investors on similar equity investments in the same sector of activity.[148]

11. Generally, the following provisions can only be implemented on a case-by-case analysis, based on the information available. As an operational guidance, the following key questions must be examined, in order to make this analysis:
    - Is government acting alone (possibly together with one or more public corporations, for a minor part) or jointly with private shareholders (as defined in ESA 2010, chapter 2 Units and groupings of units) participating in the injection?
    - Has the public corporation (and possibly, in some cases, the private corporation[149]) accumulated net losses over several years, or during the last exercise (referred to as 'one-off losses', by opposition to 'exceptional losses'), as recorded according to national accounts (e.g. net saving), according to generally accepted accounting principle, or based on other evidence, such as the negative trend of the corporation's own funds?[150]
    - Is it likely that government will receive a sufficient rate of return on its investment?

[146] In most Member States, the average maturity of long-term debt is close to 10 years.

[147] may be estimated as an average over several months when there is high volatility on markets and/or exceptional disruptions.

[148] In any case, the calculation of the rate of return must be after deduction from the corporation's revenues of transfer payments from government (see Box 2 in section 3.2.3).

[149] However, if the private investors inject equity capital strictly under the same conditions as government, this will presume that the test on return of investment is successful (see below paragraph 22).

[150] Exceptional losses are large losses recorded in only one accounting period in the business accounts of a corporation, arising from an exceptional event not 'under the responsibility' of the corporation, i.e. independent of its own business model and/or its past investment policy. These exceptional events hit a large number of corporations, whatever their own financial and economic situation, generally simultaneously in several countries (spill-over effects).

### 3.2.2.2 THERE ARE NO PRIVATE SHAREHOLDERS INVESTING

#### 3.2.2.2.1. The corporation has accumulated net losses or made exceptional one-off losses

12. When the corporation has accumulated net losses or, made 'one off' losses, as a general rule, the capital injection is treated as a non-financial transaction for its full amount.

13. Special case (partition of the transaction): when a capital injection exceeds the net amount of losses and

    a) government can provide evidence that these funds in excess will receive a sufficient rate of return (for example, they are specifically used to make further investment in already profitable operational areas of the corporation's activity, as shown by past results, or in the context of a forthcoming privatisation of the business), or

    b) there is an obvious fundamental restructuring of the corporation, in order to prevent the occurrence of new losses and to return to sustainable profitability after the complete implementation of the new business plan, and evidence that government should benefit from a sufficient return on its new investment. There should be a large consensus that the restructuring will be efficient. This would not be the case if the return on the new investment is still uncertain (the restructuring plan is largely considered insufficient as regards the main sources of losses and/or the restoring of profitability depends substantially on factors not under the control of the corporation), such that it would take time to offset the accumulated losses.

14. In this special case, the capital injection is treated as a non-financial transaction up to the limit of the losses and as a financial transaction beyond this amount.

15. For this special case, an operational guidance might be the rating — or change in rating — of the debt (notably long-term debt), the significance of management re-organisation, the shift to new activities, the competitiveness on the market etc.

#### 3.2.2.2.2. The corporation has not accumulated net losses

16. Normally, this means that, on a regular basis, the corporation makes profits, either distributed or reinvested.

17. Where government is acting similarly to a private shareholder, meaning that, when it provides funds, it receives in exchange financial assets and expects a sufficient rate of return on its investment (in the form of dividends and higher value of the financial instrument representing the government's property rights in the corporation),

18. The capital injection is recorded as a financial transaction in shares and other equity for its full amount.

19. Where the capital injection is undertaken for specific purposes relating to public policy or in the context of a fundamental change in the conditions in which the activities are carried out and which are imposed by government, the consequence on future profitability of the new government investment must be carefully checked. In such cases:

    - If an expected sufficient rate of return were still very likely, the capital injection would be treated as a financial transaction for its full amount.
    - If a sufficient rate of return were unlikely, the capital injection would be treated as a non-financial transaction for its full amount.

20. Some public corporations may be subject to statutory provisions so that their revenue can equal but not exceed their total costs (this could be the case of market NPIs, classified in the non-financial corporations sector, for instance). By definition, these cannot provide a market return, and government, when investing in such units, is not acting in the same way as a private shareholder. These should be assimilated to cases of capital injections made for public policy purposes.

### 3.2.2.3 THERE ARE PRIVATE SHAREHOLDERS INVESTING

#### 3.2.2.3.1. Private shareholders participating in the capital injection in unquoted shares

21. Private shareholders may already hold equity in the corporation. This case covers also the initial introduction of private shareholders in the event of the current injection, for instance under a process of restructuring.

22. Where the private investors:

    a) take a significant share in equity during the injection, in proportion to their existing shareholding (where appropriate), at the same time as the capital injection by government,

    b) exercise the usual influence of minority shareholders according to rights provided by current corporate law,

    c) bear risks and rewards similar to government, as regards their rights on the net assets, in the event of liquidation (ESA 2010 paragraph 5.148), for instance,

    the capital injection is treated as a financial transaction for its full amount.

23. Where the private investors do not fulfil one of the conditions mentioned above, the capital injection should be treated according to rules specified for the cases where there are no private shareholders.

#### 3.2.2.3.2. Private shareholders participating in the capital injection in quoted shares

24. Where, in exchange for its payment to the corporation, the government acquires quoted shares, which it could immediately sell for the price paid, then the transaction is a financial transaction in shares and other equity (F.511).[151]

#### 3.2.2.3.3. Special case: It is a new corporation, or new activity/assets are considered

25. The treatment will depend on the specific examination based on the various indicators as usually used in investment analysis. The presence of private investors would also be a key indicator. In any case, it should be certain that government does not intend to use the new unit only for public policy purposes.

26. As a result:

    - Either, the conditions support the conclusion that, after a 'normal' temporary period of losses (as also often observed for similar private investments), the corporation would be structurally profitable, so to earn an overall adequate rate of return, the capital injection by government is treated as a financial transaction for its full amount.
    - Or, on the basis of various factors (an uncertain economic environment, the nature of the activity and of the sector, the non-compensation of some costs imposed by government, the consensus opinion of independent experts in different areas like accounting, economics and financial analysis, etc.) there are doubts on the long-term profitability of the project, the capital injection is treated as a non-financial transaction for its full amount.

27. If the return on a capital injection turns out to be very different from the return originally expected (e.g. profits or other gains are made instead of planned losses; or conversely losses are made instead of expected profits), the accounting of the capital injection is not revised due to new information or subsequent events, unless the initial plan was misleading and misrepresenting the economic reality (see Box 2 in section 3.2.3). No revenue or expenditure is recorded to account for these differences in expectations: instead these differences between realisations and expectations are reflected in the revaluation accounts.

28. In particular, returns of money to government by an entity that benefited from a capital injection in previous years that was recorded as a capital transfer expenditure of government, is not necessarily recorded as government revenue. Instead, the proceeds collected by government are subject to the super-dividend test to determine if these are government revenue or withdrawal of equity.

[151] In other words, government should not acquire the shares above their market price (possibly estimated as an average of a period no longer than 3 months). For unquoted shares, the reference should be a fair value, estimated according to usual business valuation methods.

## Box 1 – Recording transactions: straightforward cases and difficult areas

In practice, compilers are confronted either with straightforward cases that lead to clear statistical treatments, or with borderline cases that require further inquiries and applying various tests.

### Straightforward cases

**a) Investment grant: D.92**

A capital injection that would consist of a capital transfer in cash or in kind made by government (…) to another resident (…) institutional unit to finance all or part of the costs of its acquiring of fixed assets is to be recorded as an investment grant (D.92). ESA 2010 paragraph 4.152

**b) Past losses: D.99**

A capital injection made to cover accumulated losses is recorded as other capital transfer (D.99) (ESA 2010 paragraph 4.165 (b)

**c) Acquisition of quoted shares: F.5**

A capital injection that results in government acquiring quoted shares of equal value is recorded as a transaction in shares and other equity (F.5).

**d) Loans and bonds: F.3 and F.4**

- Loans: a provision of funds in the form of a loan evidenced by a legal document specifying the borrower's obligations (redemption date of principal and interest to be paid) is recorded as a transaction in F.4.
- Bonds: a provision of funds by the government purchasing bonds issued by the corporation (again to be evidenced by legal document) is recorded as a transaction in F.3.

**e) Debt cancellation/assumption**

Debt cancellation or debt assumption gives rise to a capital transfer, or a unit being privatised within the limit of the amount of privatisation proceeds (ESA 2010 paragraph 20.227).

**f) Privatisation: F.5**

A capital injection that is made as part of a privatisation process within a short-term perspective (less than one year), such that government expects to get its money back, are recorded in F.5 within the limit of the amount of the privatisation proceeds (consistently with the rationale of ESA 2010 paragraph 20.227 in the case of debt cancellation/assumption, see also item e) above).

### Borderline cases

In the following difficult areas, two guidelines are very useful:

- A pattern of repetitive payments would be an indication and presumption of unrequited transfers, and therefore lead to record a capital transfer;
- The qualification by the European Commission of government payments as 'state aids' should be taken into consideration for the statistical treatment as an analytical indicator. The flows deemed to be state aids have to be recorded as capital transfers.

**a) Expected future losses/repetitive losses: D.9**

A capital injection made to cover expected future losses, perhaps so that the corporation can reduce its borrowing costs, should be recorded as a capital transfer (D.9), even if shares (or equivalent) are issued. In this context, it is likely that the corporation will not be profitable for a long time, because of the specific conditions of its activities. If shares are issued, it can be assumed that they have no value.

**b) An expected profitable investment: F.5**

A capital injection given to a public corporation with the objective of increasing the government's future dividends should be recorded in F.5. This would be when the corporation is free to use the

funds to maximise profits and the government expects a market return on its investment, i.e. a return similar to that, which could be obtained, from the acquisition of shares quoted on the market.

**c) Partnership with private sector partner: F.5**

If, acting jointly with a private partner, the government makes a capital injection into a unit such that the property rights, including rights to property income, are modified in proportion to the value of the injection, it indicates that the investment is expected to be profitable and should be recorded in F.5.

Where such proportionality does not exist (ownership rights do not change in the same proportion), it could be an indication that the government is serving public policy purposes and is making an unrequited transfer. If this is the case, the injection must be recorded as a capital transfer.

**d) Body manages financial assets on behalf of government: F.5**

A capital injection to a public holding company/head office or a financial corporation, managing assets in a profitable way on behalf of government, in order to acquire more financial assets, could be recorded as a transaction in F.5. The condition here would be that the assets are managed to maximise the return for government, and that higher dividends are expected.

**e) Loans granted in certain contexts**

In certain contexts (e.g. financial defeasance, business rescuing, export insurance), the characteristics of loans provided by government — and the contractual obligations — should be examined closely to check the relevance of the classification in loans (F.4). In the special case where the public corporation receiving the loan would be in financial distress and not in a position to repay the loan, the provision of funds should be recorded as a capital transfer (D.99). If the public corporation (and possibly, in some cases, the private corporation) would be in a position to repay most of the loan, but not all, this could be a case to partition the loan into F.4 and other capital transfers (D.99) (see ESA 2010 paragraphs 1.72 and 1.76–1.77).

## 3.2.3 Rationale of the treatment

### 3.2.3.1 THREE COMMON WAYS OF PROVIDING FUNDS TO A PUBLIC CORPORATION

29. Government may increase a public corporation's holdings of financial assets (generally cash) at a given point in time, usually in three ways: a) providing a grant, b) providing equity capital, c) providing loan capital. It matters in national accounts to clearly distinguish them as they result in different treatments, according to the classification of transactions and assets provided by ESA 2010:

    a) **Providing a grant (i.e. a gift)**: in national accounts terms, this is a capital transfer. It has the effect of changing the net lending/borrowing (B.9), and of changing the net worth due to saving and capital transfers (B.10.1) and therefore the own funds of the corporation. An important feature of such capital transfers is that they are transactions which are usually undertaken only by governments. The beneficiaries of these transfers are usually enterprises that do not operate in competitive markets. Acting this way, the government expects no return on its investment in the form of dividends (most of the time the enterprise receiving such transfers does not pay dividends) or in the form of other proceeds notably realised in the context of a privatisation. Government is acting for public policy purposes, and only expects some general economic or social results from the use of the funds.

    b) **Providing equity capital**: this is a financial transaction in shares and other equity. There is no change in the net lending/borrowing (B.9) and no change in the net worth (but there is a change in own funds due to the increase in equity capital). Usually, corporations raising equity capital are competing on markets and need to strengthen their financial position, by increasing their own funds, in order to plan investments etc. In providing equity capital to the corporation, the government acts similarly to a private shareholder, with the strong expectation of a sufficient return on investment. In this regard, the actual payments of dividends to the shareholder and/or the positive trend in the value of the shares are decisive criteria for treating the injection as an increase in equity. In addition, as shown in the decision tree (see end of this chapter), the participation of private shareholders in the business is also a strong indicator for the recording as equity capital, especially if the shares are quoted on the stock exchange. However, the private investors' share of equity in the corporation should not be diluted by the government's new shares acquisition (which would reduce their

participation to a level where they could not exercise influence). They must also bear similar risks and rewards to those borne by government notably as regards their rights on the net assets of the corporation in case of liquidation (case of issuance of shares with specific features).

c) **Providing loan capital (or possibly acquiring corporation's bonds)**: this is generally a financial transaction. In this case, there is no change to the net lending/borrowing (B.9), no change to the net worth (B.90) and no change to the own funds of either government or the corporation. As a lender, government is expecting that the public corporation, as a borrower, will be in a position to repay the loans, according to a schedule agreed at inception.

## Box 2 – A sufficient rate of return

In order to test whether government acts similarly to a private investor/shareholder, so that the capital injection can be treated as an increase in equity (F.5), the expected return on investment (usually also referred to as return on equity (RoE)) is a crucial indicator. Such a return, in the form of dividends or holding gains, provides evidence that the legal financial instrument (e.g. the shares) given to its owners in exchange for the funds injected is a source of future economic benefits (meeting thus the basic definition of an asset in ESA 2010) and has a market value.

Such an expected ‘adequate rate of return‘ or ‘market rate of return’ may be referred to, in government finance statistics, as a ‘sufficient rate of return’ (see sub-section 3.2.2.1).

Government has a very specific function in the economy. It is in charge of collective concerns and of dealing with externalities so to ensure, in the long run, the prosperity and well-being of the community (public health and education, public order and safety, public infrastructure, environment, …) and therefore acts primarily as a non-market producer. Funds invested in this context are provided for public policy purposes, without any expectation of a direct financial return: in national accounts, these invested funds are to be recorded as capital transfers (D.9).

However, government also interacts directly in the economy like other investors and shareholders, i.e. through public corporations, with the aim to make them as efficient and profitable as possible, in such a way that they can also be a source of revenue or other gains.

Capital invested by government always has an opportunity cost. Therefore, when government is investing with expectations of a return on investment, it would be appropriate to expect a similar return as for comparable investments by private actors, under ideal circumstances. This calls for using market rates of return as benchmarks. However, there could be reasons for government to target different required expected returns on investment. Capital markets may not function perfectly, and therefore market rates of return may not reflect the correct opportunity cost. Moreover, governments often invest in areas — or at an industrial stage — where no private actors operate, therefore making difficult benchmarking on private sector returns.

To define the appropriate minimum return required on an investment, there are several standard methods known in the theory of finance. These methods often use an opportunity cost approach, which takes into account the rates applicable to alternative investments or to the cost of financing (i.e. other opportunities). These methods investigate both the asset side (investment) and the liabilities side (financing) of the company in order to estimate the expected rate of return on the investment. One commonly used method is the Capital Asset Pricing Model (CAPM), which might be appropriate in some cases. This approaches the return from the asset side and implies estimating a risk-adjusted rate of return. This involves calculating a required minimum expected rate of return on an investment as a function of the risk, where the return can be calculated by an equation with the risk-free interest rate, the average market return, and an indicator expressing the risk pertaining to the asset class in question being present.

In practice, the observable return in the past — when there is no indication of a change in future — may be used for determining an expectation of sufficient rate of return, notably in the absence of business plan analysis.

Taking into account the specificities of governments as an investor, the ‘sufficient rate of return’ is used as a proxy for the expected market return as a fundamental benchmark for establishing the appropriate expectations of returns on government investments.

Therefore, considering the specificity of government, a 'sufficient rate of return' expected on funds invested would have to be equal at least to:

- when government is the only investor in the corporations, as a general rule, long-term (10 years)[152] government bonds rates, which means that government is not expected to receive a return inferior to its cost of borrowing;
- when government is investing together with private investors (whatever their share), risk adjusted rates of return normally required, in average and over a sufficient period of time, by private investors on similar equity investments in the same sector of activity; in practice the return on equity currently observed in average in the sector (branch) of the corporation (of comparable size) could be used as a proxy, if available.[153]

The rates being compared should be on the same basis, real or nominal.

Transfer payments by government or supranational authorities made to producers to cover losses, in the form of subsidies, other current transfers or capital transfer (rather than by outright purchases of products), should be excluded from the measure of the return on investment (i.e. these have to be taken into account, as negative discounted cash flows). These payments, together with all other payments to cover an overall deficit, should not be included in the measure of the capital invested. Some payments however, such as payments granted to any producer in this type of activity (where it is observed that there are both public and private recipients), including all payments linked to the volume or value of output, may be retained in the calculation of the rate of return.

Case where a business plan has been used: the initial classification of the injection transaction should not be revised due to later economic events changing the original outlook. However, evidence that the original business plan was incorrect or misinterpreted, observable from subsequently published annual accounts, updated business plans or audit office reports, should lead to a re-assessment of the original statistical classification and a subsequent data revision.

### 3.2.3.2 CHARACTERISTICS OF FINANCIAL AND NON-FINANCIAL TRANSACTIONS INVOLVED

#### 3.2.3.2.1. Recording a financial transaction in equity

30. A capital injection should be recorded as a financial transaction only when the government receives in exchange a financial asset of equal value to the payment. This is a fundamental characteristic of financial transaction. A holding gain on shares and other equity, possibly recorded after the capital injection, is not a 'financial asset received in exchange' (but another flow).

31. In the majority of cases, the financial instrument involved is shares and other equity (AF.5). A transaction in equity in this context is the action of 'placing funds at the disposal of a corporation' (ESA 2010 paragraph 4.53), increasing the equity capital. This is to be recorded in national accounts as a financial transaction, in shares and other equity (F.5). In accordance with ESA 2010 paragraph 4.53 and ESA 2010 paragraph 5.142, this transaction increases the property rights of shareholders of the corporation. The investment is made predominantly under market conditions and not only for public policy purposes.

32. In particular, it should be emphasised that, in providing equity capital to the corporation, the government acts as a shareholder under market conditions, normally with the expectation to receive dividends in return. The actual payment of dividends to the shareholder is an important criterion for treating the injection as equity.

33. Additionally, a capital injection that is made as part of a privatisation process within a short-term perspective (less than one year), such that government expects to get its money back, is to be recorded in F.5, within the limit of the amount of privatisation proceeds (consistently with ESA 2010 paragraph 20.201). This case, as well as others described in this chapter, should be considered to be exceptions to the rule that implies that recording a flow in the national accounts increasing the shares and other equity (F.5) of a quoted corporation should normally be related to actual issuance of new shares.

[152] In cases (notably in the context of government support to banks) where a resale of equity is foreseen in a small number of years, a 4-6 government bond benchmark reference could be used.

[153] As an example, for commercial banks, RoE should at least reach 10 %. It should be lower in industrial sector.

34. Two cases must be distinguished:

- Case of quoted shares: A capital injection that results in government acquiring quoted shares of equal value is a straightforward case. It has generally to be recorded as an acquisition of equity (F.5). The fact that the shares are quoted means that the shares may be traded on the market by private investors (as defined in ESA 2010, chapter 2 Units and groupings of units) and therefore that the corporation is respecting some minimum market requirements in the long run.
- Case of unquoted equity: Where the capital injection is given to an unlisted public corporation, the capital injection should be recorded in F.5 only if government has the objective of increasing its wealth, under the form of dividends or a higher value of the financial instrument received in counterpart (or at least equal to the amount injected, under an on-going process of privatisation, to be achieved in a short-term perspective).

35. Normally, a condition is that the public corporation has not accumulated net losses as recorded according to generally accepted accounting standards in its balance sheet or with evidence, for instance, being given by a negative trend in own funds. However, even in such cases, any part of the capital injection (in excess of the accumulated losses) used for investment in profitable areas of activities on which government will earn an adequate return on its investment may be recorded as financial transaction (typically in F.5).

36. A capital injection may also be recorded as a financial transaction in two specific cases:

- New corporations or quasi-corporations ('start-ups'): If government sets up a new market unit that is not the result of a restructuring of existing corporations, the treatment depends on a close examination of the project, using various indicators similar to investment analysis and taking account of other aspects relating to the transaction. As a result, the transaction may be treated as a financial transaction or as a non-financial one, according to the analysis, for its full amount. This applies also where an existing corporation is starting a completely new activity or is acquiring new kinds of assets for large amounts.
- Bodies managing financial assets on behalf of government: a capital injection into a public holding company/head office or a financial corporation managing assets in a profitable way on behalf of government, in order to acquire more financial assets, could be recorded as a transaction in F.5. The condition here would be that the assets are managed to maximise the return for government, and that higher dividends or higher equity value are expected.

#### 3.2.3.2.2. Special cases — transactions in other financial instruments

37. Not every provision of funds recorded as a financial transaction takes the form of acquisition of equity (F.5): other possibilities are the making of a loan (F.4) or the purchase of bonds (F.3).

38. Loans: a provision of funds in the form of a loan with evidence in a legal document specifying the borrower's obligations (redemption date of principal and interest to be paid) should generally be recorded as a transaction in F.4.

39. One exception is where government grants a loan to a loss-making public corporation, where it is very likely that the corporation would not be in a position to repay most of the loan because of recurrent losses (and, thus, not because of exceptional losses occurring in the year the loan is granted) and because there is no expectation of restoring profitability before the maturity date(s). In this case, the funds transferred to the corporation by government should be recorded as a non-financial transaction for their full amount, unless a reliable estimate of the losses would be available, allowing a partition of the loan. If it would be expected that the debtor would reimburse by itself[(154)] most of the loan, this would be a case for partitioning the loan, the part corresponding to the expected losses being recorded as a capital transfer at the time the loan is made. The stock of loans to be entered in the balance sheet should be increased by the value of the recorded loan transaction. Any subsequent recognition by government of loans or parts of the loans which would not be re-paid should be treated in accordance with the guidance in chapter 7.2 Debt assumption and debt cancellation.

40. Thus, in certain specific contexts (financial defeasance, business rescue, export insurance, etc.), the characteristics of loans provided by government (the contractual obligations) should be examined closely to check whether it is correct to classify them in F.4.

[(154)] This means mainly from sales, including subsidies on products (with the exception of subsidies described in ESA 2010 paragraph 4.35 (c), other subsidies, property income.

41. Debt instruments: a provision of funds when the government purchases bonds or notes or hybrid instruments[155] issued by the corporation (evidence also to be given by some legal document) should be recorded as a transaction in debt securities (F.3).

42. However, where the corporation has accumulated significant losses and the bonds are purchased almost exclusively by government, the acquisition by government should be considered a non-financial transaction.

43. In addition, the case of a bond issuance by a corporation with a record of debt service default, such that the purchase of bonds by private investors could be achieved only with a full guarantee from government (with investors' opinion as evidence) should be closely examined. Recording as a transaction in debt securities (F.3) requires that, at the time of the transaction, the corporation is in all likelihood in a position to meet its obligations relating to the debt service (interest and principal) according to the contractual schedule of payments.

#### 3.2.3.2.3. Recording a non-financial transaction

44. Excluding the cases of subsidies (D.3), see ESA 2010 paragraph 4.30 and following, and of other current transfers (D.75), see in particular ESA 2010 paragraph 4.138 (b), the non-financial transaction relevant for capital injections is a capital transfer.

45. The case of capital injections in kind (such as transfers of fixed assets) is dealt with in chapter 3.4 of this Manual, and only capital transfers in cash are considered here.

46. A capital injection should be treated as a non-financial transaction where the provision of funds is an unrequited transaction. The government does not receive in exchange a financial asset of an equal value, and any possible effect on the government's equity is indirect, sometimes not immediate,

    uncertain and of a different size. This sort of payment is recorded as a capital transfer (D.9), either as investment grant (D.92) or as other capital transfer (D.99).

47. An important feature of capital transfers is that, in general, they are typically government transactions, made for public policy purposes. Acting this way, the government expects nothing in return in terms of dividends (most of the time the enterprise receiving such transfers does not pay dividends), nothing else than an improvement of the corporation's wealth and the meeting of some social needs (public infrastructures, employment, etc.).

    a) Investment grants (D.92):

       A capital injection that would consist of a capital transfer in cash or in kind made by government (…) to another resident (…) institutional unit to finance all or part of the costs of its acquiring of fixed assets is to be recorded as an investment grant (D.92).

    b) Other capital transfers (D.99) for accumulated losses:

       A capital injection made to cover accumulated losses (either on a repetitive pattern during several recent fiscal years, or irregularly but with profits not compensating losses), as recorded according to generally accepted accounting principles and, for instance, with evidence given by the trend of the corporation's own funds, is normally treated as a non-financial transaction for its full amount (as a capital transfer D.99), even if some pieces of paper (called 'shares' or equivalent) are issued.

48. Similarly, capital injections made to compensate owners of capital goods destroyed by acts of war, other political events or natural disasters are also to be recorded as capital transfers (D.99).

[155] This refers notably to some 'preferred shares', convertible bonds (including contingent convertible, usually referred to as 'Cocos'), subordinated loans or bonds. In any case, in national accounts, a debt instrument is recognised as such (classified as AF.3 or AF.4) only if it bears an unconditional remuneration for the holder, i.e. due independently of any distributable profit (treated as interest to be recorded on accrual basis). Otherwise, this is considered an equity instrument subject to the rules developed in this chapter. There may be special clauses related to the accumulation of returns, such as carrying over non-paid interest. An instrument could be recorded as debt only if such carry over does not exceed the following exercise. Any longer period, or even total uncertainty, would result in treating the instrument as equity.

## Box 3 – ESA Concepts

- **Own funds and equity capital**

ESA 2010 paragraph 7.07 defines the own funds in the following way: *Own funds are the sum of net worth (B.90) plus the value of equity and investment fund shares (AF.5) as liabilities in the balance sheet*.

'Corporations raise equity capital to strengthen their financial position on the market, by increasing their own funds. Expressed through the issuance of shares, the equity capital is therefore part of the own funds'.

The immediate result of providing equity capital and increasing the own funds is that the corporation is in a better position to finance investment or refund existing debt, borrow additional debt if necessary (creditors are reassured by the financial solvency of the corporation), and finally to make and distribute profits. Shares and other equity (AF.5) in the balance sheet of a corporate enterprise are to be recorded — like most assets and liabilities in the national accounts — at market value (ESA 2010 paragraphs 7.34, 7.25 and 7.71).

- **Dividends (D.421)**

'Dividends (D.421) are a form of property income received by owners of shares (AF.5) to which they become entitled as a result of placing funds at the disposal of corporations. Raising equity capital through the issue of shares is an alternative way of raising funds by borrowing. In contrast to loan capital, however, equity capital does not give rise to a liability that is fixed in monetary terms and it does not entitle the holders of shares of a corporation to a fixed or predetermined income' (ESA 2010 paragraph 4.53).

- **Shares and other equity (F.5)**

The category shares and other equity (F.5) consists of all transactions in shares and other equity (AF.5) that are financial assets which represent property rights on corporations or quasi-corporations. These financial assets generally entitle the holders to a share in the profits of the corporations or quasi-corporations and to a share in their net assets in the event of liquidation (ESA 2010 paragraph 5.142). The transactions in shares and other equity — for instance, a capital injection providing equity capital to a corporation have thus a strong legal basis, these financial assets representing the property rights on the corporation.

A transaction in equity has usually three characteristics:

- funds are placed at the disposal of a corporation, which has a large degree of freedom in the way it can use them;
- shareholders are entitled to receive a return on their investment;
- new shares are issued (for an amount equal or related to the funds placed) in the case of corporations having the legal status of incorporated enterprises.

As a result, in national accounts, shares and other equity must be valued at a market value that reflects the expectations of return, in both the national accounts balance sheet of the holder and the issuer, whereas in the own balance sheet of the issuer they are usually accounted for at historic value (or book value). Where shares are listed on a market, their value is the observed price. Where equity does not consist of shares, or consists of shares that are not tradable on a market — as it is frequently the case for a public corporation — a proxy market value must be implemented in national accounts (see ESA 2010 paragraph 7.73 and following).

- **Capital transfers (D.9)**

The notion of capital transfer is defined in in ESA 2010, chapter 4 Distributive transactions. A capital transfer imparts a voluntary transfer of wealth between two units ('something for nothing'). Capital transfers have three main characteristics (see 2008 SNA 8.10):

- they are transactions, made by mutual agreement between two units (unlike other changes of assets);

- there is no counterpart being received in exchange;
- they involve a commensurate change in ownership of assets (or cancellation of liabilities by a creditor) between the two parties, or acquisition or disposal of assets).

The first two characteristics are common to all transfers (current and capital transfers). In addition, all transfers may be made in cash, or in kind.

Another characteristic of capital transfers is that they tend to be large and infrequent. Two types of capital transfer are then distinguished (ESA 2010 paragraph 4.146):

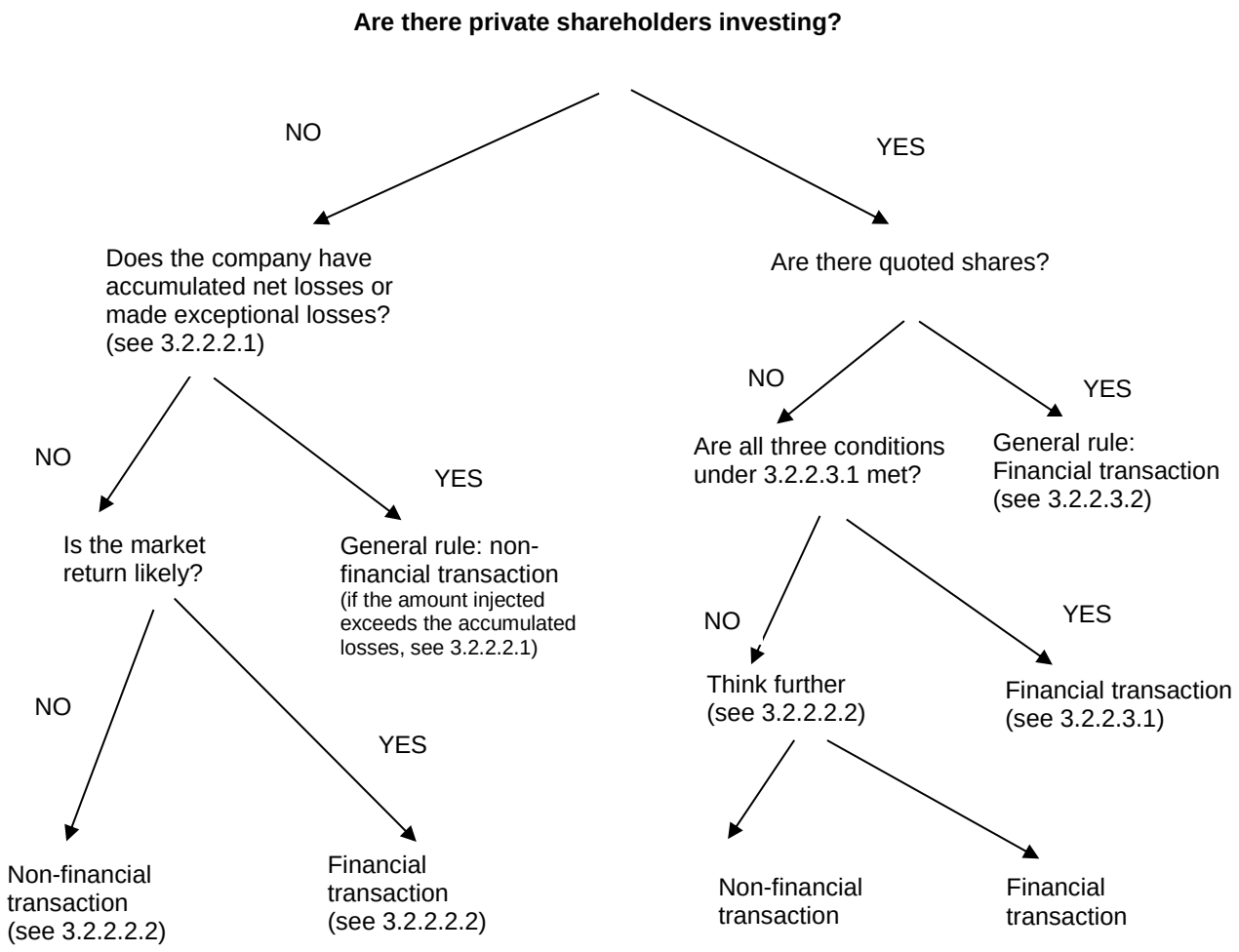
- Capital transfers in cash: these consist of transfers in cash involving changes in ownership of assets. The recipient is often obliged to use the cash to acquire assets as a condition of the transfer (e.g. investment grant), see ESA 2010 paragraph 4.146.
- Capital transfers in kind: cases of transfers of ownership of assets other than cash or of cancellation or assumption of debt without counterpart.

Capital transfers are generally government transactions: public policy purposes may lead government to make transfers without counterpart to corporations. A presumed effect of a capital transfer on the value of the equity (through the reaction of the market, for example) is not a sufficient reason for regarding the transaction as a financial one: again, the effect is not certain, as well as its size.

Therefore, unlike financial transactions, capital transfers are the counterpart flow of those ‘one-way’ changes in assets or liabilities, which means that the recipient is made wealthier, when the other party is made poorer. This is expressed by an increase in net worth in the balance sheet of the first party, and a decrease in net worth in that of the other party.

**Decision tree for capital injections**

**(other than investment grants D.92)**



# 3.3 Capital injections into public quasi-corporations

## 3.3.1 Background

1. One of the cornerstones of the national accounts is the concept of institutional units, and the grouping of those into institutional sectors. Since the aim of the system is to describe how economic agents interact in order to underpin economic analyses, the main qualifier for being recognised as institutional units lays in their capacity of exercising autonomous economic decision making in their principal function, rather than other considerations such as their legal status.

2. The concept of public quasi-corporations is intended to separate public entities from their government owners because they are engaged in market activities in such a way that they fulfil the criteria of being a market producer, deemed to have autonomy of decision. Even though they have no legal status, they are sufficiently independent and they behave differently from their owners and similarly to corporations. In particular, they can be the owner of assets, take economic decisions, and enter into contracts and incur liabilities (ESA 2010 paragraph 2.12). Public quasi-corporations must keep a complete set of accounts or it would be possible and meaningful, from both an economic and legal viewpoint, to compile a complete set of accounts if they were required; otherwise, it would not be feasible from an accounting point of view to distinguish them from their owners (ESA 2010 paragraph 2.13 (f)). In order to be said to keep a complete set of accounts, a unit must keep accounting records covering all its economic and financial transactions carried out during the accounting period, as well as a balance sheet of assets and liabilities.

3. Since public quasi-corporations are recognised in national accounts as institutional units and as market producers (i.e. charging economically significant prices), they should be treated as any other corporation as prescribed by ESA 2010 paragraph 20.193. The aim of this chapter is to give a short but comprehensive guidance on when government injections or other transfers to its quasi-corporations should be recorded as financial or non-financial transactions.

## 3.3.2 Treatment in national accounts

4. The recording of government transfers to public quasi-corporations in national accounts should in general follow the same rules as for other public corporations (see chapter 3.2 Capital injections into public corporations), unless there are, in ESA 2010, explicit prescriptions for the contrary. The capital injection test, as defined in section 3.2.2 of this Manual, should be applied based on whether the quasi-corporations make losses or profits.

5. The following operational guidance applies:

   a) when a public quasi-corporation is making profits and expecting to make sufficient profits in future, government transfers of a capital nature, such as for the purpose of acquiring assets or reducing liabilities, should be recorded as financial transactions, in other equity (F.519) (ESA 2010 paragraph 5.154 (f)), otherwise a capital transfer should be recorded;

   b) when a public quasi-corporation is running a persistent operating deficit, as a matter of deliberate government or European economic and social policy such that it would charge an insufficient price to final users, regular government transfers should be recorded as other subsidies on products (D.319), (ESA 2010 paragraph 4.35 (c) and ESA 2010 paragraph 4.61);

   c) when a public quasi-corporation receives transfers from government to cover accumulated losses or exceptional losses beyond the control of the entity, these should be recorded as other capital transfers (D.99) (ESA 2010 paragraph 4.165 (b)). However, any part of a capital injection in excess of accumulated losses, may be recorded as a financial transaction (F.519) when appropriately documented. Payments intended to cover future losses are also treated as other capital transfers (D.99);

d) when the government owner cancels financial claims against, or assumes liabilities from a public quasi-corporation, this should lead to the recording of financial transactions, in other equity (F.519) (ESA 2010 paragraph 4.165 (f)) unless the operation is intended to cover accumulated losses or an exceptionally large loss, not covered by the case mentioned under c) above, by recording other capital transfers (D.99) (ESA 2010 paragraph 5.37). In case of expected future losses, these are also treated as other capital transfers (D.99) (ESA 2010 paragraph 4.165 (b)).;

e) when government makes transfers to public quasi-corporations in order to finance all or part of the costs of their acquiring fixed assets, they should be recorded as investment grant (D.92) (ESA 2010 paragraphs 4.157 and 20.42). In this case, the provision of funds must be clearly dedicated to the financing of the acquisition or of major improvements of a given fixed asset and not as a 'general', undetermined, allocation of funds to the quasi-corporation.

6. Under these conditions, government inflows, in cash or in kind, into non-profitable public quasi-corporations should be recorded as non-financial transactions (ESA 2010 paragraph 4.165 (b) prevails over paragraph 4.165 (f) in such cases), as indicated by ESA 2010 paragraph 5.37. Government inflows in excess of losses, accumulated or expected, may be recorded as financial transactions.

## 3.3.3 Rationale of the treatment

7. The concept of public quasi-corporations is introduced into the system of national accounts because their behaviour is deemed different from the one of their government owners and similar to corporations; they are therefore recognised as institutional units and market producers. Thus, in national accounts one aims at reflecting the economic nature of the transactions between quasi-corporations and their government owners. Due to their similar behaviour, it is appropriate to bring the treatment of public quasi-corporations as close as possible to the treatment of other public corporations.

8. In order for a public quasi-corporation to be recognised in national accounts, government must allow the management of the entity considerable discretion with respect to the management of the production process and the use of own funds as defined in ESA 2010 paragraph 7.07; for the decision making autonomy criteria to be fulfilled (ESA 2010 paragraph 2.12). Public quasi-corporations must be able to maintain their own working balances and business credit and be able to finance some or all of their capital formation out of their own savings, reserves or borrowing. The ability to distinguish flows of income and capital between quasi-corporations and government implies that their operating and financing activities, in practice, should be fully distinguished in finance statistics from government revenue, despite the fact that they are not separate legal entities. The net operating surplus of a public quasi-corporation is not a component of government revenue, and the accounts for government record only the flows of income and capital between the quasi-corporation and government. If the entities cannot be separated in these respects from their government owners, the entities cannot be treated as quasi-corporations.

9. The zero net worth convention for quasi-corporations (i.e. that the value of owner's equity is assumed to be equal to net assets of the quasi-corporation in ESA 2010 paragraph 7.09) has sometimes been emphasised as a conceptual rationale for determining the recording of transactions between governments and their quasi-corporations (as transactions in equity). However, the fact that quasi-corporations' net worth is zero in practice does not by itself justify treating transactions as financial rather than non-financial. This is because capital injections are generally net worth neutral for beneficiaries, as the valuation of their equity liability generally increases by the amount received (ESA 2010 paragraph 20.200). For example, the equity of unquoted public corporations may routinely be valued as the net assets, but this would not preclude applying the capital injection test. In these cases, recording capital injections as non-financial transactions entails an entry in the revaluation account. The recording of transactions between governments and their quasi-corporations should reflect the economic nature of the transaction, irrespective of the valuation method used for equity.

10. When government payments to public corporations and public quasi-corporations are intended to cover losses, accumulated or foreseeable, these should be treated as capital transfers in accordance to ESA 2010 paragraph 4.165 (b) as further elaborated in chapter 3.2 Capital injections in public corporations. When regular government transfers are conducted in favour of public quasi-corporations running persistent operating deficits, subsidies should be recorded as other subsidies on products (D.319) in accordance to ESA 2010 paragraphs 4.61 and 4.35 (c).

11. When governments conduct debt cancellations or debt assumptions benefiting their quasi-corporations, the transactions are by convention recorded as financial transactions, by exception to the general recording applicable to corporations (capital transfer), according to ESA 2010 paragraph 4.165 (f), unless this is to cover losses, in which case ESA 2010 paragraph 4.165 (b) prevails, as indicated in ESA 2010 paragraph 5.37. ESA 2010 paragraph 4.165 (b) is applicable to debt cancellations/assumptions as well as to cash transfers because the means to recapitalise entities, in cash or in the form of other financial assets/liabilities, should generally not change the accounting recording of the transaction in question.

12. When government provides funds to a quasi-corporation in order to acquire fixed assets, these are recorded as investment grants (D.92), according to ESA 2010 paragraph 4.157, which does not make a difference between corporations and public corporations. This is also explicitly stated in ESA 2010 paragraph 20.42, which reads: *In particular, investment grants are recorded as capital transfers*. This classification is independent of the financial situation of the quasi-corporation, profitable or loss making, but is based on the objective of the payment. An investment grant is the transfer of cash (in some rather exceptional cases in kind under the form of an existing asset), in order to acquire a fixed asset (purchase or produce own-account capital formation), or to undertake a major improvement in it. The type of asset is defined by the grantor and, generally, the beneficiary must comply with precise requirements (main features of the asset, its use, time of realisation, etc.); otherwise, it may be obliged to return the funds. It does not matter whether this transfer is undertaken by the unit owning the quasi-corporation (from which it has been separated in national accounts, although without independent legal status) or by another government unit, for instance in the context of specific investment programmes set up by this unit (as an illustrative case: local quasi-corporation and central government). Such transfer may be granted directly by a government or through development or promotional banks on behalf of government (rerouted). Moreover, it does not matter whether the investment grant takes place in the context of a general scheme, covering public or private entities, or if it is designed specifically for public entities engaged in activities government intends to support/develop.

13. In this context, an investment grant is quite different from the allocation of funds by the owner of the quasi-corporation without any precise reference to a given type of asset. The quasi-corporation may use the funds under various forms (for instance for acquiring shares) and may define itself the investment programme (for instance, in the case of quasi-corporation engaged in construction of social housing). In this case, the recording in national accounts follows the normal rule, based on the profitable or not position (under an anticipation approach) of the quasi-corporation (equity AF.519 or capital transfer D.99). It may happen that not all the information related to the provision of funds is available for statisticians. In this case, it is recommended that, if the quasi-corporation usually shows capital formation and not almost exclusively the delivery of services, to record the provisions of funds as investment grant (D.92).

## 3.3.4 Accounting examples

**Example 1**

A government carries out an injection in cash of 100 into a quasi-corporation in order to finance a fixed asset.[156]

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 200 | | |
| AF.5 | 950 | B.90 | 1 150 |

**Quasi-corporation**

| A | | | L |
|---|---|---|---|
| AN.1 | 1 000 | AF.4 | 100 |
| AF.2 | 50 | AF.5 | 950 |
| | | B.90 | 0 |

[156] It does not matter whether the corporation is loss-making or profitable in order to record the capital injection as an investment grant (D.92).

**Non-financial account**

| U/ΔA | | | R/ΔL | U/ΔA | | | R/ΔL |
|---|---|---|---|---|---|---|---|
| | | D.92 | –100 | D.1 | 100 | P.1 | 200 |
| | | | | P.2 | 50 | D.92 | 100 |
| | | | | P.51g | 100 | | |
| B.9 | –100 | | | B.9 | +50 | | |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –100 | | | F.2 | +50 | | |
| F.5 | 0 | | | | | | |
| | | B.9F | –100 | | | B.9F | +50 |

**Revaluation accounts (K.7)**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| AF.5 | +50 | | | | | AF.5 | +50 |
| | | B.10.3 | +50 | | | B.10.3 | –50 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.2 | 100 | | | AN.1 | 1 100 | AF.4 | 100 |
| AF.5 | 1 000 | B.90 | 1 100 | AF.2 | 100 | AF.5 | 1 000 |
| | | | | | | B.90 | 0 |

**Example 2**

A government carries out an injection in cash of 100, in period 2, to a profit making quasi-corporation, which would have freedom as far as the use of the funds is concerned (not obliged to acquire a given fixed asset defined by the fund provider).

| General government | Quasi-corporation |
|---|---|

**Opening balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.2 | 200 | | | AN.1 | 1 000 | AF.4 | 100 |
| AF.5 | 1 000 | B.90 | 1 200 | AF.2 | 100 | AF.5 | 1 000 |
| | | | | | | B.90 | 0 |

**Non-financial account**

| U/ΔA | | | R/ΔL | U/ΔA | | | R/ΔL |
|---|---|---|---|---|---|---|---|
| | | D.9 | 0 | D.1 | 100 | P.1 | 200 |
| | | | | P.2 | 80 | D.9 | 0 |
| B.9 | 0 | | | B.9 | 20 | | |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.2 | –100 | | | F.2 | 120 | | |
| F.5 | 100 | | | | | F.5 | 100 |
| | | B.9F | 0 | | | B.9F | +20 |

**Revaluation accounts (K.7)**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| AF.5 | +20 | | | | | AF.5 | +20 |
| | | B.10.3 | +20 | | | B.10.3 | –20 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.2 | 100 | | | AN.1 | 1 000 | AF.4 | 100 |
| AF.5 | 1 120 | B.90 | 1 220 | AF.2 | 220 | AF.5 | 1 120 |
| | | | | | | B.90 | 0 |

# 3.4 Capital injections in kind

## 3.4.1 Background

1. Sometimes governments transfer fixed assets (such as buildings), and/or non-produced non-financial assets (such as land), to a public or private corporation that already exists or has been created for that purpose of holding such assets. The capital injection does not take the usual form of a flow of financial assets (in most cases cash, AF.2), but instead a flow of non-financial assets. This is done to allow the enterprise to use these assets in the production process, usually because the enterprise is assumed to be in a better position than the government to operate this economic activity.

2. In some cases, the government expects to receive some direct benefits from the transfer of the asset, in the form of property income streams (dividends, for instance) or an increase in the economic value of the corporation. In other cases, the government is satisfied that there are sufficient economic and social benefits for the nation as a whole to justify the government's loss of an asset. Such transfer may also take the form, in some countries, of 'public utility concessions' in which a public infrastructure, under a time-limited contract (but with a rather long maturity) is managed by a 'concessionaire' which may be in some cases a public corporation but is more frequently of a private nature (see chapter 6.4 Public-private Partnerships (PPPs)). As a result, the rules to be followed may also apply to transactions with private corporations.

## 3.4.2 Treatment in national accounts

### 3.4.2.1 NO EXPECTATIONS OF RETURN

3. A straightforward transfer of a non-financial asset, with no other rights or obligations being established, nor new units being created, is a 'gift' made by government to the corporation, and thus is to be recorded as a non-financial transaction.

4. In this context, the transfer of the non-financial assets is an investment grant in kind (D.92) made by the government, counterbalanced by a decrease in its gross fixed capital formation (P.51g), and/or NP, if any land is involved (ESA 2010 paragraph 20.203).

5. The result of recording two flows of an equal amount in non-financial account is that there is no impact on net lending/borrowing (B.9).

6. There is an increase in the corporation's net worth due to the capital transfer (investment grant), and symmetrically a decrease in the government's net worth. Depending on the method used in national accounts to value the government's equity in the corporation, it might be necessary to assume that the value of the equity of general government in the public enterprise reflects the increase in net worth of the latter. If so, the transformation in the enterprise's account of the positive net worth (B.90) into equity capital (F.5) may be described via a holding gain (K.7) in the revaluation account.

### 3.4.2.2 EXPECTATION OF HIGHER RETURN

7. Governments may transfer non-financial assets to a public corporation in the expectation of receiving a higher economic return from the management by the corporation than by directly exploiting the asset itself, because of expected better efficiency. In addition, the transfer may be part of a package of events that changes some aspect of the relationship between government and the corporation (for instance, through new obligations, rights and claims) or creates new units.

8. This situation can be regarded as the exchange of a non-financial asset for a financial one (government's equity in the public corporation). No transactions need to be recorded like in the case described above. Instead, the asset provided should enter the balance sheet of the corporation (and leave the government balance sheet) via the other changes in the volume assets account (K.61), see ESA 2010 paragraph 20.203 and ESA 2010 paragraph 6.19.

9. In this case, as in the previous one, there is no impact on the net lending/borrowing (B.9). There is no impact on net worth either, since two flows of an equal amount are recorded which balance in the other changes in assets accounts.

## 3.4.3 Rationale of the treatment

### 3.4.3.1 FOR TREATMENT AS INVESTMENT GRANT

10. **ESA 2010 paragraph 1.70:** *The system records all transactions in monetary terms. The values to be recorded for non-monetary transactions must therefore be measured indirectly or otherwise estimated.*

11. **ESA 2010 paragraph 4.145**: *Capital transfers require the acquisition or disposal of an asset, or assets, by at least one of the parties to the transaction. Whether made in cash or in kind, they result in a commensurate change in the financial, or non-financial, assets shown in the balance sheets of one or both parties to the transaction*.

12. **ESA 2010 paragraph 4.146**: *A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash), or the cancellation of a liability by a creditor, without any counterpart being received in return*.

13. **ESA 2010 paragraph 4.153**: *Investment grants in kind consist of transfers of transport equipment, machinery and other equipment by governments to other resident or non-resident units and also the direct provision of buildings or other structures for resident or non-resident units*.

14. The paragraphs above show that recording the gift of a fixed asset as a capital transfer in kind is valid within ESA 2010 (another way to view it, from a conceptual point of view and equivalent in terms of accounting impact, would consist in considering the capital transfer as an imputed flow of funds, then used by the corporation to buy the asset from government).

### 3.4.3.2 FOR TREATMENT IN OTHER FLOW ACCOUNTS

15. Restructuring assets and liabilities via a significant transfer of assets are different from transactions in the usual meaning of this word, and, in any case, different from a simple grant of an asset.

16. **ESA 2010 paragraph 6.20**: *When a corporation is legally split up into two or more institutional units, the appearance of financial assets and liabilities is recorded as changes in sector classification and structure*.

17. **ESA 2010 paragraph 6.19**: *Changes in structure of institutional units cover appearance and disappearance of certain financial assets and liabilities arising from corporate restructuring*.

18. Changes in sector classification and institutional structure (K.61) seem also to apply to non-financial assets. Changes in structure is assumed to include significant changes in the balance sheet of unit when they coincide with other changes such as the functions of the unit.

### 3.4.3.3 COMMENT ON RECORDING THE EVENT AS AN INJECTION OF OTHER EQUITY IN F.5.

19. To record an injection of other equity through the financial account is not appropriate. The use of F.519 (other equity = equity not evidenced by shares) in national accounts is restricted to a limited number of well-defined cases. Such treatment would artificially improve the net lending/borrowing (B.9) of government (through the counterpart transaction in P.51g or NP).

20. Moreover, even if it would not be incorrect from a pure accounting point of view, this would have no economic content. In fact, when a unit has a net borrowing (deficit), this means that there was a gap of resources which had to be financed possibly by a reduction in its assets. In the present situation, the appearance of other equity has a kind of automaticity that is more appropriately recorded in the other changes in the volume of assets accounts.

## 3.4.4 Accounting examples

In the following example, it is assumed that government gives a building worth 100 to a public corporation. In the first case it is a pure gift; there are no associated events nor does the government expect increased property income arising from the transfer of the asset. In the second case the transfer of the asset is part of a reorganisation of the delivery of some services involving the corporation.

**Recording a capital transfer and capital formation**

In the following example, the capital transfer is assumed to result, in the first instance, in an increase of the public enterprise net worth. Subsequently, it would be possible to assume that this increase in net worth is 'absorbed' by an equivalent increase in the equity of government in the public enterprise, via the revaluation account: this second step is not described here. Moreover, in the closing balance sheet, only the change in net worth is shown.

**General government** | **Public enterprise**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | | |

| A | | | L |
|---|---|---|---|
| | | | |

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| P.51g | –100 | D.92 | –100 |
| B.9 | 0 | B.10.1 | –100 |

| ΔA | | | ΔL |
|---|---|---|---|
| P.51g | +100 | D.92 | +100 |
| B.9 | 0 | B.10.1 | +100 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 0 | | |
| | | B.90 | –100 |

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | | |
| | | B.90 | +100 |

**Recording a change in classification and structure**

**General government** | **Public enterprise**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | | |

| A | | | L |
|---|---|---|---|
| | | | |

**Other changes in the volume of assets account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.5 (K.12.1) | +100 | | |
| AN.11 (K.12.1) | –100 | | |
| | | B.10.2 | 0 |

| ΔA | | | ΔL |
|---|---|---|---|
| AN.11 (K.12.1) | +100 | AF.5 (K.12.1) | +100 |
| | | B.10.2 | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.5 | 100 | | |
| AN.11 | 0 | | |
| | | B.90 | 0 |

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | AF.5 | 100 |
| | | B.90 | 0 |

# 3.5 Dividends, super-dividends, interim dividends

## 3.5.1 Background

1. Payments made by public corporations to governments as shareholders are usually called 'dividends' with reference to commercial law and business accounting.[157] In most cases, these interim payments are also recorded as property income (dividends, D.42) in the ESA framework. The question addressed in this chapter is if there are payments made by public corporations to governments which, though they might qualify as dividends with reference to business accounting, require a different treatment in the ESA framework, for macro-economic statistics purposes, i.e. whether they need to be recorded differently from property income. The following rules normally do not apply to dividend payments by private corporations where government is a minority shareholder, unless there is evidence that government had a decisive influence on the allocation of profits and their distribution.[158]
2. Two elements may notably challenge the nature of the transaction and therefore the ESA classification of the payment: the size of the payment, in relation with the accrued profit of the corporation, and the timing of the payment, and sometimes a combination of the two.
3. Dividends are paid and recorded in a corporation's accounts when decided by the owners of the corporation (normally proposed by the Board and subject to approval by the majority of the general assembly of shareholders), usually based on the observed profit of an accounting year. This decision is commonly made in the year after the accounting year of the realised profit, when the accounts for this year are approved. However, it is not uncommon, notably for large corporations preparing semi-annual or quarterly accounts (or publishing regular profit warnings), that interim dividends are paid during the accounting year, before the final yearly earnings are known. In commercial company accounting, this is a frequent practice. Some public corporations (including central banks) in the EU have a similar practice. ESA 2010 explicitly addresses the case of interim dividends.
4. Another issue is the size of the payment. According to the definition of income in national accounts, a large payment may not result from the profit of the year realised by the corporation, but from a withdrawal of previously accumulated reserves, included in its own funds. Payments made to the government, whether made to the government after the annual profit of the corporation is known, or before (interim payments), must be closely analysed for the relevant recording of transactions in national accounts.

## 3.5.2 Treatment in national accounts

### 3.5.2.1 DIVIDENDS AND SUPER-DIVIDENDS: DEFINITIONS

5. Dividends: ESA 2010 paragraph 4.53: *Dividends (D.421) are a form of property income to which owners of shares (AF.5) become entitled as a result of for instance placing funds at the disposal of corporations*.
6. In the ESA 2010 framework, the following principles are established:
   - The resource available for distribution by a unit (a corporation) as dividends (…) is the distributable income of the unit, which is equal to the entrepreneurial income (B.4) plus all current transfers receivable less all current transfers payable and less the adjustment for the change in pension entitlements (ESA 2010 paragraph 4.55).
   - Following this logic, the resources from which dividends have to be paid should neither include the proceeds of sales of assets nor holding gains (…) which are not part of the distributable income.

[157] Under ESA 2010 the notion of dividends covers more than what is strictly called dividends in business accounting (see ESA 2010 paragraph 4.54)

[158] Note that in some cases, government may have such control in the absence of a majority of shares (multiple voting rights, special arrangements). Here, the important issue is whether government has a predominant role over the other investors on any decision related to profits. There are cases where government holds no ordinary shares in an entity but is entitled to decide to take most of the dividends.

- A large payment out of reserves, reducing the own funds of a corporation, is not a distribution of income. Such a payment is in substance a capital withdrawal, to be recorded as a transaction in shares and other equity.
- In practice[159], the operating profit or surplus (including the net interest charge in order to be consistent with the 'B.4' concept in ESA 2010 as defined in paragraphs 8.26–8.27) of the corporation could be used as a proxy for the entrepreneurial income[160].

7. Corporations may smooth the amounts of dividends they pay from year to year. In one year, they may put part of the profit into a dedicated reserve for distribution and use it in the following year, for the purpose of providing the shareholders with something closer to a regular return on their investments (dividend smoothing). It is conceptually acceptable within the national accounts framework to consider such smoothed payments as dividends, since they effectively come from distributable income (provided that it was clearly approved by the General Assembly of the corporation the previous year and recorded in an identified reserve set up exclusively for this purpose). However, large payments exceeding any such special reserve set up for short term adjustment, or evidently made from reserves accumulated from more than one year earlier is considered in substance to be a withdrawal of capital, to be recorded in national accounts as a financial transaction in shares and other equity.
8. Super-dividends are different in nature from dividends, as they are paid out of accumulated reserves, accounted for in the own funds of the corporation. Any withdrawal from own funds is to be recorded as a withdrawal of equity (F.5), at least for the amount in excess of the distributable income of the accounting year.
9. While ESA 2010 paragraph 4.55 calls for a plausibility check for dividends on oversized distributions compared to income[161], there is little point in doing this for distributions made by public corporations. This is due to the specific provisions for public corporations that are included in ESA 2010 paragraph 4.56, which define super-dividends as large and irregular payments or payments that exceed the income of the relevant accounting period. ESA 2010 paragraph 4.55 refers to the concept of 'distributable income' for private corporations, whereas paragraph 4.56 refers to the concept of 'entrepreneurial income' for public corporations. It is likely that these were intended to cover the same principle, as well as practice, rather than to make a material distinction between public and private corporations in this respect. For the sake of clarity, we thus use the term distributable/entrepreneurial income hereinafter to refer to this concept. Compilers assessing dividends received by government should consider the necessary adjustments based on the income used.
10. The 'super-dividend test', as described in ESA 2010 paragraphs 20.206–207, must be applied to all sizable payments that significantly differ from the usual amounts of dividends and/or represent an abnormally high dividend pay-out ratio (which means that the ratio of dividends to the average distributable income is out of proportion over recent past). Only the part of the payment equivalent to the distributable/entrepreneurial income can be recorded as property income. Any amount in excess is to be recorded as a transaction in equity (F.5). This recommendation applies to all corporations, including the central bank, although for this specific case, ESA 2010 paragraph 20.217 replaces the distributable/entrepreneurial income by the net operating income.
11. In the case of payments made by a holding entity[162], it might be difficult to determine the distributable/entrepreneurial income of this unit as the income declared in business accounts may be largely composed by dividends received from its subsidiaries. These dividends should not be considered operating income of the parent/holding entity just because of their form (dividends) as the subsidiaries may have paid dividends in excess of their own distributable/entrepreneurial income (for example due to revaluations or disposals of assets or business). This issue is applicable to any company which has subsidiaries. This demands an extensive analysis of individual financial statements of the units included in the group which may be time consuming and difficult to quantify. A pragmatic solution for compilers is

[159] ESA 2010 paragraph 20.206 specifies that *in the absence of a measure of the entrepreneurial income, the operating profit in business accounts is used as a proxy*. Generally, both measures are very close.

[160] Income statements may strongly differ when established on a national or proper to a corporation basis. In all cases it must refer to the net result of current activity ('continuing' under IFRS), before distribution and income tax, excluding any exceptional transactions generating holding gains or losses.

[161] 2008 SNA paragraph 7.131 introduced the concept of the plausibility check.

[162] ESA 2010 paragraph 2.14 defines two types of units that are often referred to as holding entities in business terms: the 'head office', a unit which 'exercises managerial control over its subsidiaries', and the 'holding company', which 'holds the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group'.

thus, to use consolidated accounts, which should facilitate the detection of (material) non-ordinary transactions by subsidiaries. Compilers following this approach should rely on audited/consolidated accounts and should apply it consistently across time to all payments made by the relevant holding companies.

12. When the holding entity is classified inside government, its distributions to shareholders are generally recognised as D.73 (current transfers within general government), unless (in exceptional circumstances) the equity stake in the holding is explicitly shown in the financial accounts (rather than eliminated). The latter can be particularly the case when the holding entity has some shareholders classified outside government.

13. A possible form of distribution is through share buy-back programmes by which the public corporation acquires its own shares to reduce the number of outstanding shares. Share buyback programmes are designed to have equal effects economically than dividends. Substance over form (ESA 2010 paragraph 20.164) prescribes that two economically similar transactions should be recorded in the same manner. However, ESA 2010 paragraph 5.151 indicates that '[a] share buyback is recorded as a financial transaction, providing cash to the existing shareholders in exchange for a part of the corporation's outstanding equity. That is, cash is exchanged for a reduction in the number of shares outstanding.', which would imply recording dividends and share buy-backs differently.

### 3.5.2.2 TIME OF RECORDING

14. The present guidance in the ESA 2010 is the following:

- For dividends (D.421) associated with quoted shares, ESA 2010 paragraph 4.57 specifies *The time of recording of dividends is 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 practice it is very close to the time they are effectively paid to the shareholders. For unquoted shares it is the time dividend are to be paid.[163] Thus, it is clearly not the time at which the final decision for distribution is taken/approved[164] and is in line with principle of ex-dividend valuation of quoted shares.
- For withdrawal from the income of quasi-corporations (D.422), ESA 2010 paragraph 4.62 defines the time of recording as 'when they are made by the owners'. They are therefore recorded on a cash basis.

### 3.5.2.3 THE CASE OF INTERIM DIVIDENDS

15. As mentioned above, an 'interim dividend' refers to the case where the corporation makes a payment to the shareholder during the accounting year, before the final annual result of the corporation is known. They are described in ESA 2010 paragraph 20.207.

16. As a general rule, in line with super-dividends, interim payments made to the government by public corporations, including the central bank, need to be assessed on a case-by-case basis to determine whether they are recorded as property income or financial advances.

17. An interim dividend payment is recorded as property income (D.42) in national accounts if two conditions are fulfilled. First, the amount of dividend paid is based on short-period accounts available to the public, covering at least two quarters (thus, there must be evidence that the distributable/entrepreneurial income (or operating surplus in business accounting as a proxy) would be able to fund the dividends). Second, the interim dividend should be consistent with the level of distribution of dividends observed in previous years, taking into account the trend in profitability of the company.

18. If both conditions are not met, the interim payment is to be recorded as a financial advance (for government, another accounts payable (F.8)). The whole dividend would then be recorded as property income (D.42) in national accounts — being subject to the 'super-dividend test' — only when the final dividend is transferred to the shareholders, which takes place only after the annual results of the corporation are known with certainty (in the following year).

---

[163] Contrarily to the case of debt securities where the yield is contractually due from the issuer, dividends are not accrued as such, as they depend on profits and distributive policy that are uncertain or not definitive until the accounts of the year are established, audited and approved.

[164] There is generally a delay between the payment of a dividend and the date at which its distribution was decided. For quoted shares, the market price normally includes the value of the dividend until it is paid. For unquoted shares, the only available information would be the time of the payment to government.

### 3.5.2.4 RULES TO ORECORD AND PARTITION THE TRANSACTION

19. In order to decide how to partition an interim dividend between the dividend and financial components, the amount distributed is compared to the distributable/entrepreneurial income (in practice the operating surplus) for the period from the start of the accounting year to when it was declared. If this income is higher than the amount distributed, the entire amount is recorded as a dividend. Any excess of the distribution over the distributable/entrepreneurial income which has been already observed in the published accounts[165] is recorded as another accounts payable of government, awaiting the final annual result. This flow at the final assessment will be converted either as dividend, or as withdrawal of equity in case of super-dividend.

20. The general approach for partitioning a final dividend or super-dividend between dividend and financial components is to compare the distributable/entrepreneurial income (in practice the operating surplus) for the relevant period less any amounts recorded as dividends relating to interim dividends paid since the last annual dividend was paid.

21. If the distributable/entrepreneurial income is higher than the amount distributed, the entire amount is recorded as a dividend. Any excess of the distribution over the associated distributable/ entrepreneurial income is recorded as withdrawal of equity. As a final dividend usually relates to income earned in the corporation's accounting year prior to when the payment is made, this is the relevant period for the distributable/entrepreneurial income.

## 3.5.3 Rationale of the treatment

22. The rationale of the recording of distributions as dividends is that they must derive from the distributable/entrepreneurial income of the corporation, accruing in the period to which the dividend relates. In such a case, there is a close link between the dividend payment and the accrued (current) income of the corporation.

23. The rationale for recording super-dividends as financial transactions is to consider that super-dividends are different in nature from dividends: whilst dividends correspond to a distribution of income, super-dividends correspond to a distribution of the corporation's wealth, reducing the own funds of the corporation. In the case of large payments out of accumulated reserves, there is no link with the accrued income of the corporation during the relevant accounting year. Only the distributable/entrepreneurial income can be distributed as property income (D.42) in national accounts.

24. The rationale behind the possibility to record an interim dividend as property income is that, under certain conditions, based on a few criteria (the income already observed, the usual distribution ratio and the trend in growth of profits the corporation), the interim payment may be considered a transfer of accrued income. In this case, the recording of a property income, before the annual results are known, does not contradict the basic statistical and accounting rules.

25. When the criteria and conditions to record a dividend at the time of interim payment are not met, this payment is recorded as a financial advance, with reference to ESA 2010 paragraph 5.240: other accounts receivable/payable, excluding trade credits and advances, (F.89) are 'financial claims arising from timing differences between distributive transactions… and the corresponding payments'. Dividends are an example provided in paragraph 5.241. The rationale to record a financial advance is that, before knowing with certainty the annual result and the distributable/ entrepreneurial income, there is a risk that the payment may turn out to be higher than the distributable/entrepreneurial income, thus including an element of super-dividend.

[165] There is generally a delay between the payment of a dividend and the date at which its distribution was decided. For quoted shares, the market price normally includes the value of the dividend until it is paid. For unquoted shares, the only available information would be the time of the payment to government.

# 3.6 Impact on government accounts of transfer of pension obligations

## 3.6.1 Background

1. This chapter deals only with the recording of receipts by government (frequently referred to as 'lump sum') from a public corporation, and possibly a private corporation, in the context of a transfer of pension obligations to government in one-off operations.

### 3.6.1.1 EMPLOYERS' PENSION SCHEMES[166]

2. In several EU Member States, institutional units, including public corporations and government, may set up specific pension schemes for their own staff. ESA 2010 paragraph 4.89 (b) describes these schemes as a second type of social insurance schemes: *The second type consists of other employment related schemes. These schemes derive from an employer-employee relationship in the provision of pension and possibly other entitlements that are part of the conditions of employment and where responsibility for the provision of benefits does not devolve to general government under social security provisions*. Under ESA 2010, such responsibility is designed as 'pension manager' ('sponsor' under ESA 2010), by opposition to the role of a 'pension administrator', acting only of behalf of the former. Such schemes may be organised separately from the parent unit (referred to as 'autonomous' or 'non-autonomous' pension schemes in ESA 2010 paragraph 2.106) in which cases, they are classified in the pension funds subsector (S.129) or even in the subsector insurance corporations (S.128). They may be organised directly by the unit, under the form of a segregated reserve, or, through accounting conventions, an equivalent is recognised. In this case, they are not considered to be institutional units in national accounts and they are recorded in national accounts within the unit instead.

3. Such employer pension schemes are not treated in national accounts as social security schemes, i.e. the flows of contributions (by the employer and/or the employees) and pension benefits are not part of government revenue or expenditure. Therefore, the flows and stocks are allocated to the pension funds' subsector, to the life insurers' subsector or to the sector in which the employer organising/managing the scheme is classified (sector S.11 for non-financial corporations or sector S.12 for financial corporations. The corporations that run the scheme may be public or private corporations.

4. Where the scheme is classified in subsectors S.129 or S.128, it is by definition funded. If the scheme is classified in the sector of the employer, it may be funded or unfunded.

5. An employer scheme is funded if the employer builds up a segregated reserve in its own balance sheet — whether because of legal obligations, specific regulations, contractual clauses, accounting standards or only on voluntary basis — that reflects the pension obligations (on an actuarial basis) against the beneficiaries. This reserve, with associated earmarked assets, ensures an important protection of the pension rights of the beneficiaries, notably in the cases of merger or bankruptcy of the employer (it is considered the ownership of the beneficiaries).

6. An unfunded employer pension scheme occurs where the scheme does not hold assets to specifically meet the pension obligations. Such schemes are also often labelled as 'pay-as-you-go' (PAYG) schemes. Under them, the pension benefits due in a year are financed from the accrued contributions of the same year, with possible additional payments. In business accounting, at least for some corporations (notably those quoted in a stock market) a commitment must be recognised, including those in the form of a provision (as the occurrence of the payment is deemed to be certain). In other cases, it may be only additional information provided in the annual report of the corporation. ESA 2010 recognises in the core accounts the pension liabilities for employer pension schemes for sector S.11 and S.12.

7. Pension obligation towards beneficiaries is recorded as pension entitlements (AF.63) in ESA 2010. If the employer scheme is underfunded, a liability of the employer towards the pension administrator is recorded in claims of pension funds on pension managers (AF.64) but only if the scheme is not recorded

[166] For more detail, see chapter 1.3 in this Manual and ESA 2010 chapter 17 (Social insurance including pensions).

within the employer's sector, covering the gap between the present values of the obligations to the beneficiaries, recorded in AF.63, and the earmarked assets. As a reminder, in the case of a defined-benefit funded scheme (pensions set up by a set formula, notably with a link to their salary), this liability is valued as the present value of the outstanding pension net obligations of the employer. In the case of a defined-contribution scheme, the outstanding pension obligations are equal to the market value of the investments, as the manager normally in this case does not normally take any risk on the pension obligations and, thus, recording a liability AF.63 for the employer-manager would not be relevant.

#### 3.6.1.2 TRANSFER OF EMPLOYERS' PENSION OBLIGATIONS TO GOVERNMENT

8. For various reasons, government may take over these pension obligations. Examples include plans for (total or partial) privatisations or new stock market quotation. Government, as the owner of the public corporations (or in the context of a support to a private firm), may wish to improve their financial situation by 'cleaning' liabilities from their balance sheet. For instance, in the case of a planned privatisation, investors may be reluctant to purchase the equity of a corporation encumbered with pension obligations, notably in case of under-funding (where the assets of the scheme have a lower value than its obligations and the employer has a commitment to bridge the gap). In the case of a private corporation, the reason may also be to improve the situation of the corporation but possibly also to enlarge the coverage of social security.

#### 3.6.1.3 THE KEY ISSUE IN NATIONAL ACCOUNTS

9. At the time of the transfer of the pension obligations to government, the corporation has to pay (possibly by instalments over a given period of time) a lump sum (in cash or under the form of other financial assets, such as securities[167] in order to compensate government for becoming responsible for the service of pensions (both for retirees and future beneficiaries still in activity) as, in most cases, the employees of the corporation will be subject to the 'normal' social security scheme obligations, based on a 'PAYG' system. This means that by the transfer as such any funded scheme would be at the same time transformed into an unfunded scheme. Analytically, one may consider that government takes over pension obligations, which will be considered an unfunded scheme (no AF.63 liability in ESA 2010) whatever the nature of the scheme in which these obligations were recognised. Some operations may occur before the transfer but will concern exclusively the accounts of the corporation, the households, possibly a pension scheme or an insurance corporation, but not government (see below). Cases where the change would take only the form of a change in the management of funded scheme without change in the nature of the scheme (i.e. its disappearance, replaced by an unfunded scheme for the same level of pension entitlements) might also be observed.

10. When the value of the assets is equal to the value of the pension obligations, this is to be considered a financial transaction with no impact on government net lending/borrowing (B.9). The transfer of the assets is counter-balanced by a liability. According to ESA 2010 paragraphs 20.273–20.275, this must be viewed as a financial advance, the prepayment of social contributions. These new participants, who will pay normal contributions to government in the future as long as they are active, have acquired rights to pensions without any contribution to this scheme before the transfer. This is also the case of the existing beneficiaries of pensions at the time of the transfer. It is to be noted that in case some non-financial assets (as buildings) would be transferred within a compensation package, there will be an impact on government net lending/borrowing (B.9) through an increase in gross fixed capital formation.

## 3.6.2 Treatment in national accounts

#### 3.6.2.1 CASE 1 — THE PENSION OBLIGATIONS ARE NOT RECOGNISED IN GOVERNMENT ACCOUNTS

11. A first case is the transfer of the employer pension obligations to an unfunded scheme under the responsibility of government, i.e. a social security scheme. The calculation of the obligations (in present value terms) must be based on the various pension parameters observed at the exact time of the transfer and not on the basis of some future decisions by government changing some parameters used in the calculation, such as the discount rate.[168] Even if, in a very short term after the transfer,

[167] As it is frequent that funded pension schemes invest in government securities, the transfer to government of such assets would reduce the government (EDP) debt, through consolidation.

[168] By definition, such a calculation over a very long period of time, as for pension entitlements which cover a significant number of decades,

government would change some parameters (such as the level of pension or the required time of contributing), for instance by aligning them on those of the government scheme, this would be considered to be independent from the original conditions under which the transfer took place. *De facto*, the employer's pension funded scheme would be 'liquidated' just before the transfer and recorded only in the accounts of the corporations and households (which would only concern the accounts of the scheme and households through K.62 other flow in volume for the extinction of the AF.63 liability) and in this case the assets would be deemed as transferred from the households to government. This does not change the impact on government accounts but only the counterpart sector.

12. As a matter of principle, under this case, it is assumed that, as a general case, the 'lump sum' paid to government matches or will match[169] the pension obligations taken on by government. No liability AF.63 is to be recorded in government's balance sheet but only a liability AF.89, equal to the value of the assets transferred as a counterpart. At the time of the transfer, this has no impact on government net lending/borrowing (B.9) (unless some non-financial assets would be transferred). The impact on government net lending/borrowing (B.9) would only appear after the extinction of this liability AF.8.

13. It might happen, although rather exceptionally, that there might be evidence, based on some public information following consensus between experts and/or parliamentary debate, either that the net present pension obligations are actually under-estimated[170], or that government has not received enough assets in exchange for taking over pensions obligations, as valued according to the generally accepted calculation methods. In such cases, the above-mentioned AF.89 liability should be revalued and any difference between this new amount of liabilities and the value of all assets, transferred as compensation, so that a capital transfer, with an immediate impact on government net lending/borrowing (B.9), should be recorded at that time. It would be considered in this case that government has deliberately accepted, clearly in order to support the corporation, to enter in an unbalanced transaction.

#### 3.6.2.2 CASE 2 — THE PENSION OBLIGATIONS ARE RECOGNISED IN GOVERNMENT ACCOUNTS

14. This case involves the transfer of pension obligations to government which places them in a scheme, at least during a first period, where the beneficiaries' entitlements are recognised in the core national accounts by an AF.63 liability in the accounts of government. However, it is likely that government would not take over the tasks of pension administrator and, thus, the scheme would be classified in S.129 or S.128.

    If the scheme was still classified in the pension subsector in national accounts, government being substituting itself to the corporation as 'manager' but not as 'administrator', there would be, at the time of this change, a claim of the fund on the corporation in case of an insufficient funding of the scheme (recorded as AF.64 in ESA 2010). The corresponding amount should be viewed as a debt assumption and, therefore, a capital transfer from government to the corporation should be recorded, notwithstanding any measures taken by government after the transfer in order to improve the net situation of the fund.

    All in all, the basic assumption is that the market value of the assets (cash, shares, debt securities and possibly also non-financial assets) transferred to government matches the value of the pension obligations (recorded as AF.63 in national accounts) transferred at that time. This equivalence has thus no impact on government net lending/borrowing (B.9) (with the exception, already mentioned, of non-financial assets). However, if there is a difference between the market value of the financial assets and the value of the liability (not applicable to defined-contributions schemes as mentioned above), a capital transfer should be recorded for the difference at the time of the transfer, with an impact on net lending/borrowing (B.9), in order to show the decrease in government net worth due to the unbalanced transaction.

#### 3.6.2.3 THE RECORDING OF TRANSACTIONS AFTER THE TRANSFER

15. After the transfer, the management of the scheme by government (i.e. receiving social contributions and paying pension benefits, both recorded on an accrual basis) should be neutral on government net

gives only a picture at a given point of time. It is quite certain that the future reality would be different for many reasons but such a net present calculation is the only rational method to measure time equivalence of long term commitments.

[169] In case of instalments, as previously mentioned, government will record in its assets a receivable together with the transferred financial assets.

[170] This under-estimation should, however, go beyond the generally accepted margin of error (or approximate) for such actuarial calculations.

lending/borrowing (B.9), until the complete extinction of the liability AF.8. The latter represents a payment in advance, which is to be 'amortised' in the form of D.759 imputed revenue offsetting the actual payment of benefits to the pensioners of the former employer scheme. This progressive extinction might follow the planned schedule for benefits payments or, for practical reasons, take the form of a linear imputation on a given period (such as 20–25 years). It is important to point out that it would not be necessary to check whether the payment of pensions to former employees of the corporation would correspond exactly to what had been foreseen at the time of the transfer. In other words, in reality, it is very likely that government could actually pay either more or less what was foreseen at the time of the transfer[171], which would have an implicit impact on its net lending/borrowing (B.9). This would notably occur because of the revision of some parameters.

16. However, for time-equivalence purposes, as the liabilities are calculated in present terms (any expenditure in the future has a lower current value), it is necessary to reverse this situation at the time of the effective payment of the benefits. For this reason, interest expenditure should also be imputed in the non-financial account of government. In this regard, the rate of discount used for the estimation of the pension obligations at the time of their transfer to government could be used or, as a second best, a government benchmark long-term interest rate. The lump sum may be invested specifically earmarked assets (escrow account) of which revenue be used to increase the value of the liability (from net present value to current value). Generally, government is not acting like that, benefiting from the lump sum for reducing its borrowing needs in the year of the transfer. However, in this case, there will be an 'opportunity gain' for government due to the reduction in borrowing and conceptually this would be equivalent to the investment in assets.[172]

## 3.6.3 Rationale of the treatment

17. The main references in ESA 2010 are the following:

ESA 2010 paragraph 20.273: *On occasion, units may pay a lump sum to government in exchange for taking over some of their pension obligations. Such large one-off transactions occur between a government and another unit, usually a public corporation, often linked to the change of status of the corporation, or to its privatisation. The government usually assumes the*

*obligations in question in exchange for a cash payment covering the expected net borrowing (deficit) resulting from the transfer*.

18. ESA 2010 paragraph 20.274: *In concept, being an equal exchange of cash for the incurrence of an obligation that is a liability, the transaction should not affect measures of net worth and financial net worth, and should not alter the government net lending/borrowing (B.9). However, the pension obligation may not appear as a liability on the balance sheet of either of the units transferring and assuming the obligations. For example, when transferred to the government, the pension obligations may be merged with a social security scheme for which no liability is recognised*.[173]

19. ESA 2010 paragraph 20.275: *In this context, such a lump sum payment should be viewed as a prepayment of social contributions. In consideration of the various arrangements observed in practice, and in order to avoid any distortion in the calculation of some aggregates such as labour costs and compulsory levies, the lump sum is recorded as a financial advance (F.8), a prepayment of miscellaneous current transfers (D.75) which will be recorded in the future in proportion to the related payments of pensions. As a result, the lump sum payment has no impact on the net lending/borrowing (B.9) of the general government in the year of transfer of obligations*.

20. In case the obligations taken on by government are not recognised in its balance sheet, generally, no capital transfer should be recorded. It is assumed that such transfers would normally take place under a procedure which ensures a 'fair' compensation to government. There is notably a democratic control by Parliament and it should be rather exceptional that a significantly insufficient compensation, largely evidenced by independent experts, could be effectively conducted and government enter in 'unfavourable deals'. In addition, in most cases, the agreement of the European Commission would be

[171] There are several reasons for that, excluding changes in basis parameters, such as deviation from the hypotheses used in the estimation of the future pension benefits (mortality tables, inflation, etc.).

[172] However, as the liability covers long-term pensions, in practice, there would be a gap due to change in refinancing costs.

[173] The case of transfer to a government employer's scheme is not foreseen in ESA 2010, as it seems highly unlikely because it will imply a change in the status of the employees of the corporation.

required as the reduction in the pension obligations insufficiently without a corresponding equal decrease in cooperation's assets as compensation to government, could be considered a source of distortion, according to competitive rules, such unbalanced transaction resulting in an immediate improvement in the financial position of the corporation (which, as mentioned above, is generally the reason for carrying out the operation). This would be considered a clear support from government to the corporation, which, for reasons of transparency and substance, must be recorded in national accounts.

21. However, such cases of unbalanced compensation may effectively happen, under some specific circumstances and for various reasons (for instance, for corporations which might not fall under competition rules because of the nature of their activity or if there is an on-going privatisation plan). Thus, there is a need to complement ESA 2010 in this Manual as, in the above-mentioned case, the net worth of the government would be (negatively) affected, as well as the net worth of the corporation involved in the transaction (in a positive sense).

22. As a general principle in national accounts, when government carries out unequal transaction, by evidence not for 'purely commercial reasons' which would imply equivalence between the two legs of the transaction, a capital transfer has to be recorded. ESA 2010 paragraph 5.21 states that in the case of a transfer as counterpart (totally or partially) of a financial transaction, *the transaction value is identified with the current market value of the financial assets and/or liabilities involved*. In other words, the financial transaction is recorded for an amount higher than what was observed and includes the transfer component, which is added to the effective amounts of assets exchanged between parties.

*23.* In the case of transfer of pension obligations, the recording of the difference between the lump sum and the pension obligations is clearly described in 2008 SNA paragraph 17.188: *If government assumes the responsibility for pension provision for the employees of a non-government unit through an explicit transaction, a pension liability should be recorded in the balance sheet of government. If the government does not receive matching assets in return, the difference between the increase in the government's liability and the assets received is shown as a capital transfer to the non-government employer*.

24. Contrarily to 2008 SNA, ESA 2010 does not recognise pension liabilities in the balance sheet of the government, notably for social security schemes or for its own employer pension schemes. This is why only an AF.8 liability can be recorded (instead of AF.63) in government accounts. However, in both cases, the transfer of the pension obligations results in future commitments for government and it is clear that government has not undertaken the transaction with the aim to receive a full compensation for the obligations taken over. It has deliberately accepted to enter in a transaction in which there is by evidence an unrequited element. From an economic point of view, the substance is quite similar.

25. Under these conditions, the national accountants, which must provide a description 'optimal for economic analysis and the evaluation of economic policy' (ESA 2010 paragraph 1.25 (d)) must view the codification of the liability as conventional and consider it as a rather secondary technical point. This would be particularly reinforced in cases where the unbalanced transaction could be considerable; government could even decide to take over the pension liabilities from the corporation completely for free or for a token value.

26. As a consequence, whatever the agreed conventions in national accounts about the recording of the pension obligations, there is no difference between 2008 SNA and ESA 2010, which is legally enforceable in EU, as regards the economic substance of the transaction. In both cases, there must be an entry of the obligations in government's balance sheet for their exact value. Thus, if the transaction is not balanced, for any reason, i.e. the pension obligations exceeding the assets received in exchange, the transaction must be 'rebalanced' and, under ESA 2010, the only way is to adjust the liability in government accounts, whatever its codification. This will create a gap between the assets received by government in the transaction and the 'final' amount of liabilities recorded in the balance sheet. According to a basic principle in national accounts, this must be recorded as a capital transfer, with an impact on government net lending/borrowing (B.9).

27. This would be independent from any measure (of which the impact and the timing are uncertain and not predictable at the time of the transaction) that government could take in the future in order to cover the gap. There are other cases of recording a capital transfer only by reference to the impact on the financial position of government as observed at the time of a transaction and not on the basis of information on possible, but fully uncertain or quite contingent, future actions by government or future events.

## 3.6.4 Accounting examples (simplified)[174]

**Case 1: Pension liability not recognised in government accounts**

A public corporation transfers to the government its obligations related to pensions for its staff that the corporation has organised on its own (recorded as pension entitlements (AF.63) in national accounts). Government accepts to pay future pensions, under the 'universal' social security schemes. It has been agreed (and not questioned) that the pension obligations have a net present value of 1 000. In a future given year (t+20), pensions payable to the former employees of the corporation are 50 (assuming that they are identifiable), whereas they were expected to be 40 at the time of the transfer, according to the schedule available at this time and after reconversion in current value (by simplification the rate of interest on government holdings is equal to the discount rate and the corporation and the households are shown in a consolidated way).

**a) The transaction is balanced**

Government receives in return a cash payment of 1 000, equal to the pension obligations taken on and immediately invested in securities. The impact on government net lending/borrowing (B.9) appears only when the liability AF.89 is exhausted, which is assumed not to be the case here after 20 years, even if the effective payments do not fit the amount foreseen.

**Year t**

| General government | | | | Corporations/Households | | | |
|---|---|---|---|---|---|---|---|
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | +1 000 | F.89 | +1 000 | F.2 | –1 000 | | |
| | | B.9F | 0 | F.89 | +1 000 | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.3 | 1 000 | AF.89 | 1 000 | | | | |

**Year t+20**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R/ ΔL | U/ΔA | | | R/ ΔL |
| D.6211 | 50 | D.75 | 50 | D.75 | 50 | D.6211 | 50 |
| D.41 | 5 | D.41 | 5 | | | | |
| B.9 | 0 | | | B.9 | 0 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | –50 | F.89 | –50 | F.2 | 50 | | |
| | | B.9F | 0 | F.89 | –50 | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.3 | X(<1 000) | AF.89 | X(<1 000) | | | | |

[174] The examples are focusing on the impact on government net lending/borrowing (B.9) and or debt and do not aim to show all recordings in total economy.

**b) The transaction is not balanced**

Government receives in return a cash payment of 500, less than the pension obligations taken on (1 000) and immediately invested in securities. A capital transfer is recorded for the gap whereas AF.89 is not equal to the assets received in the transaction. This has an impact on government net lending/borrowing (B.9) of the year the transfer takes place but not on the following years as long as the liability AF.89 is not exhausted. The difference with the previous case is that this appears before the 20th year (the closing balance in year t+20 is not shown as there is no longer link with the initial transaction).

**Year t**

| General government | | | | Corporations/Households | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R/ ΔL | U/ ΔA | | | R/ ΔL |
| D.99 | 500 | | | | | D.99 | 500 |
| B.9 | –500 | | | B.9 | +500 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | +500 | F.89 | +1 000 | F.2 | -500 | | |
| | | | | F.89 | +1 000 | | |
| | | B.9F | –500 | | | B.9F | +500 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.3 | 500 | AF.89 | 1 000 | AF.89 | 1 000 | | |

**Year t+20**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R/ ΔL | U/ ΔA | | | R/ ΔL |
| D.6211 | 50 | | | | | D.6211 | 50 |
| B.9 | –50 | | | B.9 | +50 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | –50 | | | F.2 | 50 | | |
| | | B.9F | –50 | | | B.9F | +50 |

**Case 2: Pension liability recognised in government accounts after the transfer of the obligations**

**a) The transaction is balanced**

In year t, a public corporation transfers to government AF.63 pension obligations related to its current or former employees. Government will pay future pensions from a scheme for which a pension liability AF.63 is still recognised in national accounts (and here recorded within government). Government receives in exchange a cash amount of 1 000 immediately invested in F.3 (or more likely directly F.3 or F.5 assets — by simplification there is no change in price in the example). In a future given year (t+20) pensions payable are 50 and they are paid from the assets which have been transferred. There is no impact on government

net lending/borrowing (B.9) as there is no need of borrowing to cover the payment of pension (the adjustment in non-financial account is recorded as D.75).

**Year t**

| General government | | | | Corporation/Households | | | |
|---|---|---|---|---|---|---|---|
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | +1 000 | F.63 | +1 000 | F.2 | –1 000 | AF.63 | –1 000 |
| | | B.9F | 0 | | | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.3 | 1 000 | AF.63 | 1 000 | AF.2 | X–1 000 | | |
| | | | | AF.63 | 1 000 | | |

**Year t+20**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R/ΔL | U/ΔA | | | R/ΔL |
| D.6211 | 50 | D.75 | 50 | D.75 | 50 | D.6211 | 50 |
| B.9 | 0 | | | B.9 | 0 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | +50–50 = 0 | AF.63 | –50 | F.2 | +50 | | |
| F.3 | –50 | | | F.63 | –50 | | |
| | | B.9F | 0 | | | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.3 | X–50 | AF.63 | X–50 | AF.2 | Y+0 | | |
| | | | | AF.63 | X–50 | | |

**b) The transaction is not balanced**

Under the same operation, for 1 000 of pension liability, government receives in exchange a cash amount of 500 immediately invested in F.3 (or more likely in F.3 or F.5 assets — by simplification no change in price in the example). This gap is reflected as a capital transfer as government has de facto assumed an implicit liability AF.64 of the corporation to households (which does not appear in the example as corporations and households sectors are consolidated). The difference with the previous case is that in year t+20 pensions payable are 50 but government no longer holds assets to finance the pensions and thus it must incur new borrowing which would substitute to AF.63 (this would have an impact on government (EDP) debt as it is instrument included in it, contrarily to AF.63).

**Year t**

| General government | | | | Public corporation/Households | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R/ΔL | U/ΔA | | | R/ΔL |
| D.99 | 500 | | | | | D.99 | 500 |
| B.9 | –500 | | | B.9 | +500 | | |

**Financial account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| F.3 | +500 | F.63 | +1 000 | F.2 | –500 | AF.63 | –1 000 |
| | | B.9F | –500 | | | B.9F | +500 |

**Closing balance sheet**

| A | | L | | A | | L |
|---|---|---|---|---|---|---|
| AF.3 | 500 | AF.63 | 1 000 | AF.2 | X–500 | |
| | | | | AF.63 | 1 000 | |

**Year t+20**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|

**Non-financial account**

| U/ΔA | | R/ΔL | | U/ΔA | | R/ΔL | |
|---|---|---|---|---|---|---|---|
| D.6211 | 50 | D.75 | 50 | D.75 | 50 | D.6211 | 50 |
| B.9 | 0 | | | B.9 | 0 | | |

**Financial account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| F.2 | +50–50 = 0 | AF.63 | –50 | F.2 | +50 | | |
| | | AF.3 | +50 | F.63 | –50 | | |
| | | B.9F | 0 | | | B.9F | 0 |

**Closing balance sheet**

| A | | L | | A | | L |
|---|---|---|---|---|---|---|
| | | AF.63 | X–50 | AF.2 | Y+50 | |
| | | AF.3 | 50 | AF.63 | X–50 | |

# 3.7 Impact on government accounts of transfer of decommissioning costs

## 3.7.1 Background

1. Decommissioning is an operation consisting of dismantling (uninstalling) a production/industrial site in order to clean it up so that it, or the land underneath or surrounding it, becomes available for future use. The aim may be to re-use the buildings and/or other installations or to totally transform the site for other purposes (for instance, into a park).
2. This chapter mainly concentrates on the recording of decommissioning in cases where an asset to be decommissioned is transferred to government, which will take over the future cost of the decommissioning. This is a different case from the one where government owns an asset, from inception, which needs to be decommissioned in the future. There are several examples of these situations, such as 'experimental' equipment (for instance in the nuclear field), military bases, laboratories, other 'critical' installations, etc. It is also different from the case of a public corporation that holds only assets to be decommissioned and would be reclassified in the general government sector as soon as it would no longer meet the criteria to be a market unit, which will occur, at the latest, when the unit is no longer engaged in a productive activity (for instance a power station disconnected from the electricity network).
3. This chapter also deals with contributions to decommissioning funds that are classified inside general government. These funds encompass any type of assets intended specifically to cover the expenditure necessary for decommissioning installations and are typically managed by a dedicated body that has independence in its decisions from the contributors to the fund, which may be public or private entities.
4. The following assets can be subject to decommissioning: nuclear power stations, oilrigs, mines, quarries, complex industrial factories (chemical, refineries, etc.), landfills sites, etc. This list is not exhaustive. For some assets, the decommissioning work may take place over a number of years. This is particularly the case for nuclear installations, where existing levels of radioactivity prevents any major intervention on the core (reactor) until a significant decline is reached. In other cases, the operations may be carried out over a relatively short period.
5. The costs may vary between being rather negligible compared to the initial value of the fixed assets to being very substantial, especially where environmental protection is necessary. In practice, a decommissioning project may also contain significant costs that are associated with long-term waste management activities: e.g. often, in the case of nuclear plants, the cost of subsequent treatment and/ or storage of nuclear waste material (i.e., after it is safely removed from the site) could be added to the total cost of the project. The combined cost of decommissioning and long-term waste management activities are referred to in this document as decommissioning costs for simplicity.
6. In general, such production sites are typically owned by corporations considered as market producers, classified in the non-financial corporations sector (S.11), which are also responsible for the termination (decommissioning) costs without any direct government financial involvement. For some of them (notably when they are quoted corporations), the business framework and accounting requirements may oblige them to set up provisions — although the need for future expenditure is certain, the exact amounts are uncertain and will be based on estimates. Due to possible spill over effects, there may also be specific international arrangements in the case of some productive areas, such as the nuclear one.
7. Government may be involved in decommissioning in various ways. A government unit may own such assets from the beginning of their service life, or may acquire them later through different ways. Government may also finance decommissioning costs for assets owned by corporations, through grants, when the costs are considered significant or because of other reasons, such as the responsibility of government in environmental protection.
8. Government may also require the constitution of special funds in anticipation of the future decommissioning of facilities owned by the non-financial corporations sector. These funds may be even placed under the responsibility of government to ensure their availability and sufficiency. Contributions to the funds can be made on a regular basis (e.g. annual payments) or by means of a one-off 'lump-sum'

payment. Responsibility for potential future shortages of the fund will depend upon the country's legal and regulatory framework.

#### 3.7.1.1 OVERVIEW OF THE TREATMENT IN NATIONAL ACCOUNTS

9. Provisions for decommissioning costs were introduced in 2008 SNA and ESA 2010. Recognising practical difficulties in the general application of the 2008 SNA approach, the *Manual on the changes between ESA 95 and ESA 2010* has recommended a practical approach.

10. The practical approach implies that decommissioning costs can be reflected in consumption of fixed capital (P.51c) at the end of the operating life of the asset (at the moment when the actual expense occurs). As an alternative, the estimated decommissioning costs can be reflected in consumption of fixed capital over the operating period of the asset, which is the theoretical approach of the SNA, if reliable information is available. Both treatments are accepted.

11. ESA 2010 paragraph 3.129 (h) states that terminal costs, i.e., large costs associated with disposal, e.g. decommissioning costs of nuclear power stations or clean-up costs of landfill sites, are considered gross fixed capital formation (GFCF, P.51g) in the period in which they actually take place. It might, however, be rather arbitrary to determine a threshold for such 'large' costs. Consequently, it is not recommended to consider the value of decommissioning costs as an operational criterion for their classification as GFCF, as this could reduce the comparability of data across EU Member States. Instead, a criterion based on the expected period needed for the decommissioning, i.e., 'less or more than one year', could be an acceptable proxy by which to decide whether to record costs related to decommissioning activity as GFCF. However, as a possible exception, there might also be cases where significant decommissioning expenditure could be carried out in less than one year, but still be considered GFCF.

12. Costs, which do not qualify as decommissioning costs, should not be treated as GFCF but, in general, as intermediate consumption (P.2).

## 3.7.2 Treatment in national accounts

#### 3.7.2.1 TRANSFER OF ASSETS TO GOVERNMENT

13. The transaction in GFCF must be recorded for the observed amount. If the asset is transferred for free, the increase in GFCF of government would be compensated by capital transfer (in kind), with no impact on government net lending/borrowing (B.9).

14. When an asset is transferred to government, in principle the liabilities associated to its decommissioning are also included in the transfer. The transfer may consequently be accompanied by a lump sum or sequence of lump sums to government.

15. If government is given a lump sum deemed to cover some future decommissioning costs, this amount should be recorded as a financial advance to government, not as government revenue. The original owner of the transferred asset will no longer have involvement in the future decommissioning and, thus, it compensates government by anticipation for taking this responsibility. The transfer of the financial assets in the 'lump sum' corresponding to the dedicated accumulated reserve, is a financial transaction, with a matching entry in other accounts payable (F.8).

16. Whenever available information is deemed reliable, a comparison between the estimated decommissioning costs and the lump sum received should be performed at inception.

17. It might be the case that the net present decommissioning obligations are under-estimated; hence, government receives insufficient assets in exchange for taking over decommissioning obligations, as valued according to the generally accepted calculation methods. In such cases, the above-mentioned AF.8 liability is increased to the correct value and the difference between this and the value of assets transferred is balanced through a D.99 capital transfer with an immediate impact on government net lending/borrowing (B.9). It is considered that government has deliberately, in order to support the corporation, entered into an unbalanced transaction.

18. When government carries out decommissioning expenditure, it is recorded as financing it via the dedicated reserve, which, here, means via a reduction of the other accounts payable (F.8) until the total depletion of the amount. As the lump sum takes the form of a discounted value (i.e., taking into account

the fact that the expenditure occurs over a period of time), there is a need to revalue it adequately — through property income.

19. As a consequence, and similarly to the case of transfer of pension obligations, once the expenditure associated with the decommissioning begins, the impact on government net lending/borrowing (B.9) will be neutralised by a notional entry (revenue) for government. Such revenue will be either recorded as a capital transfer (D.99) receivable (for capital expenditure related to the assets) or as a current transfer (D.75) receivable (for intermediate consumption expenditure), identical to the amount of decommissioning expenditure. The fact that the former asset owner (corporation) may have disappeared at this time does not prevent the implementation of the neutralisation rule given above. Thus, when the reserve (AF.8) has been extinguished there should be a negative impact on government net lending/borrowing (B.9).

#### 3.7.2.2 PAYMENTS TO GOVERNMENT WITH NO OTHER TRANSFER OF ASSETS

20. It may be the case that government receives payment(s) in exchange for assuming the future decommissioning obligations but the ownership of the facilities involved does not change.

21. It may also be the case that there is a regulatory environment under which the asset operators contribute on a regular basis to an independently managed fund, typically under strict provisions defined by government such that it is de facto in control of the fund. The objective of such a framework is to ensure that the funds will be available when needed, whether or not the responsibility for the decommissioning activities remains at the operators' side.

22. In both cases, the accounting treatment may be assimilated to the situation when an asset (e.g. a nuclear power plant) is also transferred to government, although in this case, the asset relates to the cash or other financial assets received and not to the facility itself.

23. As mentioned above, if the owner provides to government a lump sum (or a sequence of payments) deemed to cover some future decommissioning costs, this amount is recorded as a financial advance to government. The transfer of the financial assets is a financial transaction, with a matching entry in other accounts payable (F.8). When the transfer of funds implies a transfer of the responsibility to perform the decommissioning activities and the available information is deemed reliable, a comparison at inception between the estimated decommissioning costs and the lump sum received (in case of one-off payment) or to be received (in case of sequential payments) should be performed.

24. When the transfer of funds from a company to a dedicated fund does not imply a transfer of responsibilities (e.g. in case of cash accumulated by a top-up guarantee fund), the amounts in question are recorded as financial advances. Later withdrawals from this fund will enter the financial accounts.

## 3.7.3 Rationale of the treatment

25. There is a strong analogy with the case of the transfer of pension obligations, although generally the estimated future costs are more reliable in the case of pension liabilities (see chapter 3.6 of this Manual). Thus, a similar rationale (ESA 2010 paragraphs 20.273 and 20.274) may be used, i.e., that if the transaction is considered as an equal exchange of financial assets against an obligation that is a liability, then 'the transaction should not affect measures of net worth and financial net worth'. An identical situation exists concerning the rules in respect to the ESA 2010 asset/liability boundary. As the decommissioning liabilities are not recognised in national accounts as a reserve-provision item, they can only be recorded as other accounts payable (AF.8).

26. In national accounts, for global consistency ('quadruple entry' principle), the payable in the government sector must be counterbalanced by the recording of a receivable in the non-financial corporations sector. If the previous owner of the asset is no longer an institutional unit, due to liquidation, merger/acquisition, etc. (even when the successor entity does not recognise such an account receivable asset in its commercial accounting balance sheet) the receivable continues to be recorded in the accounts of the sector as a notional unit of that sector. Although it may be difficult for statistical compilers to collect data for such imputations from their usual data sources, it is a necessary part of the recording.

## 3.7.4 Accounting example (simplified)

27. Just before the end of year *t*, government implements a new energy policy that foresees a nuclear shut-down in 5 years. It estimates that the cost of decommissioning all the nuclear power plants would total €25 billion. Initially, the energy companies were considered liable for the process. Government considers that this is a risk that is too high for private energy producers to manage and decides to take over their nuclear-related obligations in exchange for €20 billion (which is the amount the energy companies had constituted in accounting provisions at the date of the agreement).

28. At the same time, government creates the Nuclear Waste Disposal Fund to address the future costs of safe disposal of radioactive materials generated by commercial nuclear energy production. The fund receives the €20 billion in cash from the energy companies. The management board of the fund approves a strategy of investing in financial assets with very low volatility while obtaining a long-term return of 1.7 %, such that the transfer has an implied value of €23 billion (instead of €20 billion).

29. The decommissioning and waste management activities begin right after the shut-down of the facilities (at end of year t+5). For simplicity we assume it is completed in a year and that there is an inflation rate of 0 %. Cash inflows over t+1 to t+5 comprise the interest on the financial assets.

Government cash-flows € m

| Year t | t+1 | t+2 | t+3 | t+4 | t+5 | t+6 |
|---|---|---|---|---|---|---|
| 20 000 | 340 | 346 | 352 | 358 | 364 | –25 000 |

Interest accretion and final balance (rounded) AF.89 € m

| Year t | t+1 | t+2 | t+3 | t+4 | t+5 | Final |
|---|---|---|---|---|---|---|
| 23 000 | 390 | 394 | 402 | 408 | 406 | 25 000 |

Net present value of the future decommissioning costs is (in € m):

NPV: €25 000 / (1+1.7 %)5 ≈ €23 000

**Year t**

**General government** | **Corporations**

**Non-financial account**

| U/ΔA | | R | |
|---|---|---|---|
| D.99 | 3 000 | | |
| B.9 | –3 000 | | |

| U/ΔA | | R | |
|---|---|---|---|
| | | D.99 | 3 000 |
| B.9 | 3 000 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | 20 000 | F.8 | 23 000 |
| | | B.9f | –3 000 |

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | –20 000 | | |
| F.8 | 23 000 | | |
| | | B.9f | 3 000 |

**Closing balance sheet**

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | 20 000 | AF.8 | 23 000 |
| | | B.90 | –3 000 |

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | –20 000 | | |
| AF.8 | 23 000 | B.90 | 3 000 |

**Year t+1**

**General government** | **Corporations**

**Non-financial account**

| U/ΔA | | R | |
|---|---|---|---|
| D.4 | 390 | D.4 | 340 |
| B.9 | –50 | | |

| U/ΔA | | R | |
|---|---|---|---|
| | | D.4 | 390 |
| B.9 | 390 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | 340 | F.8 | 390 |
| | | B.9f | –50 |

| ΔA | | ΔL | |
|---|---|---|---|
| F.8 | 390 | | |
| | | B.9f | 390 |

**Closing balance sheet**

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | 20 340 | AF.8 | 23 390 |
| | | B.90 | 3 050 |

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | –20 000 | | |
| AF.8 | 23 390 | | |
| | | B.90 | 3 390 |

**Year t+5**

**General government** | **Corporations**

**Non-financial account**

| U/ΔA | | R | |
|---|---|---|---|
| D.4 | 406 | D.4 | 364 |
| B.9 | –42 | | |

| U/ΔA | | R | |
|---|---|---|---|
| | | D.4 | 406 |
| B.9 | 406 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | 364 | F.8 | 406 |
| | | B.9f | –42 |

| ΔA | | ΔL | |
|---|---|---|---|
| F.8 | 406 | | |
| | | B.9f | 406 |

**Closing balance sheet**

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | 21 760 | AF.8 | 25 000 |
| | | B.90 | –3 240 |

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | –20 000 | | |
| AF.8 | 25 000 | | |
| | | B.90 | 5 000 |

**Year t+6**

| General government | Corporations |
|---|---|

**Non-financial account**

| U/ΔA | | R | |
|---|---|---|---|
| P.51g | 25 000 | D.99 | 25 000 |
| B.9 | 0 | | |

| U/ΔA | | R | |
|---|---|---|---|
| D.99 | 25 000 | | |
| B.9 | –25 000 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | –25 000 | F.8 | –25 000 |
| | | B.9f | 0 |

| ΔA | | ΔL | |
|---|---|---|---|
| F.8 | –25 000 | | |
| | | B.9f | –25 000 |

**Closing balance sheet**

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | –3 240 | AF.8 | 0 |
| | | B.90 | –3 240 |

| ΔA | | ΔL | |
|---|---|---|---|
| AF.2 | –20 000 | | |
| AF.8 | 0 | | |
| | | B.90 | –20 000 |

# 3.8 Annex: selected ESA 2010 transactions

## 3.8.1 Payments by public corporations to government

1. **Other taxes on production (D.29)**

   This category includes all taxes that enterprises incur as a result of engaging in production. They may be payable on land, fixed assets or labour employed in the production process or on certain activities or transactions. They account for a significant part of payments from corporations to government.

2. **Current taxes on income and wealth (D.5) and capital taxes (D.91)**

   In general, it should be clear what is a tax, and public corporations pay taxes as other units do. However, for classification issues, the government's role levying taxes might conflict with its role as the owner of the public unit, such that it is more appropriate to treat a payment of tax as a withdrawal of equity. This is more likely to apply to taxes on transactions initiated by government.

   Relevant examples are the cases of large payments related to privatisation, and large payments related to exceptional sales or revaluations of foreign asset reserves.

3. **Miscellaneous current transfers (D.75)**

   This category includes payments for fines and penalties unless they are undistinguishable from taxes[175].

4. **Dividends (D.421)**

   Dividends arise from ownership of a unit. They apply here to payments from the unit to government that are funded from the unit's income. In ESA 2010, dividends do not apply to payments funded by asset sales, capital gains or reserves accumulated over several years (with the exception of those which are foreseen for smoothing of dividends), even if they are called dividends in the accounts of the unit. These should be recorded as withdrawals of equity in F.5. See chapter 3.5 on the notions of income and dividends.

5. **Other capital transfers (D.99)**

   Capital grants are unrequited payments and so it is difficult to envisage circumstances in which D.99 would be appropriate for the classification of a payment from a market unit to government as corporations are not supposed to give their money away in return for nothing. ESA 2010 lists, among others, the following possibilities:

   - ESA 2010 paragraph 4.165 (h) Major payments in compensation for extensive damage or injuries not covered by insurance policies (except payments by general government or by the rest of the world to the owners of capital goods destroyed or damaged by acts of war, other political events or natural disasters (floods, etc.)). The payments are awarded by courts of law or settled out of court (see ESA 2010, paragraph 4.165 (h)). Examples are payments of compensation for damage caused by major explosions, oil spillages, the side-effects of drugs, etc.;
   - ESA 2010 paragraph 4.165 (i) Extraordinary payments into social insurance funds made by employers (including government) or by government (as part of its social function), in so far as these payments are designed to increase the actuarial reserves of those funds. This option requires the existence of an actual fund of assets to finance the social benefits, with assets and liabilities recorded in AF.6. It would not apply to unfunded social insurance schemes run by government; return of funds by the original debtor to government on previously called guarantee (to be tested by the super-dividend test as stated in ESA 2010 paragraph 20.259).

6. **Standardised guarantees schemes (F.66)**

   Provisions for calls under standardised guarantees (F.66) include the amounts of expected losses that government is expecting in the context of the guarantees given under such schemes. The counterpart is a capital transfer, see chapter 7.4 Government guarantees.

[175] Fines and penalties can also be treated as capital transfers (see section, 2.7.2).

7. **Loans (F.4)**

This includes actual repayment of lending and imputed repayments associated with debt cancellation. In most cases debt cancellation should be recorded as a transaction in F.4. The counterpart is usually a capital transfer from government (D.99), except when privatisation is imminent: the counterpart is a transaction in equity (F.5).

In some cases a debt write-off is recorded in other changes in volume not elsewhere classified (K.5). It could be recorded in changes in sector classification and institutional unit structure (K.61) but only if the write-off is associated with appearance and disappearance of units.

8. **Other equity (F.519)**

**Withdrawal of equity**

This includes significant one-off payments made to government when the payment is funded by the liquidation of assets such as drawing on accumulated reserves; sales of financial or non-financial assets; or realised capital gains. It excludes those payments that are to be classified as dividends.

Payments to government that arise from significant sales of assets at the request of government, or as part of a government policy, should be recorded as withdrawals of equity rather than as dividends or other non-financial transaction.

The classification is appropriate even when the public accounts of the unit describe the transaction as something else such as a dividend or, in some circumstances, a tax.

This treatment applies to indirect privatisation (see chapter 5.2 Sales of financial and non-financial assets). Privatisation receipts in national accounts are treated as the sale of the government's equity in exchange for another type of financial asset (in general liquid assets). Following this logic, the privatisation receipt as such does not improve the government net lending/borrowing (B.9) but modifies its financing. The government's new liquid assets could go towards reducing the government debt, either directly by repurchasing government debt securities, or indirectly by reducing the need for new debt issuance.

In order to ensure consistency and transparency, this treatment of direct privatisation is extended to indirect privatisation where government equity is sold through an intermediary — usually a head office — and the proceeds of the sale are passed on to government. This applies whatever is the legal form of this repayment to the government: dividend, tax, transfer, etc.

To be consistent with the sale of financial assets the treatment also applies to the indirect sale of significant non-financial assets (with no impact on net lending/borrowing (B.9)).

**Withdrawals of equity in kind**

The case of payments in kind to government is difficult because of the conflicting desire to be consistent with both the treatment of the indirect sale of non-financial assets (treated as F.5) and the desire for symmetry with payments in kind by government to a public corporation (see D.9 below).

When the transfer of assets between public corporations and government is associated with other restructuring and changes in functions and responsibilities, it is appropriate to record the transfers in kind as a change in classification and structure (K.61), in the other changes in volume of assets account.

**Withdrawals of equity from central bank**

The classification F.5 also applies to some transactions between government and central banks. This is because central bank assets are treated in national accounts as public property. For example, a fall in the central bank's gold and foreign exchange reserves would reduce the value of government's equity in the central bank.

9. **Changes in sector classification and institutional unit structure (K.61)**

This is appropriate when units are created, closed down, or merged; or when there is a significant change in the functions and responsibilities of units that cannot be recorded adequately in the transaction accounts. This category also applies when assets revert to government ownership after a period during which the public corporation has been allowed to exploit them (see chapter 6.3 on contracts related to fixed assets, such as concessions).

## 3.8.2 Payments by government to public units

10. In several of these cases it is important to consider whether government is making payments to increase its investment in financial assets, as any rational investor might do, or whether it is seeking to support particular types of economic activity. The phrase 'capital injection' is often used to describe large payments from government to public corporations. It is not a national accounts concept. In national accounts, it could be either a capital transfer, a transaction in equity or a partition of the two.

11. **Subsidies (D.3)**

    These are regular payments by government to reduce prices charged by the unit and cover losses. It is inappropriate to consider such payments as injections of equity (F.5) because they fund current expenditure and they are often paid conditionally on the unit behaving in a particular way, such as charging low prices, which can reduce the value of the equity.

12. **Other current transfers (D.7)**

    Abnormal pension charges would be in miscellaneous current transfers (D.75), see ESA 2010 paragraph 4.138 (b).

13. **Investment grants (D.92)**

    This applies to all unrequited payments to public units conditional on the funds being used for fixed capital formation rather than current expenditure.

    Capital expenditure financed by government payments results in an increase of the value of government's equity in the public corporation at inception. However, this is not a reason for classifying the payment as an injection of equity (F.5), see ESA 2010 paragraph 20.200, notably because there is no certainty that the value of the government's equity will increase by the same amount. The capital formation may be used by the corporation to implement the government's economic and social policies (for example building railway lines or hospitals) rather than to increase profitability. In other words it is important to consider government's objectives when making 'capital injections' into a public corporation.

    'Capital injections in kind' are when government transfers the ownership of fixed capital assets from itself to a public corporation (see chapter 3.3 Capital injections into public quasi-corporations and section 3.3.2 Treatment in national accounts). Straightforward gifts of fixed assets by government to a corporation should be rearranged as investment grants, with corresponding amounts recorded as acquisition of the asset under gross fixed capital formation. This has no impact on government net lending/net borrowing (B.9).

    In more complicated cases, where the injection in kind is associated with other restructuring of assets and liabilities and, perhaps the creation of new units, it is better to record the outcome in the other changes in the volume of assets account (K.5) or changes in classification and structure account (K.61) according to the provisions related to these flows. This also leaves government net lending/net borrowing (B.9) unchanged.

14. **Other capital transfers (D.99)**

    ESA 2010 paragraph 4.165 identifies that D.99 is appropriate in the following cases:

    - compensations for damage;
    - payments to cover losses made over several years or exceptional losses;
    - counterparts to the cancellation of debts except when part of a privatisation (recorded in F.5).

    Item D.99 is also relevant for the acquisition of financial assets by government in cases where the transactions are not undertaken at market prices but are undertaken primarily to support the unit. For example government might buy bad debts or give soft loans or grant income contingent loans (see chapter 4.7). In such cases, it is necessary to estimate the difference between the market value of the financial assets acquired and the price paid by government. This difference is recorded as a capital transfer from government to the unit. In effect, the payment by government is treated partly as an acquisition of financial assets and partly as a gift. This treatment is often appropriate for financial defeasance structures set up to rescue banks.

15. **Loans (F.4)**

When classifying payments to public units as loans it is important to examine the likelihood of repayment and the commercial arrangements for repayment and payment of interest. In cases where repayment is uncertain, it might be more appropriate to record the loans as capital transfers or, where the interest payments are not fixed, to record them as the acquisition of other equity.

16. **Equity and investment fund shares or units (F.5)**

Acquisition of equity in public corporations — this category excludes any payment conditional on the acquisition of fixed capital and payments in kind: these should be recorded as investment grants. An important characteristic of an injection of equity is that the public unit should have freedom to use the funds in the way it thinks best to increase the value of the business. There are three cases:

**Government is the only shareholder in the public unit**

Equity (F.51) might be appropriate for the classification of some payments by government to the unit but only if strict conditions apply. The payments must be made for financial reasons with the same objectives that a private investor would have when investing in a business.

In other words, government must expect to earn a market rate of return, through either higher dividends from its investment or higher equity value. Payments to the unit for other purposes (for example, to cover losses) must be classified as capital transfers.

**Government and some other units are partners in ownership**

Some payments by government might entitle it to a larger share of the unit and its future profits. If the unit were run in a commercial way so that the government would earn a return on its investment, classification as F.5 would be appropriate.

If the objective of the increase in the government's shareholding would not provide financial benefits, perhaps because the unit's objectives are to support government's economic and social policies rather than profit making, classification as a capital transfer would be more appropriate.

**Government owns tradable shares in the public unit**

If the government acquires tradable shares for its payment, which it could immediately sell for the price paid, then classification as the acquisition of shares is correct.

# 3.9 Keywords and accounting references

| | |
|---|---|
| Capital transfers | ESA 2010, 4.145 and following |
| Capital transfers in kind | ESA 2010, 4.146 |
| Changes in classification and structure | ESA 2010, 6.17-6.20 |
| Corporate restructuring | ESA 2010, 6.19-6.20 |
| Debt cancellation, assumption of liabilities | ESA 2010, 5.36-5.39 |
| Dividends | ESA 2010, 4.53 |
| Entrepreneurial income | ESA 2010, 8.26-8.28 |
| Equity | ESA 2010, 5.141 and following |
| Equity capital | ESA 2010, 5.148 |
| Financial transactions | ESA 2010, 5.17, 5.19-5.22, 5.32-5.35 |
| Institutional unit | ESA 2010, 2.12 |
| Investment grants | ESA 2010, 4.152-4.163 |
| Net worth | ESA 2010, 7.01 |
| Non-monetary transactions | ESA 2010, 1.70 |
| Other accounts receivable/payable | ESA 2010, 5.230-5.244 |
| Other capital transfers | ESA 2010, 4.164-4.167 |
| Own funds | ESA 2010, 7.07 |
| Persistent losses | ESA 2010, 4.35 (c), 4.61 |
| Property income | ESA 2010, 4.41 |
| Quasi-corporation | ESA 2010, 2.13 |
| Subsidies | ESA 2010, 4.30 |
| Terminal (e.g. decommissioning) costs | ESA 2010 3.129 (h) |
| Consumption of fixed capital for terminal costs | ESA 2010 3.139 |

# 4 Relations between government and the financial sector

## 4.1 Overview

1. This part concerns the recording of relations between the government and the national central bank (NCB), and between government and other financial institutions in the context of public support for them.
2. Some NCBs have been observed making significant payments to government. These reduce the government net lending/borrowing (B.9) if they are recorded as non-financial transactions. It is not always easy to determine whether such transactions are financial or non-financial because the government is in a sense the owner of the national central bank and so can influence it to undertake transactions with the objective of reducing the government net lending/borrowing (B.9). A key issue is in determining whether government receipts from the NCB that are labelled as dividends or taxes should be recorded in national accounts as withdrawals of equity because that reflects better the economic reality (but does not improve the government net lending/borrowing (B.9)).
3. Government support for financial institutions in times of severe financial crisis is not covered by this Manual but is subject to separate recording conventions developed by Eurostat. Cases of financial support outside of such times, sometimes referred to as 'financial defeasance' are dealt with in chapter 4.5.

# 4.2 Payments between the central bank and government

## 4.2.1 Background

1. The management of asset portfolios and interventions in foreign exchange markets for monetary policy purposes may generate capital gains for central banks, which are liable to be distributed to general government, generally in the form of dividends. The amounts involved may sometimes be very large.

2. Capital gains are not income in national accounts and therefore payments to government financed out of capital gains cannot be recorded as property income. This chapter describes how the recording of capital gains made by the central bank as property income in the government accounts should be avoided. It also states that the rules on capital injections when government makes a payment to the central bank. Such payments by government may be made to cover losses made by the central bank. Capital losses may occur due to foreign exchange holding losses. Operating losses may exceptionally occur due to the fact that interest and other operating income do not cover operational costs made by the central bank.[176]

## 4.2.2 Treatment in national accounts

3. In national accounts, capital gains have to be excluded from the distributable profits of the central bank, which therefore essentially results, on one hand, from the net interest revenue (on foreign exchange, on monetary operations with the banking system, and on other assets and liabilities) and, on the other hand, from the operating costs incurred by the central banks. There may be also, in a various proportions, revenue from the sales of some services (including to government). For this purpose, a practical method may be applied using general available information on the central bank's profits and losses and payments between the central bank and government. It consists of comparing the two following amounts:

   a) the amount of operating profits/losses: this amount is equal to the total profit/loss of the NCB before distribution minus the capital gains/losses included in the total profit/loss. Thus, it is equal to net interest income and other operating income minus operational costs, such as staff costs;

   b) the amount paid to general government as part of distributed profits.

4. For the central banks that apply the Euro-system accounting rules (including many EU Members not part of the euro area), the item 'net result of financial operations, write-downs and risk provisions' (items 2.1, 2.2 and 2.3 of the profit and loss account in Annex IX of ECB/2010/20) should be deducted from the total profit/loss for the year to arrive at the operating profit/loss. The net result of financial operations includes realised holding gains/losses arising from financial operations as well as unrealised holding losses (so-called 'write-downs') and transfers to/from provisions for foreign exchange rate and interest rate risks. To compute the operating profit/loss in a harmonised manner among EU Member States, unrealised gains on financial assets that are part of the total profit of non-Euro-system central banks should be deducted from the total profit together with any realised holding gains and (un)realised losses included in the total profit.

5. The following rules apply:

   1) if the payment to government (B) is equal to the operating profit (A), the whole payment to government (B) is recorded as property income (D.4) in the government accounts;

   2) if the payment to government (B) is lower than the operating profit (A), the whole payment to government (B) is also recorded as property income in the government accounts. This is true for all

[176] The Eurogroup agreed in February 2012 that certain euro area Member States would transfer to the Greek government the profits made on Greek government bonds held by their national central banks on an annual frequency by June. The transfers between these Member States (expenditure) and Greece (revenue) are recorded as current transfers (D.75) while the transfers from the NCBs to their respective government should fully follow the rules stated in this chapter, notably as concerns the distinction between dividends and withdrawal of equity.

cases where the payment to government (B) is lower than the operating profit (A), whether due to capital losses or due to an addition to the central bank's reserves;

3) where there is no payment to government, no property income is recorded in the government accounts;

4) if the payment to government (B) is higher than the operating profit (A), an amount equal to (A) is recorded as property income. The difference between (B) and (A) is recorded as an equity withdrawal by government;

5) if the operating profit (A) is zero or if there is an operating loss, no amount can be recorded as property income and the whole payment (B) is recorded as a withdrawal of equity (F.5) by government.

6. These rules apply to payments that the government receives in its capacity as a shareholder of the central bank. Regular corporate taxes on profits (that are also levied on the profits of other corporations) paid by the central bank to government are recorded as a current tax on income and wealth.

7. If government is not the only recipient of the central bank's profits, and they are distributed among several owners, the rules from this section 4.2.2 have to be used to determine which part of total distributable profit should be recorded as property income paid by the central bank to all owners and which part as a withdrawal of equity by all owners. When government receives a part of the distributable profits, then the same proportion of total property income can be recorded in the government accounts as property income and the same proportion of the total withdrawal of equity should be recorded in the government accounts as a withdrawal of equity by government.

## 4.2.3 Rationale of the treatment

8. Holding gains and losses result from changes in the price of assets. They are not the result of production or the distribution of income from production and are recorded in the other changes in assets accounts as a change in the value of the assets and liabilities (ESA 2010 paragraphs 1.80 and 1.81). Because holding gains are not distributive transactions, they cannot be recorded as property income (ESA 2010 paragraph 4.01). Capital gains by central banks, as referred to in private bookkeeping, are not conceptually different from holding gains, as understood in national accounts: the only difference consists in the way they are calculated. The bookkeeping of the Euro-system central banks for instance includes realised holding gains and both realised and unrealised holding losses as capital gains/losses in total profit. Some non-Euro-system central banks may also include unrealised holding gains in their total profit.[177] Irrespective of how capital gains are computed, they are not part of income.

9. When a payment to government from the central bank (B) is lower than the operating profit (A) due to capital losses, the total payment (B) is recorded as property income (see rule 2 in paragraph 5 in the previous section 4.2.2). In such a case it is not allowed to record an amount (A) as property income and the difference between (B) and (A) as an acquisition of equity in the central bank by government. Thus, capital gains and losses are somehow not treated symmetrically. This is explained in more detail in Table 1.

   Consider the following two cases in Table 1:

   - case X presents the case where the central bank experiences a capital loss;
   - case Y describes the case where the central bank has a capital gain.

[177] However, the basic accounting principle of conservatism normally leads accountants to anticipate or disclose losses, but it does not allow a similar action for gains. For example, potential losses from lawsuits will be reported on the financial statements or in the notes, but potential gains will not be reported.

**Table 1: Annual accounts of the central bank and government**

| **Recording in central bank's bookkeeping** | **Case X** | **Case Y** |
|---|---|---|
| Operating profit (a) | 100 | 100 |
| Capital gain/loss (d) | -20 | 20 |
| Total profit (e) = (a) + (d) | 80 | 120 |
| Payment to government (b) | 80 | 120 |
| **Recording payment in government accounts** | **Case X** | **Case Y** |
| D.4R Property income | 80 | 100 |
| B.9 Net lending/borrowing | 80 | 100 |
| F.2 Currency and deposits | 80 | 120 |
| F.5 Equity injection | 0 | |
| F.5 Equity withdrawal | | -20 |
| Revaluation of F.5 | 0 | 20 |

10. In both cases the total profit is distributed to government. The upper part of the table shows the recording in the central bank's bookkeeping system.

    The lower part of table 1 shows the recording of case X and Y according to the rules set out in the previous section 4.2.2 Treatment in national accounts.

11. Rule 2) from section 4.2.2 determines that the whole payment in case X should be recorded as property income. Rule 4) determines that part of the payment in case Y should be recorded as property income and that part of the payment should be recorded as a withdrawal of equity. A symmetric recording of capital gains and losses would have led to the recording of 100 as property income and 20 as an equity injection by government in case X. Such a treatment would have been appropriate within a reinvested earnings framework, but this approach is only accepted in the international accounting standards (ESA 2010, IMF *Balance of Payments Manual*) in the case of foreign direct investment.

### 4.2.3.1 LEGAL AND ECONOMIC OWNERSHIP

12. The rules in section 4.2.2 only apply to payments made to government in its capacity as shareholder of the central bank. Even if, from a legal point of view, there is no ownership relation between government and the central bank, equity is to be recorded in national accounts to reflect the fact that the central bank holds and manages reserve assets on behalf of the nation, and hence of government. Moreover, if the government receives part of the profits on a regular basis or has a right over the net assets in case of liquidation, this also indicates that government is the economic owner of the central bank. In such cases where government has economic ownership despite not being the legal owner, government ownership in the central bank is recorded as other equity in national accounts.

### 4.2.3.2 VALUATION OF GOVERNMENT EQUITY

13. The equity stake of government in the central bank is valued on the basis of net assets. This includes equity capital (issued), revaluation reserves (notably gold and foreign exchange), legal and dedicated reserves, and retained earnings.

### 4.2.3.3 OTHER PAYMENTS

14. The rules above do not apply to payments made by the central bank for services provided by government or to the payment of taxes. Regular corporate taxes to which other corporations are also subjected, paid by the central bank to government are recorded as a tax on income (D.51) with the exception of taxes paid on exceptional transactions (see chapter 4.3 The sale of gold and foreign exchange by the central bank). The fact that capital gains may be taxed as well is not an issue. According to ESA 2010, taxes on income are not only levied on income, but also on profits and capital gains (see ESA 2010 paragraph 4.78).

### 4.2.4 Accounting examples

Table 2 shows some stylised examples of the annual profit and loss account of the central bank and payments to government. The proper recording in the government accounts can be determined by comparing the payment to government (B) with the operating profit/loss (A). The holding gains/losses in F.5 held by general government are computed by deducting the amount of property income paid from the total profit.

**Table 2: Payments from central bank to government and their recording in national accounts**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Total profit (+)/loss (-) | 100 | 150 | 150 | 100 | 100 | 150 | 50 | 50 |
| Operating profit (+)/loss (-) | 100 | 100 | 100 | 150 | 150 | 100 | -50 | -50 |
| Capital gain (+)/loss (-) | 0 | 50 | 50 | -50 | -50 | 50 | 100 | 100 |
| Payment from NCB to Government | 100 | 100 | 50 | 100 | 150 | 150 | 50 | 100 |
| Change in reserves due to retained earnings* | 0 | 50 | 100 | 0 | -50 | 0 | 0 | -50 |
| **Recording in government accounts** | | | | | | | | |
| D.4R property income received | 100 | 100 | 50 | 100 | 150 | 100 | | |
| Impact on B.9 net lending (+) | 100 | 100 | 50 | 100 | 150 | 100 | | |
| F.5 A acquisition of equity | | | | | | | | |
| F.5 A withdrawal of equity | | | | | | -50 | -50 | -100 |
| F.5 A Holding gain (+) loss (-) | | 50 | 100 | 0 | -50 | 50 | 50 | 50 |

* Change in reserves due to other reasons is neglected in these examples (legal and dedicated reserves)

**Table 3: Profit and loss account of a central bank**

Table 3 represents the published profit and loss accounts of a central bank that applies the Euro-system accounting rules.

| |
|---|
| 1.1. Interest income |
| 1.2. Interest expense |
| 1. Net interest income |
| 2.1. Realised gains/losses arising from financial operations |
| 2.2. Write-downs on financial assets and provisions |
| 2.3. Transfer to/from provisions for foreign exchange rate, interest rate, credit and gold rate risks |
| 2. Net result of financial operations, write-downs and risk provisions |
| 3.1. Fees and commissions income |
| 3.2. Fees and commissions expense |
| 3. Net income/expense from fees and commissions |
| 4. Income from equity shares and participating interests |
| 5. Net result of pooling of monetary income |
| 6. Other income |
| **Total net income** |
| 7. Staff costs |
| 8. Administrative expenses |
| 9. Depreciation of tangible and intangible fixed assets |

| |
|---|
| 10. Banknote production services |
| 11. Other expenses |
| 12. Income tax and other government charges on income |
| **(Loss)/profit for the year** |

The operating profit/loss can usually be computed by deducting item 2 of the profit and loss account 'net result of financial operations, write downs and risk provisions' from the total profit/loss for the year, to arrive at the operating profit/loss and by deducting all other provisions and reserves not recorded in item 2, since it cannot be completely excluded that, apart from item 2, other items of the profit and loss account of a central bank also contains provisions and reserves (for instance item 5). These will then also have to be deducted from the total profit/loss to obtain the operating profit/loss.

## 4.2.5 Annex: Bookkeeping in central banks

### 4.2.5.1 INTRODUCTION

15. Following the creation of the euro area, the European System of Central Banks (ESCB) has harmonised its accounting practices on all central banking related activities for Euro-system financial reporting purposes. The harmonisation rules are described in ECB guideline of 11 November 2010 on the legal framework and financial reporting in the European System of Central Banks (ECB/2010/20) and the amending ECB Guideline of 10 December 2012 (ECB/2012/29).

16. While the ECB Guidelines are legally binding to euro area NCBs (the Euro-system), a number of EU NCBs of non-participating Member States have also aligned their practices to them as preparatory step to a possible adoption of the euro. The Guidelines are not mandatory for some items ('other assets') for which the rules are only recommended. When a particular item is not covered by the Guideline, central banks apply International Financial Standards or national laws.

17. The implementation of the above-mentioned ECB Guidelines has harmonised the accounting treatment of gains and losses within the Euro-system. However, the distribution of NCB profits is not determined by above-mentioned Guideline, but is governed by national law or based on an agreement with the Ministry of Finance and is still very heterogeneous from one country to another.

### 4.2.5.2 RECORDING CAPITAL GAINS/LOSSES

18. Realised gains or losses occur when financial assets are sold; while unrealised gains or losses are generated when financial assets are kept on the books and revalued. This annex presents firstly, the treatment of both realised and unrealised gains and losses in the Euro-system bookkeeping, and secondly the existing practices regarding the profit distribution of the EU NCBs. The Euro-system accounting concepts used hereafter do not necessarily correspond to the wordings used in national accounts (e.g. income).

#### 4.2.5.2.1. Income recognition and balance sheet valuation Euro-system rules

19. The rules for income recognition and balance sheet valuation are based on a prudent accounting approach whereby unrealised capital gains are not recognised as income (and therefore are not distributed). The following main rules apply:

- realised gains and losses are taken to the profit and loss account;
- unrealised gains are not recognised as income in the profit and loss account but they are recorded on balance sheet in a revaluation account;
- unrealised losses are taken at year-end to the profit and loss account if they exceed previous revaluation gains booked in the revaluation account; the unrealised losses taken to the profit and loss account cannot be netted-out by new unrealised gains in subsequent years;
- there is no netting of unrealised losses in any security, in any currency or in gold holdings against unrealised gains in other securities or currencies or gold.

20. These rules apply to gold, assets and liabilities in foreign currency, non-Held-to-Maturity marketable securities, and marketable equity instruments that are not participating interests and are not held as permanent investments, and off balance sheet instruments. Held-to-maturity securities and non-

marketable securities are presented at amortised cost subject to impairment. Illiquid equity shares, participating interests, and other equity shares held as permanent investment are also valued at cost subject to impairment while loans are presented at nominal value (or cost).

#### 4.2.5.2.2. Other systems

21. For those NCBs that have not yet implemented the ESCB Guideline, a balance sheet revaluation item that includes unrealised gains may also be available. However, in some cases all valuation gains and losses are accounted in the profit and loss account.

### 4.2.5.3 RECORDING DISTRIBUTION OF PROFITS

22. Governments are usually the main shareholders of national central banks and therefore are the main beneficiaries of the distributed profits. The modalities in which the profits of the NCBs are attributed and distributed to the respective governments are, though, rather heterogeneous across the different EU Member States as this is subject to national practices.

23. For most NCBs, the allocation of profit is in most cases codified in national law but in a few cases, the profit distribution is based on an agreement between the central bank and the Ministry of Finance. In one case, where the government is not a legal shareholder, the main part of the NCB's profit is transferred to the government. In this case, the government's economic ownership of the NCB is recognised in the national accounts with the government recorded to hold other equity in the NCB.

24. The level of profit distributed to shareholders varies across the ESCB. In some cases, the profit is equally shared between the NCB and the shareholders, while in other cases the shareholders (mainly the government) receive the bulk of the net profit. While some NCBs distribute pre-determined percentages of the net profit, other NCBs restrict the profit distribution depending on the level of reserves and provisions.

25. To protect themselves against foreign exchange and interest rate risk, a number of NCBs may transfer part of the profits to general provisions and reserves. The profit distribution to government is asymmetrical in the sense that the profits at least partially lead to payments to governments while losses do not necessarily lead (only in exceptional cases) to a payment from government to the NCB. In order to cover possible losses when they arise, general risk provisions and reserves might be created as financial buffers.

26. A new paragraph was inserted in ECB Guideline ECB/2012/29, whereby: *Taking into due consideration the nature of the activities of the NCBs, an NCB may establish a provision for foreign exchange rate, interest rate, credit and gold price risks on its balance sheet. The NCB shall decide on the size and use of the provision on the basis of a reasoned estimate of the NCB's risk exposure*. However, this article cannot supersede national laws and the creation of general provisions and reserves is still subject to national legislation. A common definition of these two terms is as follows (and is the case for the ESCB accounting guideline):

- '**Provisions** are defined as amounts set aside before arriving at the profit or loss figure in order to provide for any known or expected liability or risk, the cost of which cannot be accurately determined'.
- '**Reserves** are considered to be amounts set aside out of distributable profits, which are not intended to meet any specific liability, contingency or expected diminution in value of assets known to exist at the balance sheet date'.

### 4.2.5.4 SPECIAL TRANSITIONAL RULES FOR COUNTRIES ENTERING THE EURO AREA

27. NCBs revalue all financial assets and liabilities at the date they become members of the Euro-system. Unrealised gains, which arose before entry into the euro area, are separated from those unrealised valuation gains arising after the entry into the euro area. The ECB Accounting Guideline recommends the NCBs not to distribute unrealised gains during the transitional period leading to the entry into the Euro-system. In this case, unrealised gains, which arose before entry into the euro area, can be distributed once they have actually been realised through transactions that occur after the entry in the euro area.

# 4.3 The sale of gold and foreign exchange by the central bank

## 4.3.1 Background

1. The proceeds of a sale of gold or other reserve assets by the central bank may be transferred to government. This chapter explains why such a transfer does not affect government net lending/borrowing because it is considered a withdrawal of equity. This treatment is shortly mentioned in ESA 2010 paragraph 20.217.

2. It is worthwhile, first, to give a definition of reserve assets. Such a definition may be found in the IMF's *Balance of Payment Manual*: *Reserve assets are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing)*. Reserve assets must be foreign currency assets and assets that actually exist. Potential assets are excluded. Underlying the concept of reserve assets are the notions of 'control,' and 'availability for use' by the monetary authorities.[178] Reserve assets comprise monetary gold, SDR holdings, reserve position in the IMF, currency and deposits, securities (including debt and equity securities), financial derivatives, and other claims (loans and other financial instruments).[179] In the following sections, only gold and foreign exchange assets are considered.

## 4.3.2 Treatment in national accounts

3. A central bank may sell a significant part of its reserve assets and pay part or all of the proceeds to government. In such a case, the payment of proceeds to government is completely recorded in the financial accounts of government and the central bank. It is recorded as a withdrawal of shares or other equity (F.5) from the central bank by government, with a counterpart entry as an increase in a financial asset (most likely deposits (F.2)) held by government, or, possibly, a decrease in a financial claim of government (loans (F.4) for instance) on the central bank.

4. This treatment in the national accounts has to be made irrespective of how the payment is labelled in the central bank's bookkeeping or in public accounts, such as a dividend or taxes for instance. In the case of large payments related to an exceptional sale of gold or foreign exchange reserves, the payment of taxes has to be recorded as a withdrawal of equity (see chapter 4.2 Payments between the central bank and government).

5. In national accounts, the correct recording of the sale of gold in the NCB's accounts depends on whether the gold sold is monetary gold or not. Monetary gold is a financial asset, is gold to which the monetary authorities (or others who are subject to the effective control of the monetary authorities) have title, and is held as reserve assets. Non-monetary gold is a valuable and hence a non-financial asset. The sale of monetary gold will have no impact on the net lending/borrowing (B.9) of the central bank. The sale of non-monetary gold (i.e. monetary gold that has been demonetised) will affect net lending/borrowing (B.9) of the central bank. In both cases the payment of proceeds by the central bank to government has no impact on the net lending/borrowing (B.9) of government.

## 4.3.3 Rationale of the treatment

### 4.3.3.1 THE SPECIFIC NATURE OF RESERVE ASSETS

6. Reserve assets have specific features compared to other financial instruments. Although the central bank has a full autonomy for managing them, this institution does not act in self-interest like a corporation, i.e. by maximising their shareholder's profits or wealth. The role of the central bank

[178] IMF: *Balance of Payments and International Investment Position Manual* Sixth Edition (BPM6) (2009), chapter 6 — Functional categories, F.I Reserve assets, page 111.
[179] See BPM6, Box 6.5: Components of Reserve Assets and Reserve-Related Liabilities, page 112.

concerning the management of foreign assets is fixed by specific legislation. They are managed for macro-economic purposes and for the public interest, in the framework of monetary policy. Thus, these assets are not really owned by the units that manage them. They are owned by the nation, represented in national accounts by general government.

#### 4.3.3.2 THE RECORDING OF FOREIGN EXCHANGE IN CENTRAL BANKS' BALANCE SHEETS

7. The above-mentioned specific nature of foreign exchange held by central bank has to be reflected in national accounts under the form of equity recorded on the asset side of general government and on the liability side of the central bank. Considerations and uniformity of statistical treatment across EU Member States are given a more prominent role than the legal status of the central bank. Even if, from a legal point of view, there is no ownership relation between government and the central bank, equity is to be recorded in national accounts to reflect the fact that the central bank holds and manages reserve assets on behalf of the nation, and hence of government, or that government is the economic owner of the central bank, because it has right over the net assets in case of liquidation or receives part of the profits on a regular basis (ESA 2010 paragraph 5.148).

8. The question is how to value the equity of government in the central bank in respect of the reserve asset holding. To answer this question, it is worth considering the money creation process due to foreign transactions: at the time reserve assets are acquired by the central bank, there is most likely, in its balance sheet, a counterpart entry on the liabilities side to record the issuance of (base) money. When the market price of reserve assets acquired in this way increases, there is a holding gain. In national accounts balance sheets, the holding gain leads to increase in the value of the instrument on the asset side of the central bank's balance sheet. This increase on the asset side has a counterpart on the liability side: an increase in government equity.

9. Thus, at a given point in time, the value of government equity in the central bank's balance sheet in respect of reserve assets will be captured by the difference between the prices at which these assets were acquired by the central bank and their present market prices. More precisely, it is equal to the accumulation of holding gains/losses minus any withdrawals of equity made by government. At this stage, it is useful to make a distinction between monetary gold and foreign exchange assets.

10. Gold was generally acquired by central banks a long time ago and gold prices have greatly increased since that time. As a consequence, government equity in respect of the holding of monetary gold is generally important insofar as central banks have kept reserve assets under this form.

11. It is more difficult to be so conclusive about the equity related to foreign exchange assets: the final influence of movements in exchange rates depends on too many factors, such as impact on both imports and exports, currency of settlements, etc. It might happen that the value of equity declines and even becomes negative due to holding losses.

12. Nevertheless, the existence of payments to government, related to foreign exchange assets, implies a positive difference between the present market value of foreign currencies and their acquisition price; if there were a loss, there would be no room for payments from central bank to government. So, in the cases under consideration there has been a holding gain, and as a consequence the value of government equity in the central bank in respect of foreign exchange assets has increased.

13. All payments made by the central bank to government related to the activity of holding and managing reserve assets, occur because government has equity in the central bank in respect of these reserve assets. They are thus treated as a withdrawal of shares and other equity (F.5).

#### 4.3.3.3 MONETARY VS. NON-MONETARY GOLD

14. The sale of monetary gold is recorded differently in the NCB's accounts than non-monetary gold. Monetary gold is a financial asset held by monetary authorities (the central bank or in some countries the central government) as part of the foreign reserves (see ESA 2010 paragraph 5.57). If gold is sold by the NCB to other (i.e. foreign) monetary authorities, it is recorded in the financial accounts of the domestic central bank as a decrease in financial assets with as a counterpart entry a decrease in the liabilities of the central bank vis-à-vis foreign monetary authorities (or an increase in the financial claims of the central bank on foreign monetary authorities). If gold is sold to non-monetary authorities, it is treated as a disposal of a valuable. Such a sale is preceded by a demonetisation of monetary gold in the central bank's accounts.

15. Demonetisation, meaning the reclassification from monetary to non-monetary gold, is recorded in the changes in classification of assets and liabilities (K.62) of the central bank — see ESA 2010 paragraphs 6.22–6.24).[180] Although the sale of non-monetary gold is recorded differently in the central bank's account than the sale of monetary gold, the transfer of the proceeds is in both cases recorded as an equity withdrawal because in both cases gold is managed by the central bank on behalf of the nation and hence of government.

16. Furthermore, the sale of gold does not affect the operating profits of the central bank. The transfer of the sale proceeds to government can therefore not be recorded as property income in the government accounts irrespective of whether gold has been sold to monetary authorities or other institutional sectors. This treatment of the sale of non-monetary gold is consistent with the recording of indirect sales of non-financial assets (see sub-section 5.2.2.4 Indirect sale of non-financial assets).

17. A gold sales agreement over 5 years between a number of European central banks has been renewed in 2009 proposing a concerted program of sales over a period of 5 years and a threshold of annual sales that is not to exceed 500 tons in total.[181]

### 4.3.3.4 ACCOUNTING EXAMPLES

**Example 1**

- Assume that the central bank holds monetary gold that increases by €100 million in value in year 1.
- In year 2, the central bank sells €90 million worth of gold to foreign monetary authorities.
- In year 3, the proceeds are transferred to government.

**YEAR 1**

**General government** | **NCB**

**Opening balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z | |

| A | | L | |
|---|---|---|---|
| AF.1 | y | AF.2 | b |
| | | AF.5 | z |

**Other changes in assets accounts**

| ΔA | | ΔL |
|---|---|---|
| AF.5 | 100 | |

| ΔA | | ΔL | |
|---|---|---|---|
| AF.1 | 100 | AF.5 | 100 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z +100 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y +100 | AF.2 | b |
| | | AF.5 | z +100 |

**YEAR 2**

**General government** | **NCB**

**Opening balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z +100 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y +100 | AF.2 | b |
| | | AF.5 | z +100 |

[180] There may also be the reverse operation 'monetisation' (for instance sized gold by custom transferred to central bank).

[181] See http://www.ecb.int/press/pr/date/2009/html/pr090807.en.html.

**Financial account**

| ΔA | | ΔL | ΔA | | ΔL | |
|---|---|---|---|---|---|---|
| | | | F.1 | -90 | F.2/S.2 | –90 |

**Closing balance sheet**

| A | | L | A | | L | |
|---|---|---|---|---|---|---|
| AF.2 | a | | AF.1 | y +10 | AF.2 | b–90 |
| AF.5 | z +100 | | | | AF.5 | z +100 |

**YEAR 3**

**General government** **NCB**

**Opening balance sheet**

| A | | L | A | | L | |
|---|---|---|---|---|---|---|
| AF.2 | a | | AF.1 | y +10 | AF.2 | b–90 |
| AF.5 | z +100 | | | | AF.5 | z +100 |

**Financial account**

| ΔA | | ΔL | ΔA | | ΔL | |
|---|---|---|---|---|---|---|
| F.2 | 90 | | | | F.2/S.13 | +90 |
| F.5 | –90 | | | | F.5 | –90 |

**Closing balance sheet**

| A | | L | A | | L | |
|---|---|---|---|---|---|---|
| AF.2 | a +90 | | AF.1 | y+10 | AF.2 | b |
| AF.5 | z+10 | | | | AF.5 | z+10 |

**Example 2**

- Assume that the central bank holds monetary gold that increases by €100 million in value in year 1.
- In year 2, the central bank sells €90 million worth of gold to financial corporations. The gold is demonetised before the actual sale takes place.
- In year 3, the proceeds are transferred to government.

**YEAR 1**

**General government** **NCB**

**Opening balance sheet**

| A | | L | A | | L | |
|---|---|---|---|---|---|---|
| AF.2 | a | | AF.1 | y | AF.2 | b |
| AF.5 | z | | AN.13 | 0 | AF.5 | z |

**Other changes in assets accounts**

| ΔA | | ΔL | ΔA | | ΔL | |
|---|---|---|---|---|---|---|
| AF.5 | 100 | | AF.1 | 100 | AF.5 | 100 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z +100 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y +100 | AF.2 | b |
| AN.13 | 0 | AF.5 | z +100 |

## YEAR 2

**General government** **NCB**

**Opening balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z +100 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y +100 | AF.2 | b |
| AN.13 | 0 | AF.5 | z +100 |

**Other changes in assets accounts**

| ΔA | | ΔL |
|---|---|---|
| | | |

| ΔA | | ΔL |
|---|---|---|
| AN.13 | +90 | |
| AF.1 | –90 | |

**Non-financial account**

| U/ΔA | | R/ΔL |
|---|---|---|
| | | |

| U/ΔA | | R/ΔLΔ |
|---|---|---|
| AN.13 | –90 | |

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| | | |

| ΔA | | ΔL |
|---|---|---|
| | F.2/non S.13 | –90 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z +100 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y+10 | AF.2 | b–90 |
| AN.13 | 0 | AF.5 | z +100 |

## YEAR 3

**General government** **NCB**

**Opening balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a | |
| AF.5 | z +100 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y+10 | AF.2 | b–90 |
| AN.13 | 0 | AF.5 | z +100 |

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| F.2 | 90 | |
| F.5 | –90 | |

| ΔA | | ΔL |
|---|---|---|
| | F.2/S.13 | +90 |
| | F.5 | –90 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AF.2 | a +90 | |
| AF.5 | z+10 | |

| A | | L | |
|---|---|---|---|
| AF.1 | y+10 | AF.2 | b |
| AN.13 | 0 | AF.5 | z+10 |

# 4.4 Non-returned banknotes and coins after a cash changeover

## 4.4.1 Background

1. During a cash changeover, banknotes and coins in circulation denominated in national currency are returned to the respective issuers, which are the national central banks for banknotes and, in most cases, the national governments for coins. However, part of the national currency previously in circulation will never be returned because it has been destroyed or lost, or because holders have decided to keep it for collection or other reasons.
2. When an NCB no longer exchanges or expects to exchange old national banknotes, it writes off a liability. This write-off is then recorded as a profit in the profit and loss statement of the NCB. The profits from the non-return of banknotes in national currency may ultimately accrue to government, either as a separate payment or as part of the regular payment of dividends and/or income taxes by the national central banks (NCB). The issue is whether such a payment affects government net lending/borrowing (B.9).
3. The ESA 2010 recording rules only apply to the recording of stocks and flows in national accounts and do not prescribe rules for the actual bookkeeping done by the NCBs. ECB Guideline 2006/16 provides the legal framework for accounting and financial reporting in the European System of Central Banks.
4. In general, coins are a liability of government and the question arises whether their non-return impacts government net lending/borrowing (B.9) and debt (see below in sub-section 4.4.2.2 Non-returned coins, the treatment agreed by convention in ESA 2010).
5. The recording principles in this chapter do not only apply to the case of a cash changeover to the euro, but also to other cases when existing series of coins or banknotes are substituted by new series of coins and banknotes, for instance due to a change in design of banknotes.

## 4.4.2 Treatment in national accounts

### 4.4.2.1 NON-RETURNED BANKNOTES

6. Gains from non-returned banknotes have no impact on government net lending/borrowing (B.9). Banknotes in circulation appear in the balance sheet of the NCB under the category currency and deposits (AF.2). In a cash changeover, old national banknotes that have ceased to be legal tender and have not been returned to the NCB will be classified as other accounts payable (AF.8) in the balance sheet of the NCB. When banknotes that are not legal tender are exchanged against new banknotes, a reduction of other accounts payable is recorded with a counterpart entry in currency and deposits.
7. The non-returned national banknotes are written-off from the NCB balance sheet in national accounts, when the NCB no longer exchanges them against new notes. In those countries where old national banknotes can be redeemed indefinitely against new ones, the old banknotes are written-off from the NCB's balance sheet when it is certain that they will no longer be returned even though the legal obligation to redeem the old banknotes still exists. In practice it seems generally prudent that statisticians derecognise NCB liabilities for the purposes of compiling the financial accounts, when the NCB's own accountants have done so. These write-offs are recorded as other changes in the volume in the other accounts payable of the NCB.
8. The value of equity the government holds will increase by the same amount as that of the write-off, assuming that government is the only shareholder entitled to the gains from non-returned banknotes. This increase is recorded in the other changes in assets accounts of both the NCB and the government. When gains on non-returned banknotes are distributed to government, the amounts distributed have to be recorded as financial transactions (a withdrawal of equity (F.5) by government), not as government revenue (dividends, taxes on profits or capital transfers). In certain countries, the government is not the legal shareholder of the NCB, but is nevertheless entitled by legislation to receive the proceeds from non-returned banknotes. In such cases, national accounts recognise the economic ownership of government and record government holding other equity (F.519) in the NCB.

9. In cases where the NCB makes payments to government in anticipation of the write-off of the non-returned banknotes, the payments are treated in national accounts as advance payments. The payments are recorded as other accounts payable (F.8) in the government accounts and as other accounts receivable (F.8) in the accounts of the NCB, with counterpart entries in currency and deposits (F.2). When the actual write-off takes place, the amounts previously recorded in F.8 are reversed against the withdrawal of equity by government.

#### 4.4.2.2 NON-RETURNED COINS

10. Non-returned coins have an impact on government debt as defined for the Excessive Deficit Procedure, but leave government net lending/borrowing (B.9) unchanged. The treatment in national accounts is similar to the treatment of non-returned banknotes.

11. In public accounts, coins in circulation are not a liability of the central bank, but of central government, and therefore the central bank pays the central government the face value of the issued coins. However, coins are part of the monetary aggregates and, by convention, a liability equal to the amount issued is entered under the category 'currency in circulation' on the central bank balance sheet, with a notional claim (AF.29) on central government and a liability (AF.29) in government accounts (see ESA 2010, chapter 5, Box B.5.2 and chapter 8.2 of this Manual, The calculation of general government debt).

    In a cash changeover, old national coins that have ceased to be legal tender and have not yet been returned to government, but can still be officially exchanged against legal tender, are reclassified as other accounts payable (F.8) by other changes in the volume (K.5) in the other changes in assets accounts. This reduces the stock of debt when old currency ceases to be legal tender, since other accounts payable are not parts of government debt. If old currency is returned against new coins, government debt increases, as the amount of coins in circulation rises.

12. The write-off of the non-returned national coins in government's balance sheet takes place when the government no longer exchanges the old national coins against the new legal tender or when it is certain that they will no longer be returned. This should be recorded in national accounts through other changes in the volume (K.5), with no impact on government net lending/borrowing (B.9).

## 4.4.3 Rationale of the treatment

13. The ESA 2010 category currency (F.21) consists of coins and banknotes that are commonly used to make payments (see ESA 2010 paragraphs 5.76–5.78). Once old national banknotes and coins cease to be legal tender, they can no longer be used to make payments and therefore have to be excluded from the ESA 2010 asset category currency (F.21). This is not an interaction between institutional units by mutual agreement and as a consequence is not recorded as a financial transaction (see ESA 2010 paragraph 1.66). Rather, an asset reclassification other than (de)monetisation of gold (K.62) is to be recorded (ESA 2010 paragraph 6.24) in the other changes in assets accounts of both debtor and creditor. As long as old coins and banknotes can be exchanged against new ones, they still represent a financial claim on the issuers and they still have to be considered financial assets (unlike valuables) and are reclassified to the ESA 2010 category other accounts receivable/payable. They *de facto* function as a store of value to the holders, while the issuer has a liability, as it must redeem these instruments on presentation.

14. When old national banknotes and coins can no longer be exchanged against new currency and, thus, discontinue to constitute a claim against the issuer, other changes in the volume of financial assets and liabilities (K.5) have to be recorded in the other changes in assets accounts of both debtor and creditor, because it is not the result of an interaction by mutual agreement and neither a financial transaction nor a capital transfer. In practice, accountants also write-off old currency when it is (almost) certain that the old banknotes and coins will no longer be exchanged, even though the legal obligation to exchange them still exists. Accountants know from experience that not all old banknotes and coins will be exchanged either due to exceptional losses (see ESA 2010 paragraph 6.14 (a)) or because old coins and notes are kept as collectibles. In this case, statisticians follow the same approach as the accountants and also record a write-off in the national accounts, so as to reflect economic rather than legal reality. If old banknotes and coins that have already been written off are, against expectation, handed in for exchange against new banknotes and coins, the write-off has to be reversed through the other changes in assets accounts of both debtor and creditor.

15. The value of the equity government holds in the NCB will increase due to the write-off of banknotes, since the amount of outstanding liabilities of the NCB is reduced. Changes in valuation of equity are also to be recorded in the other changes in assets accounts (in the revaluation account).

16. Payments made to government by the NCB following the gains made due to non-returned banknotes cannot be recorded as dividend income (given that equity is valued at the NCB`s net assets). These gains were not the result of production or the redistribution of production but the result of write-offs and therefore cannot be part of the operating profit of the NCB. This is the reason for which the payment made to government has to be recorded as a withdrawal of equity by government, leaving the government net lending/borrowing (B.9) unchanged.

17. Reclassifications or write-offs of old coins also leave the government net lending/borrowing (B.9) unchanged. Government debt, as defined for the purpose of the Excessive Deficit Procedure, consists of currency and deposits (F.2), debt securities (F.3) and loans (F.4). A reclassification of old coins from currency and deposits to other accounts payable once they cease to be legal tender, reduces the stock of debt, since other accounts payable are not part of government debt. If old currency is returned against new coins, government debt increases, as the amount of coins in circulation rises.

## 4.4.4 Accounting examples

**Example 1**

- The euro is introduced on day 1 of year 1.
- After half a year old national banknotes are no longer accepted as legal tender. €100 million worth of old banknotes have not yet been exchanged against euros by the end of year 1.
- After one and half years, the old banknotes can no longer be exchanged against euros. €15 million worth of old banknotes have not been exchanged against euros by the end of year 2 and have been written-off accordingly.
- The amount of €15 million is paid to the government by the NCB in the course of the second half of year 2.
- For the sake of simplicity, it is assumed that old banknotes are exchanged against new banknotes and not against coins or deposits.

**YEAR 1**

**General government** | **NCB**

**Opening balance sheet**

| A | | L |
|---|---|---|
| AF.22 | a | |
| AF.5 | y | |

| A | | L |
|---|---|---|
| | AF.21 | x |
| | AF.22 | a |
| | AF.5 | y |
| | AF.8 | z |

**Other changes in assets accounts**

| ΔA | | ΔL |
|---|---|---|
| | | |

| ΔA | | ΔL |
|---|---|---|
| | AF.21 | –100 |
| | AF.8 | 100 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AF.22 | a | |
| AF.5 | y | |

| A | | L |
|---|---|---|
| | AF.21 | x–100 |
| | AF.22 | a |
| | AF.5 | y |
| | AF.8 | z +100 |

**YEAR 2**

**General government** | **NCB**

**Opening balance sheet**

| A | | L |
|---|---|---|
| AF.22 | a | |
| AF.5 | y | |

| A | | L |
|---|---|---|
| | AF.21 | x–100 |
| | AF.22 | a |
| | AF.5 | y |
| | AF.8 | z +100 |

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| F.22 | 15 | |
| F.5 | –15 | |

| AΔ | | ΔL |
|---|---|---|
| | F.21 | 85 |
| | F.22 | 15 |
| | F.5 | –15 |
| | F.8 | –85 |

**Other changes in assets accounts**

| ΔA | | ΔL |
|---|---|---|
| AF.5 | 15 | |

| ΔA | | LΔ |
|---|---|---|
| | AF.5 | 15 |
| | AF.8 | –15 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AF.22 | a+15 | |
| AF.5 | y | |

| A | | L |
|---|---|---|
| | AF.21 | x-15 |
| | AF.22 | a+15 |
| | AF.5 | y |
| | AF.8 | z |

**Example 2**

- The euro is introduced on day 1 of year 1.
- After half a year, old national banknotes are no longer accepted as legal tender. €100 million worth of old banknotes have not yet been exchanged against euros by the end of year 1.
- After one and half years the old banknotes can no longer be exchanged against euros. In year 2, €15 million worth of old banknotes are written off from the NCB's balance sheet. The amount of €15 million is paid to the government by the NCB in advance in the course of year 1.
- For the sake of simplicity, it is assumed that old banknotes are exchanged against new banknotes and not against coins or deposits.

## YEAR 1

### General government

#### Opening balance sheet

| A | | L | |
|---|---|---|---|
| AF.22 | a | F.8 | b |
| AF.5 | y | | |

#### Financial account

| ΔA | | ΔL | |
|---|---|---|---|
| F.22 | 15 | F.8 | 15 |

#### Other changes in assets accounts

| ΔA | | ΔL | |
|---|---|---|---|
| | | | |

#### Closing balance sheet

| A | | L | |
|---|---|---|---|
| AF.22 | a+15 | F.8 | b+15 |
| AF.5 | y | | |

### NCB

#### Opening balance sheet

| A | | L | |
|---|---|---|---|
| F.8 | c | AF.21 | x |
| | | AF.22 | a |
| | | AF.5 | y |
| | | AF.8 | z |

#### Financial account

| ΔA | | ΔL | |
|---|---|---|---|
| F.8 | 15 | F.22 | 15 |

#### Other changes in assets accounts

| AΔ | | ΔL | |
|---|---|---|---|
| | | AF.21 | –100 |
| | | AF.8 | 100 |

#### Closing balance sheet

| A | | L | |
|---|---|---|---|
| F.8 | c +15 | AF.21 | x–100 |
| | | AF.22 | a+15 |
| | | AF.5 | y |
| | | AF.8 | z+100 |

## YEAR 2

### General government

#### Opening balance sheet

| A | | L | |
|---|---|---|---|
| AF.22 | a+15 | F.8 | b+15 |
| AF.5 | y | | |

#### Financial account

| ΔA | | ΔL | |
|---|---|---|---|
| F.5 | –15 | F.8 | –15 |

#### Other changes in assets accounts

| ΔA | | ΔL | |
|---|---|---|---|
| AF.5 | 15 | | |

### NCB

#### Opening balance sheet

| A | | L | |
|---|---|---|---|
| F.8 | c +15 | AF.21 | x–100 |
| | | AF.22 | a +15 |
| | | AF.5 | y |
| | | AF.8 | z+100 |

#### Financial account

| ΔA | | ΔL | |
|---|---|---|---|
| F.8 | –15 | F.21 | 85 |
| | | F.5 | –15 |
| | | F.8 | –85 |

#### Other changes in assets accounts

| AΔ | | ΔL | |
|---|---|---|---|
| | | AF.5 | 15 |
| | | AF.8 | –15 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.22 | a+15 | F.8 | b |
| AF.5 | y | | |

| A | | L | |
|---|---|---|---|
| F.8 | c | AF.21 | x-15 |
| | | AF.22 | a+15 |
| | | AF.5 | y |
| | | AF.8 | z |

**Example 3**

- The euro is introduced on day 1 of year 1. Coins are a government liability.
- After half a year, old national coins are no longer accepted as legal tender. €100 million worth of old coins have not yet been exchanged against euros by the end of year 1.
- After one and half years the old coins can no longer be exchanged against euros. €15 million worth of old coins have not been exchanged against euros by that date. Of the 85 million old coins that were exchanged at banks, 40 million were exchanged against new euro coins. €45 million worth of old coins were deposited on bank accounts.

**YEAR 1**

**Government sector**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.22 | a | AF.21 | x |
| | | AF.8 | y |

**Other changes in assets accounts**

| ΔA | | ΔL | |
|---|---|---|---|
| | | AF.21 | –100 |
| | | AF.8 | +100 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.22 | a | AF.21 | x–100 |
| | | AF.8 | y+100 |

Note that government debt is diminished by 100 at the end of year 1 due to the reclassification of old national coins.

**YEAR 2**

**Government sector**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.22 | a | AF.21 | x–100 |
| | | AF.8 | y +100 |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.22 | –45 | F.21 | +40 |
| | | F.8 | –85 |

**Other changes in assets accounts**

| ΔA | | ΔL | |
|---|---|---|---|
| | | AF.8 | –15 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| F.22 | a–45 | AF.21 | x–60 |
| | | AF.8 | y |

The final impact on government debt by the end of year 2 due to the cash changeover is smaller than the impact after year 1 due to the fact that a large amount of old coins have been exchanged against new legal tender.

# 4.5 Financial defeasance

## 4.5.1 Background

1. This issue is covered in ESA 2010 paragraph 20.46 (classification of defeasance units) and ESA 2010 paragraphs 20.243–20.248 (impact on government accounts of its some interventions, including more extensively any 'bail out' of financial institutions).

2. According to the experience in Europe in the 1990's and since 2008 onwards, financial defeasance has been identified as the management of problematic (bad) assets held by a financial institution, with significant negative impact on its profitability and also frequently on its solvency. In this context, the involvement of government is in most cases a key feature of financial defeasance.

   For public policy reasons the government puts itself in a position to bear the major risks attached to the assets and/or to ensure the long-term management of such assets. In case of public units, the government takes ownership of the entity (nationalisation) and intervenes, directly (capital injections for covering losses, loans, etc.) or more indirectly, through granting of guarantees, and sometimes through a public entity, owned directly or indirectly (through some public financial corporations) by government.

   In this Manual and in national accounts, it will be defined as a rescue process of financial institutions, having three major characteristics:

   - a financial institution has become financially distressed due to its involvement with considerable problematic ('bad' or 'non-performing') assets;
   - most of the time (but not always), the rescue process involves the creation of an entity dedicated to the management of those problematic assets, the defeasance structure, also referred to as a 'bad bank', while 'normal' commercial activity, assumed to be profitable, remains in the financial institution;
   - government is involved, directly or indirectly, in the rescue process through various ways, such as capital injections for covering subsequent losses due to the problematic assets (write-down, realised losses), financing at specific conditions, granting guarantees or nationalisation, in such a way that it may be viewed as assuming control or placing itself at risk (in fact taking over most of the final risk attached to assets of bad quality, while it might also be entitled to possible rewards).

3. It is important to note that in some situations the solvency and/or liquidity of banks, private or public, might be at stake and the government and/or the Central Bank might need to intervene, usually by providing collateral/liquidity in the context of specific schemes. This sort of rescue operation will not be referred to as 'defeasance'; the financial institution is not being relieved from the negative impact of its problematic assets. Nevertheless, these cases may show common features and may lead to similar recording recommendations (for instance recognising the specific role of government in the defeasance process and notably as regards risks incurred, see sub-section 4.5.2.6).

4. A crucial point is the existence of problematic assets, which must be precisely defined. As a general definition, problematic assets are those non-performing assets (financial and, to a lesser extent, non-financial) that have negative consequences on the profitability of the financial intermediary that holds them and are of sufficient size that they could endanger the solvency of the unit. They are assets that a 'normal' financial intermediary would normally need to be relieved of. Such assets could be transferred through market transactions; however, in this case the unit would incur immediate and frequently significant losses, which could not be covered through its absorption mechanism. Problematic assets cover impaired and illiquid assets, as described below.

5. Impaired assets are valued in the business balance sheet in excess of their long-term market or fair value and are therefore expected to incur losses in the future. The value of such impaired assets may have been already downgraded (or written down), in unusually high proportions compared to normal practice (observed on average for similar competitors on the market, which means that their nature diverges from market standards, and problematic assets are not defined by a minimum share of recorded or expected impairments). Further potential losses are usually still expected and the financial institution will not be in a position to meet such losses through its own loss-absorption mechanism. In the specific case of market assets, the unit could not dispose of them in a short term without incurring

losses, such that the unit is *de facto* obliged to keep them and is subject to an involuntary exposure to market risk.

6. In some cases, problematic assets take also the form of illiquid assets. In the context of this Manual, they are defined as those marketable assets, which cannot be priced and disposed in the short term because of the absence of market functioning under normal conditions. There is thus high uncertainty on their future market value and the holder of the assets is not in a position to modify its risk exposure by another way than transferring it to a defeasance structure. For this reason, to ensure consistent treatment across countries, the definition of problematic assets used in this chapter includes these types of assets.

7. In this context, the direct intervention of the general government may take various forms:

   - government provides to the financial institutions in difficulty a guarantee which will be called when these institutions record in their accounts losses on the problematic assets;
   - government buys directly the problematic assets from the financial institutions;
   - government creates on purpose public bodies with the aim to hold the assets of bad quality.

8. In practice, there may be more complicated arrangements where government intervenes in a more indirect way through units which are largely under its control or influence, for instance through some public financial corporations. The role of government will have to be ascertained in such situations, taking into consideration the guarantees, which are usually granted by some government units to one of the entities involved in the rescue process. Generally, such guarantees are explicit but in some cases the unit benefits from an implicit government guarantee due to its public legal status.

## 4.5.2 Treatment in national accounts

### 4.5.2.1 SECTOR CLASSIFICATION — GENERAL RULES

9. Any financial institution may be observed to hold some problematic assets, in many cases with no threat to the continued operation of the institution. It is important to distinguish those cases which are financial intermediaries as defined by ESA 2010 paragraphs 2.55–2.58, from those having the feature of financial defeasance structures, whatever their legal status.

   A financial defeasance structure is an institutional unit, which has substantial problematic assets, whose principal activity is the resolution of these assets generally over an extended period and not the provision of financial intermediation services. Such an institutional unit is not a financial intermediary as defined in ESA 2010.

   Some or all of the features on the following indicative list would provide evidence of the defeasance structure nature of a unit, since they would call into doubt that the institution could be classified as a financial intermediary:

   - being closed to new deposits-taking, or partly open under restrictive conditions. This includes the ceasing of deposit taking from the general public or specified and relatively large sub-groups thereof. In particular, deposit-taking from the government, specific public corporations, would not be considered sufficient to conclude that the institution is engaging in financial intermediation;
   - being closed to new lending, or partly open under restrictive conditions. The extending of loans which relate to the management of existing assets would not be sufficient to conclude that the institution is engaging in financial intermediation;
   - strong externally imposed restrictions from competing on banking and financial markets;
   - in most cases, a foreseen limited lifetime linked to the progressive liquidation of the assets by recovery or sales on the market.

10. For those institutions which do not meet the requirements to be classified as financial intermediaries (do not place themselves at risk, see ESA 2010 paragraph 2.57), several cases can be distinguished:

    1) a public body may be created by government with the clear task to hold problematic assets, frequently until their complete liquidation, and to directly assume losses that cannot be borne by 'normal' commercial entities;

2) in other cases the assets are allocated to an entity, public-owned or closely controlled by government (the original shareholders having no or limited power) which is created in the context of the restructuring of an existing financial institution holding problematic assets. This may take various forms, according to the allocation of the problematic assets:

   a) an existing financial institution is split between a new entity owned and controlled by government with the task to manage the problematic assets, and a remaining entity(ies) that is assumed to continue its financial intermediation activity in competition on the banking/financial market, possibly under a new name;

   b) the financial institution transfers, under various procedures, its 'commercial profitable activity' (such as deposit taking, quality assets, low risk lending). As a consequence, the unit is left with the management of most or all problematic assets, which therefore become its main activity, and this is achieved with a strong support of the government and under its control (government being generally the main shareholder, directly or indirectly through other public bodies).

11. When there is evidence that government is assuming all or the majority of the risks and rewards associated with the activities of a government-controlled defeasance structure, as described above, this structure is classified in the general government sector, whatever its legal status. For instance, government is committed to cover the majority of the expected losses from the assets, through providing guarantees on the financing of the entity holding the problematic assets and the guarantee fee is not in line with the risks involved, or that the main source of financing is from the public sector. The entity should be classified in the general government sector either from its creation (case 1) mentioned above) or a point of reclassification (case 2)).

### 4.5.2.2 SECTOR CLASSIFICATION — IMPLEMENTATION ISSUES

12. In all cases, the sector classification of the publicly controlled defeasance structure that will hold problematic assets as a major share of its assets has to be decided by analysing the degree of government sponsorship in the rescue process. Major share means that the book value of the assets on which exceptional losses (see above) have been recorded and further losses are still expected is a predominant part (and in some cases 100 %) of the 'earning assets' held by the entity.

13. There may be borderline cases where entities, meeting most of the fundamental features of a defeasance structure mentioned above, are still on the list of monetary financial institutions (MFIs), which provides for the production of the ECB list of MFIs subject to the Eurosystem's minimum reserves as well as a list of counterparties eligible for Eurosystem operations. These cases will be analysed by Eurostat and the national statistical institute (which is responsible for the sector classification of units in national accounts), possibly in close cooperation with the ECB and the central bank, without prejudice to ESA 2010 paragraphs 2.67, 2.68 and 2.75 (defining monetary financial institutions, other monetary financial institutions and deposit-taking corporations except the central bank) on the one hand, and ESA 2010 paragraphs 20.46 and 20.248 (defining defeasance structures/'bad banks' classified in general government) on the other hand.

14. It may happen that a public financial corporation in distress is put in liquidation according to a 'normal' procedure, applicable to any units in the economy not subject to an attempt of recovery (notably with the support of government). Such a unit may have most of the features of a financial defeasance structure: notably bearing problematic assets, being closed to new business, having a limited lifetime. This unit in liquidation may also be a residual part of financial institution in distress, which has been restructured. The fact that the unit[182] is undergoing liquidation should not prevent its classification within the general government sector if government is, *de jure* or *de facto*, controlling the liquidation process (for instance through its dominant influence on a creditors' committee) and/or it is expecting to bear a majority of the expected losses from the liquidation due to its significant claims on the unit (taking into account its ranking among creditors) and/or due to support granted in the context of the management of the bail-out.

15. When the rescuing entity is a special purpose vehicle, not bearing most of the risks and not acting as a private investor would do, it should be considered acting on behalf of government. Therefore, it will be

[182] One could argue that the unit is no longer an institutional unit because the owners have lost their ability of controlling it, with a decision making power to the liquidator and/or creditors. However, the liquidation process implies that economic decisions are taken on its assets and liabilities. The fact that the control has been withdrawn to the previous owners is not as such sufficient to be automatically classified in the sector of the liquidator or the creditors (possibly belonging to different sectors). Thus, the unit must remain in the financial sector or, as mentioned above, be reclassified in the general government sector.

regarded as a government-sponsored defeasance structure and should then be classified in the general government sector, except in the cases specified in the Eurostat guidance note in July 2009[183], which will be valid until the end of the financial crisis.

#### 4.5.2.3 IMPACT ON NET LENDING/BORROWING (B.9) AND DEBT

16. As regards the impact on net lending/borrowing (B.9), whatever the case envisaged (the case of an entity created by government, case a above or case b above, or the case of an SPE), when the reclassification implies a transfer of assets for an amount higher than the market value that can be independently estimated, the difference should be considered a capital transfer, with the assets added to the government balance sheet at market value. Any future holding gains/losses on these assets will be recorded in the revaluation accounts.

    In the case of a defeasance structure which results from the restructuring of an existing financial intermediary which continues to operate with changed activities (case b above), the operation should be split into two steps:

    - first, in order to take account of the support provided to the financial intermediary in the context of the operation, the difference between the transaction value of the transferred assets and their market value is recorded as a capital transfer to the debtors of the defeasance structure;
    - then, the classification of the defeasance structure within the government sector is to be recorded as other changes in volume of assets account (changes in sector classification and institutional unit structure (K.61).

17. As regards the impact on government debt, in the case of restructuring under cases a and b above, or the case of SPE, the classification of these entities to government will mean that both their assets and liabilities are included in the government balance sheet, and therefore gross government debt will include the relevant debt instruments of the entities.

#### 4.5.2.4 TREATMENTS TO BE FOLLOWED WHEN GOVERNMENT IS ONLY INVOLVED BY ITS GUARANTEE

18. Financial institutions or specific units controlled by those institutions, classified outside the general government sector, may receive government guarantees on all or part of the problematic/impaired assets that have been clearly identified in their portfolio.

    Where such a guarantee exists, then:

    - if government takes on all or most of the risks and rewards directly attached to the problematic assets, government is considered the economic owner of the assets and the government accounts should record the acquisition of a financial asset with the counterpart transaction being a loan from the financial institution to the government. If the government acquires the assets above their market price or fair value, a capital transfer by government should be recorded for the part exceeding the market price or fair value (see the accounting example);
    - if, instead, the government guarantee covers only losses on problematic assets, the treatment in national accounts should comply with the general rules on guarantees as provided in chapter 7.4 of this Manual, except that the rule related to repeated calls is not applicable in the case of problematic assets.

      Different cases should be considered:

      – first, a guarantee call on a problematic asset when the call is partial and the asset is considered at least partly recoverable (i.e. remains in the balance sheet), a capital transfer (government expenditure) should be recorded for the amount of the guarantee call, at the time it takes place;
      – second, a guarantee call on a problematic asset when no future recoveries are expected (but the asset remains in the balance sheet) should be recorded as capital transfer (government expenditure) at the time it takes place for the full amount of a call. Any unexpected repayment should be recorded as a reverse capital transfer (government revenue);

[183] The statistical recording of public interventions to support financial institutions and financial markets during the financial crisis from 15 July 2009.

– third, when the problematic asset was sold by the financial institution with a loss and the guarantee is called, a capital transfer (government expenditure) should be recorded for the amount of the guarantee call, at the time it takes place;

– fourth, in some specific arrangements, a default of payment on problematic assets guaranteed by government could trigger a transfer of the asset to government. This should be recorded in government accounts as a capital transfer (government expenditure). Only in case some amounts could be reliably estimated as recoverable (by an independent body), a financial transaction could be recorded for the recoverable part.

#### 4.5.2.5 TREATMENTS TO BE FOLLOWED WHEN GOVERNMENT BUYS THE PROBLEMATIC ASSETS

19. Government may also buy (or take over) the problematic assets. It does this directly or through specific units created on purpose which are considered part of the government sector. In the following section, both will be referred to as purchases by government. The main point is that government buys (or takes over) the problematic assets from the financial institution at a price that might differ/be higher than the market value (or fair value) estimated or observed at that moment.

**a) Recordings at the start of the defeasance process**

20. As a general principle, the purchase of the assets is a financial transaction but under the conditions above a capital transfer should be recorded when government buys the assets from a financial institution. The amount of the capital transfer in favour of the financial institution should be equal to the difference between the amount paid for buying them and their market value. It is useful to make a distinction between different kinds of assets.

    In any case, the impact on the net lending/borrowing (B.9) is equal to the amount of the capital transfer at the time the assets are transferred to the government defeasance structure or to another government unit. If the transfer of the assets takes place in the context of a change in classification of a defeasance unit resulting from the restructuring of an existing financial institution, as described above, the impact on the debt is equal to the liabilities taken over by government.

21. Most assets, being traded on markets on a regular basis, have an observable market value. This applies to securities, quoted shares and, to a lesser extent (depending on some specific conditions), to real estate. If (as it may be assumed) the sale price of these assets to the defeasance structure deviates from this market value, the amount of the capital transfer is equal to the difference between the sale price of the assets and the market value.

    - For real estate assets, the financial institutions may be in distress because of the falling prices on the real estate market. Price indexes for real estate may be applied to their purchaser price, in order to calculate their market value.
    - For securities and shares, except in the case of persistent absence of market functioning, market prices can be derived from stock exchange information for quoted instruments. The price for unquoted shares should be derived from the trend of quoted shares in a similar sector.
    - For problematic loans, the fair value (currently expected redemption value) will be less than the principal amount due by the debtors. They are transferred by the financial institutions, usually at the principal outstanding amount (original contractual redemption value). By definition, as loans are not negotiable instruments on existing markets, there is no market value and thus their fair value must result from estimates, based on 'realistic hypothesis' which should be carried out by an independent body in case of significant transfer to government. In the absence of any negotiation with the debtors, there is no change in the original obligations of the latter. As a consequence, the loans must be entered in the balance sheet at their nominal values. As the transaction is by evidence not made for purely commercial considerations (i.e. with an expectation on profit after it, see ESA 2010 paragraph 5.21 stating that a capital transfer should be imputed for the difference between the transaction price and the market price). Nevertheless, if there is reliable information that some loans are irrecoverable (for instance because of the disappearance of the debtor), fully or for nearly their total amount, the real value of these loans should be accounted for at zero and a capital transfer is recorded for their full amount at the time of the transaction with the defeasance structure. In most cases, they should be written off by the defeasance structure after the transaction.

**b) Recordings during the defeasance process**

22. In this case, it is also necessary to make a distinction between the transferred assets.

- In the case of non-financial assets, for instance buildings or, more generally, for real estate, the market value may change during the time they are held by a unit considered a defeasance structure. The change has to be recorded in the revaluation account, with no impact on government net lending/borrowing (B.9). If they are sold to units classified outside the general government sector, their sale is recorded as a disposal of non-financial assets, with a positive impact on net lending/borrowing (B.9) of government (and possibly also a revaluation effect if the price is higher than the value recorded in the balance sheet).
- The same treatment applies to securities and shares, except that their sale has no impact on government net lending/borrowing as it is purely a financial transaction.
- For loans, if they are not finally repaid at redemption at the principal value that has been recorded by the purchasing government unit, they may be subject to two possible procedures: a cancellation implying a capital transfer if the debtor still exist, or, in very exceptional cases a write-off to be recorded in the other changes in volume of assets account if the debtor does not exist anymore and the debt cannot be reimbursed by a pledging unit.

#### 4.5.2.6 THE CASE WHERE GOVERNMENT PROVIDES DIRECT FINANCING

23. A unit, not reclassified in the government sector and holding problematic assets or taking part in a support operation related to problematic assets, may enjoy government financial support through direct financing in order to carry out specific transactions, at the initiative of government that a normal private investor would not undertake and that go beyond its usual activity. The government should be considered the principal party to the respective transaction and the transaction should be rerouted in the accounts of the government (ESA 2010 paragraphs 1.73–1.75). If the rerouted transactions involve the injection of capital by the financial intermediary into a financial or non-financial corporation on behalf of the government, the recording of this capital injection should be as outlined in the chapter 3.2 of this Manual or the Eurostat Decision of July 2009 on *The statistical recording of public interventions to support financial institutions and financial markets during financial crisis*.

## 4.5.3 Rationale of the treatment

#### 4.5.3.1 CLASSIFICATION ISSUES

24. The defeasance structures seem to be involved in financial activity: they have borrowed resource (transferred or newly issued) in order to finance the impaired assets. However, they should not be considered to be real financial intermediaries, because they do not really place themselves at risk by acquiring financial assets and incurring liabilities on their own account, which is a typical feature of a financial intermediary according to ESA 2010 paragraph 2.57. On the contrary, they act on behalf of government. This is the rationale for classifying them in the general government sector. Under these conditions, the exceptional cases mentioned above should be closely considered by the competent authorities.

#### 4.5.3.2 THE GENERAL PRINCIPLE FOR RECORDING CAPITAL TRANSFERS

25. The recording of a capital transfer from government, with an impact on government net lending/borrowing (B.9), can take place at four points in time:

- at the time of setting up the defeasance process, when government buys (or takes over) the involved assets for the amount paid in excess to the market or fair value, as observed at the time of the transfer;
- during the management of the defeasance, when government, normally through guarantee calls (on assets or on some liabilities), assumes losses from the financial institutions or other units classified outside general government;
- during the management of the defeasance, when government makes capital injections in the unit, either for covering losses or/and for providing the needed financing resources;

- during the management of the defeasance, when government cancels loans it may have granted to the unit.

26. In these situations, a capital transfer is recorded because there is a redistribution of wealth among the different units involved. This is in line with the definition of other capital transfers (D.99) given in ESA 2010 paragraph 4.164.

27. The capital transfer is recorded at the time the transfer of wealth occurs. This can be, in the case where assets are taken over by government, at the time when the operation is agreed between the parties. For other cases, it is at the time government transfers the amounts corresponding to the assumption or cancellation of debt or capital injections.

### 4.5.3.3 VALUATION ISSUES FOR ASSETS OTHER THAN LOANS

28. The general rule for valuing these kinds of assets in national accounting is to record them at their market price (fair value), which is consistent with the basic principle set up in international

    accounting standards (IFRS, IPSAS). In general, financial institutions, such as banks, may follow some specific rules, according to the supervisory regulations.

29. In the internal bookkeeping of the financial institutions, some impaired assets may be valued at the price paid for their acquisition. In other words, the book value of these assets, also possibly called the 'accounting value' does not correspond to the market or fair value. Although, in a prudent approach, banks should anticipate possible losses on some assets by recording provisions, they have often the tendency to minimise such impact or wait as much as possible, in absence of explicit orders by the Supervisory Authorities.

30. The fact that such assets are placed in the defeasance means that the expected realisation value is far below the accounting value. If they are transferred at the accounting value, a capital transfer needs to be recorded in national accounts to reflect this difference between the accounting value and the market (fair) value. In the case where such value is not available but where an estimation of the expected losses may be carried out by an independent body on the basis of usual pricing methods, this estimate could be used as a proxy for the difference between accounting and market value.

31. Subsequent changes in the market (fair) price of these assets, when held by units classified in general government, will give rise to the recording of holding gains/losses, which have no impact on net lending/borrowing.

### 4.5.3.4 THE CASE OF LOANS

32. The valuation of loans is dealt with in ESA 2010 paragraph 7.70. The general rule is to record, in the balance sheets of both creditors and debtors, 'the amounts of principal that the debtors are contractually obliged to repay the creditors, even in cases where the loan was traded at a discount or premium'. This is the principal outstanding amount (original contractual redemption value). It is also the amount on which the interest is accrued. The notion of fair value (or market value) is thus not recognised for loans in the balance sheets in the system of national accounts, contrary to business and banking accounting systems.

33. ESA 2010 paragraph 5.122 and ESA 2010 paragraph 6.58 give further guidance when loans are traded (as exceptional transaction) at a price which is different from the redemption value. The seller and the purchaser have to record the transaction at the effective price in their financial accounts but they must use the revaluation account for the difference between the transaction value and the redemption value (to be recorded in the balance sheet) before (the seller) and after (the purchaser) the transaction. This is based on the fact that, just at the point of sale, the assets are considered for a brief moment as market assets.

34. In the financial defeasance case, when loans are sold/transferred by the financial institutions to the specific government unit, the transaction value may be equal to their redemption value. Nevertheless, it is common sense to assume that the loans put in the defeasance would not be redeemed at the previously expected value. As the transaction is by evidence undertaken by government for other than purely commercial considerations (see ESA 2010 paragraph 5.21), here to support a financial institution in distress, the transaction values would have to be identified with the 'current market (fair) values' of the loans, which cannot be observed in practice. However, in many cases estimates on expected losses might become available and be used as a proxy for the difference between the amount paid and the

fair/market value (see also sub-section 4.5.3.3). In addition, loan portfolios are likely to have been subject to provisions (impairments) in the accounting bookkeeping of financial institutions (which are frequently imposed by supervisory authorities). This may provide supplementary information on the potential size of the capital transfer to be recorded. It is recalled that in ESA 2010 provisions for bad debt do not appear anywhere in the system (ESA 2010 paragraph 4.165 (f)).

35. Moreover, if, among the transferred assets, there is reliable information leading to think that some loans will in fact never be repaid, the capital transfer to the financial institution disposing of them must be accounted for the full value of these loans. Afterwards, they should be removed (written-off) from the acquiring defeasance unit's balance sheet under the conditions mentioned above. This is recorded in the other changes in volume of assets account of the financial institutions.

#### 4.5.3.5 GLOBAL ASSESSMENT OF THE TREATMENTS

36. When undertaken by government, defeasance leads to an impoverishment of general government. There are three ways in which this occurs, according to the above rules:

- when a capital transfer is recorded at the time a government unit buys the involved assets or directly covers the losses linked to such assets: this has a direct impact on its net lending/borrowing at the time the transfer is recorded;
- when government acts through its guarantee: this has an impact on its net lending/borrowing at the time the guarantee is called, according to the rules set chapter 7.4 Government guarantees;
- when the assets bought by a government unit are loans which have been transferred without the recording of a capital transfer. This has an impact on government net lending/borrowing if the loans are cancelled to the benefit of the debtor and, on some exceptional occasions, when there is evidence that the debtor no longer exists and that no other unit is responsible for its debt, through other changes in the volume of assets.

37. The classification in the general government sector of units in charge of the defeasance process may also have an impact on government debt by the amount of their liabilities. It will then also have an impact on net lending/borrowing of the general government sector through the financing cost (interest) of the debt.

## 4.5.4 Accounting examples

This example deals with the case where a unit, which is classified in general government buys some bad assets from a financial institution at their bookkeeping value. The government equity in the financial institution is not shown.

**Setting up the defeasance**

Assets transferred from financial institutions to the public unit in charge of the defeasance are the following ones:

- Securities/shares, with a bookkeeping value of 40, and a market value of 25 (value in the opening balance sheet);
- Buildings, with a bookkeeping value of 10, and a market value of 5 (in the opening balance sheet);
- Loans, with a redemption value of 50 (in the opening balance sheet): during the year and at the time the defeasance is set up, some loans are considered to be irrecoverable, for an amount of 10.

As the bookkeeping value of the assets is 100 (10+40+50) and as the market/fair value is falling to 70 (5+25+40), a capital transfer of 30 is recorded. The government unit is assumed to have borrowed all its funds.

| General government | | | | Financial institution | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.2 | x | AF.4 | x | AN | 5 | | |
| | | | | AF.4 | 50 | | |
| | | | | AF.5/AF.3 | 25 | | |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| P.5 | 5 | D.99 | –30 | P.5 | –5 | D.99 | +30 |
| B.9 | –35 | | | B.9 | +35 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | –100 | | | F.2 | +100 | | |
| F.4 | +40 | | | F.4 | –40 | | |
| F.5/F.3 | +25 | B.9F | –35 | F.5/F.3 | –25 | B.9F | +35 |
| **Other changes in volume of assets account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | | | AF.4 | –10 | B.10.2 | –10 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AN | 5 | AF.4 | x | AF.2 | 100 | | |
| AF.2 | x–100 | | | | | | |
| AF.4 | 50 | | | | | | |
| AF.5/AF.3 | 25 | B.90 | –30 | | | B.90 | +20 |

**Management of the defeasance**

Starting from the establishment of the defeasance until liquidation of the unit in charge of management of the assets, the following events occur:

- securities are finally sold for 30,
- buildings are finally sold for 8,
- of the total amount of 40 of loans: 30 are finally repaid, 6 are written-off, and 4 are cancelled by mutual agreement.

The repayment by the unit of the loan it has acquired, as well as interest payments are not shown.

| General government | | | |
|---|---|---|---|
| **Opening balance sheet** | | | |
| A | | | L |
| AN | 5 | | |
| AF.2 | x–100 | | |
| AF.4 | 40 | | |
| AF.5/AF.3 | 25 | | |

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| P.5 | –8 | D.99 | –4 |
| B.9 | +4 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.2 | +68 | | |
| AF.4 | –34 | | |
| AF.5/AF.3 | –30 | | |
| | | B.9F | +4 |

**Other changes in volume of assets account**

| ΔA | | | ΔL |
|---|---|---|---|
| K.10 on AF.4 | –6 | | |
| | | B.10.2 | –6 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| K.11 on AN | +3 | | |
| K.11 on AF.5/3 | +5 | B.10.3 | +8 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AN | 0 | | |
| AF.2 | x–32 | | |
| Other AF | 0 | B.90 | –2 |

In this example, government takes risk and rewards on problematic assets held by a financial institution ('economic ownership' case).

1. Problematic assets have a book value of 50, equal to their market/fair value.

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.3/F.4 | +50 | F.4 | +50 |
| | | B.9F | 0 |

**Financial institution**

**Opening balance sheet**

| A | | | ΔL |
|---|---|---|---|
| AF.3/4 | 50 | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.3/F.4 | –50 | | |
| F.4 | +50 | | |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.3/F.4 | 50 | AF.4 | 50 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.4 | 50 | | |

2a) Problematic assets are covered by a government support scheme (risks and rewards) for an amount of 50 but their market/fair value is estimated 40, as recorded in the balance sheet of the financial institution.

**General government**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| | | | |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| | | D.9 | –10 |
| B.9 | –10 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.3 | +40 | F.4 | +50 |
| | | B.9F | –10 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.3 | 40 | AF.4 | 50 |

**Financial institution**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.3 | 40 | | |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| | | D.9 | 10 |
| B.9 | +10 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.3 | –40 | | |
| F.4 | +50 | | |
| | | B.9F | +10 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.4 | 50 | | |

2b) Holding losses on the assets of 10 are recorded in government balance sheet. Government has to transfer in cash 10 to the financial institution (e.g. financed by borrowing on the market by issuing debt securities)

**General government**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.3 | 40 | AF.4 | 50 |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| B.9 | 0 | | |

**Financial institution**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.4 | 50 | | |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | (+10–10) | F.4 | –10 |
| | | F.3 | +10 |
| | | B.9F | 0 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +10 | | |
| F.4 | –10 | | |
| | | B.9F | 0 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.3/4 | –10 | | |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.3 | 30 | AF.4 | 40 |
| | | AF.3 | 10 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 10 | | |
| AF.4 | 40 | | |

2c) At the end of the lifetime of the assets there is a final holding gain of 5 on the assets (government receives 35, not 30). Government borrows 5 on the market (e.g. by issuing debt securities) in order to repay the loan of 40.

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.3 | 30 | AF.4 | 40 |
| | | AF.3 | 10 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | (+35+5–40) | F.4 | –40 |
| F.3 | –35 | F.3 | +5 |
| | | B.9F | 0 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.3 | +5 | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.3 | 15 |

**Financial institution**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 10 | | |
| AF.4 | 40 | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +40 | | |
| F.4 | –40 | | |
| | | B.9F | 0 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 50 | | |

# 4.6 Capital increases in multilateral development banks

## 4.6.1 Background

1. Multilateral development banks are institutions that provide financial support and professional advice for economic and social development activities in developing countries. The term Multilateral Development Banks (MDBs) typically refers to the World Bank Group (notably the IBRD — International Bank for Reconstruction and Development and IDA — International Development Agency) and four Regional Development Banks:
   - The African Development Bank (AfDB),
   - The Asian Development Bank (AsDB),
   - The European Bank for Reconstruction and Development (EBRD),
   - The Inter-American Development Bank Group (IDB).
2. MDBs are characterized by a broad membership, from both borrowing developing countries and from developed donor countries, which is not limited to member countries from the region of a regional development bank. Each bank has its own independent legal and operational status, although, with a similar mandate and a considerable number of joint owners, the MDBs maintain a high level of cooperation between themselves.
3. Most of the MDBs have two types of funds, often called lending windows or lending facilities. One type of lending window is used to make loans at market-based interest rates. Such non-concessional loans are, depending on the MDB, extended to governments and private sector firms in middle income, and some creditworthy low-income countries. The other type of lending window is used to make loans at (well) below-market interest rates (concessional loans) granted to the governments of low-income countries.
4. To offer non-concessional loans, the MDBs borrow money from international capital markets and then re-lend the money to developing countries. MDBs are able to borrow from international capital markets because they are backed by the guarantees of their member governments. This is provided through the ownership shares that member countries subscribe in each bank. Only a small portion (typically less than 5–10 %) of the value of these capital shares is actually paid to the MDB ('paid-in capital'). The bulk of these shares is a form of guarantee that the donor stands ready to provide to the bank if needed. This is called 'callable capital,' because the money is not actually transferred from the donor to the MDB unless the bank needs to draw on its members' callable subscriptions because their resources are exhausted and they still need funds to repay bondholders.
5. Periodically, when donors agree that the future demand for loans from an MDB is likely to expand, they increase their capital subscriptions to an MDB's non-concessional lending window in order to allow the MDB to increase its level of lending.
6. As the MDB extends concessional loans and grants to low-income countries, the window's resources for such activities become systematically depleted. The donor countries meet together periodically to replenish those resources. Thus, these increases in resources are called 'replenishments', and most occur on a planned schedule ranging from three to five years. If these facilities are not replenished in good time, they will run out of resources and have to substantially reduce their levels of activity.
7. Some MDBs offer solely or mainly concessional loans (these are: IDA, Fund for Special Operations (FSO) at IDB, AfDF and AsDF) and therefore they are largely funded by contributions from the governments of its richer member countries or from the income of other MDBs (for instance IDA receives additional funds from IBRD's and IFC's income), and from borrowers' repayments of earlier credits.
8. MDB concessional loans are characterized by a very low interest rate and long maturities with grace periods. IDA credits typically have maturities of 35 or 40 years with a 10-year grace period on repayment of principal. There is no interest charge, but credits do carry a small service charge of 0.75 % on

disbursed balances. These are not only below market interest rates, but do not even cover funding and administrative costs.

## 4.6.2 Treatment in national accounts

9. The treatment in national accounts of government injections in MDBs depends on the type of loans provided by multilateral development banks. Injections into MDB facilities whose main or sole purpose is to provide concessional loans at marginal or zero interest rate should be recorded as capital transfers, while investments into MDB facilities providing non-concessional loans should be recorded as acquisition of other equity, as set out in ESA 2010 paragraph 5.154 (d): 'government investments in the capital of international and supranational organisations, with the sole exception of the IMF, even if these are legally constituted as companies with share capital (e.g. the European Investment Bank)' are to be recorded as AF.519, other equity.

**Treatment of capital increase in MDBs**

| Type of capital injection / Type of MDB facility | Paid-in capital | Callable capital | Conversion of reserves into paid-in capital | Hybrid capital increase | Temporary increase | Encash ment period |
|---|---|---|---|---|---|---|
| **MDB facilities providing non-concessional loans** | Shares and other equity F.5/F.513 | Nothing recorded, until called | No implications | Examine on a case-by-case basis | Loans (F.4), if cancelled D.9 | F.5 at inception |
| **MDB facilities providing mainly concessional loans** | D.9 | Nothing recorded until called | N/A | Examine on a case-by-case basis | Loans (F.4), if cancelled D.9 | D.9 when due to be paid |

## 4.6.3 Rationale of the treatment

10. MDBs may have two types of lending facilities or lending windows. Concessional loans are interest free loans or loans with an interest rate much below the market rate. Usually those loans are long term and have long grace periods. Despite a small service charge, MDBs facilities providing concessional loans are generally not able to cover their funding and/or administrative costs and thus their funding resources become depleted over time. In order to maintain their activities at least at the same level, MDBs facilities providing concessional loans have to receive replenishments from their donors. It is clear from the very beginning that MDB facilities providing concessional loans are not going to be profitable, and in substance, these replenishments are rather similar to capital injections aimed to cover losses. Therefore, following the capital injections rules, government injections into MDB facilities providing concessional loans should be treated as capital transfers.

11. Non-concessional loans are made at market interest rates, which implies, that a return is expected or at least the borrowing costs and/or administrative costs of the MDB's facility are covered. Once MDB facilities providing non-concessional loans accumulate reserves, these can later be converted into capital and used for further operations. Therefore, in practice, it is not very common that a MDB draws down its callable capital. In fact, capital increases by donor governments are usually needed for the purpose of new or expanding activities. Thus, government injections into MDB facilities providing non-concessional loans should be treated according the ESA 2010 paragraph 5.154 (c), as other equity AF.519.

12. In the case of MDBs, capital increases by governments usually take the following forms: paid-in capital, callable capital, conversion of reserves into paid-in capital, hybrid capital increase, temporary increase and encashment period.

### 4.6.3.1 PAID-IN CAPITAL

13. In most MDB facilities, providing non-concessional loans, new paid-in capital represents only a fraction of their total capital. In this case the paid-in part will be considered a financial transaction (purchase of equity) not affecting the government net lending/borrowing (B.9).

14. In the case of paid-in capital to MDB facilities providing mainly or solely concessional grants and loans, the injection is recorded as a capital transfer.

#### 4.6.3.2 CALLABLE CAPITAL

15. A large part of an MDB capital increase is usually structured as callable capital, i.e. not paid-in. The statistical treatment is as follows: the callable part is to be considered a contingent transaction, which is not to be recorded in the national accounts system. This applies to both types of facilities of MDBs. Of course, once capital is called it must be analysed as paid-in capital.

#### 4.6.3.3 CONVERSION OF RESERVES INTO PAID-IN CAPITAL

16. (A part of) the capital increase may be implemented through a conversion of accumulated reserves into permanent paid-in capital without any cash being transferred from shareholders. The statistical treatment is as follows: in ESA 2010 it is not the number of shares which needs to be examined, but their value. If some of the reserves were to be converted into shares, the value of the shareholding would still be the same. There would be therefore no direct implications for the accounts and no impact on government net lending/borrowing (B.9) and debt.

17. Facilities of MDBs providing mainly concessional loans and grants normally have no accumulated reserves, as they deplete all of their funds. Therefore, this case does not apply to them.

#### 4.6.3.4 HYBRID CAPITAL INCREASE

18. (A part of) the capital increase could be implemented through issuing a form of hybrid capital instrument (in combination with callable capital) with both debt and equity features. The statistical treatment cannot be judged in general; the precise conditions will have to be assessed on a case-by-case basis.

#### 4.6.3.5 TEMPORARY INCREASE

19. Contrary to a permanent increase, a capital increase may be indicated as only for a temporary period and (a part of) it is re-paid to members after an agreed period of time (e.g. when a crisis is over and the lending activities have returned to normal levels). The statistical treatment is as follows: a temporary increase with a scheduled repayment would be seen as a loan, even if at zero interest rate. Scheduled repayment will progressively decrease the outstanding amount of the loan.

20. The initial treatment as a loan applies to both cases of MDB facilities. If there is a subsequent loan cancellation, this would have to be recorded as capital transfer.

#### 4.6.3.6 ENCASHMENT PERIOD

21. It may be decided to stretch the actual cash payment by members of the paid-in part of the capital increase over a longer period of time, in several instalments (this could be up to 10 years). Here the two types of MDB facilities have to be distinguished.

22. In the case of a MDB facility providing mainly non-concessional loans, the statistical treatment is as follows, assuming that the capital increase is decided at inception (i.e. one decision concerning one capital increase, although with deferred payments, and not concerning many decisions for separate capital increases over the years). An acquisition of equity is recorded at inception for the full amount of the paid-in capital. For the financial counterpart of amounts not paid initially in cash, the recording is determined by the length of the period of time in which instalments are to be paid. If they are paid quickly, within one year, the part not yet paid is recorded under other accounts payable (AF.8), with no impact on the government (EDP) debt. Beyond that, the counterpart is recorded as a loan (AF.4) from the bank to government, with an impact on government (EDP) debt.

23. For the MDB facilities providing mainly or solely concessional loans and grants, these payments are recorded as capital transfers. The time of recording would have to comply with ESA 2010 paragraph 4.166, which is when the payment is due to be made.

# 4.7 Recording of income contingent loans

## 4.7.1 Background

1. This chapter addresses the case where government provides funds (directly or through a dedicated public sector entity), in the legal form of loans, whereby repayments are contingent to elements defined in the funding agreement or by law. These contingent elements, which allow the debtor not to repay the funding (partially or totally), can take various forms such as the future income of the beneficiary of the funding, the limitation of the period of repayment or other elements not fully under the control of the parties. Cases of government lending with a total cancellation option due to events depending on the sole decision or under the sole control of the borrower may require different rules than those covered by this chapter.
2. This chapter on income contingent loans should also apply in situations that could be assimilated to such loans, i.e. to loans with non-negligible contingency elements other than related to income contingencies for example contingency elements related to programme performance or the death of the debtor.
3. Such funding is mainly provided by government to households, but can also be provided to other institutional units. The aim of it is to support public policy, so the terms for the beneficiaries will be more favourable than in case of taking a loan from a financial institution.
4. In general, such funding is called income contingent loans. It may not fully meet the criteria to be considered a loan as referred to in national accounts, as it does not establish an unconditional debt as requested by ESA 2010 paragraph 5.113.
5. Income contingent loans are often granted by governments for relatively small amounts to a large number of debtors under standard conditions. Therefore, the analysis in national accounts can apply to the whole loan portfolio and not to each individual loan granted.
6. Public schemes of income contingent loans provided by private financial institutions with the backing by government of the contingent elements are not covered by this chapter, as they would have typically the nature of standardised guarantees (see section 7.4.3).
7. Such borrowing is generally granted with long term maturity (up to 30 years or even longer) and bear interest. The interest may be capitalised or not and may be at market or concessional rates. Income contingent loans typically include provisions that allow the debtor not to comply with the reimbursement of the debt at maturity or when instalments are due. Several conditions (such as age, income, physical ability, limit in time etc.), might activate the cancellation of the borrowing or part of it by the creditor (government).
8. As a consequence, the conditionality of income contingent loans has a potential impact on government revenue and expenditure:
   - this Manual states in sub-section 8.2.2.2. that in national accounts interest is recorded when accrued, whether paid or not. Therefore accrued interest affects the net lending/borrowing (B.9), although such interest may never actually be paid, due to the contingent threshold for repayment to be made not being reached, having the potential to distort government expenditure/revenue reporting,
   - due to the long term nature, write-offs and/or debt cancellation will only occur after a long period, when the contingency element crystallises, which would transfer any recognition of potential losses far into the future.

## 4.7.2 Treatment in national accounts

9. Following, amongst others, ESA 2010 paragraph 20.121, loans granted by government should undergo an assessment of whether they are likely to be repaid or not. Taking into account the contingency element of income contingent loans, this assessment should thus determine the expected losses at inception.

10. The probability of expected losses can be assessed in different ways such as:

    a) observed losses on similar loans,

    b) evaluation of expected losses based on the probability of a contingency event by the debtor.

11. Taking into account the large number of such loans (irrespective of possible changes in the overall features of their contingency elements following a decision by government), the analysis of coherent sub-portfolios (i.e. loans granted within a given year, or through a specific loan scheme) seems to be the appropriate approach.

12. If it appears that sufficient information is available to determine in a satisfactory way the potential losses of the income contingent loan portfolio, three categories of income contingent loans can be identified, for a different statistical treatment of income contingent loans:

    a) the expected loss at inception due to contingency elements is low e.g. a small fraction of the provided funds,

    b) the expected loss at inception due to contingency elements is extremely high e.g. almost all of the provided funds,

    c) the expected loss at inception due to contingency elements is significant e.g. a large fraction of the provided funds.

13. For category (a) the income contingent loan can be recorded at inception as loan for its full value.

14. For category (b), the income contingent loan can be recorded for its full value at inception as government expenditure with subsequent repayments (if any) recorded as government revenue.

15. For category (c), the funding should be partitioned. Part of the funding granted by government should be recorded as a loan, i.e. a financial transaction without any impact on government net borrowing/net lending (B.9) and part as a government expenditure. The amount to be recorded as government expenditure should be estimated on the basis of expected losses arising from the contingency, using an appropriate discount factor, for example the borrowing cost for government.

16. The approach described in paragraph 15 above can also be applied for all income contingent loans, i.e. even when expected losses are very low or very high, if the statistical authorities consider it as most suitable.

17. If it appears that no sufficient information is available to determine in a satisfactory way the potential losses of the income contingent loan portfolio, it should generally be recorded as government expenditure (with the recording of government revenue for any future repayment by the debtor), applying the treatment described in paragraph 12.b. When the overall impact of the contingency is likely to be rather small, a loan can be recorded, but only if there are well founded reasons to do so, applying the treatment described in paragraph 12.a.

18. The value of income contingent loans granted by government is influenced by changes of the revenue expectations of the borrower as well as by government policies changing the characteristics of the income contingent loan scheme. Where a change in expectations leads to a substantial re-assessment of the expected losses of the loan portfolio (or the relevant sub-portfolio) it should lead to the recording of government expenditure (or negative expenditure)[184]. It might not be necessary to record government expenditure when the re-assessed expected losses due to changes from regular forecast updates that are not substantial.

19. Some governments proceed to an active management of their loan portfolios by selling all or a portion of such loans to private investors under current market conditions. The market valuation of the income contingent loan portfolio might differ from the value recorded in the ESA government balance sheet:

    a) in category (a), the difference has to be recorded as government expenditure,

    b) in category (b), the sale has to be recorded as government borrowing,

    c) in category (c), if the value (loan asset plus accrued interest) recorded in the government balance sheet differs substantially from the current market price of the transaction, an additional capital transfer should be recorded in favour of the debtor or government in order to ensure that the

[184] The same statistical treatment has to be applied, if discrepancies between the expected redemption amount and the amount effectively received by government over the lifetime are observed.

expenditure/revenue element of the income contingent loan is fully captured, consistently with the previous paragraph.

20. In category (c) interest accrues (using the discount factor) and is added to the principal, following ESA rules, but only on the part that is recorded as a loan. Repayment of principal and interest is recorded as a reduction of the instrument.

## 4.7.3 Rationale of the treatment

21. ESA 2010 rules for valuation, sales and write-offs of loans apply to loans complying with the features described in ESA 2010 paragraph 5.113. They can also apply to income contingent loans, where the contingency element has only a small impact on the repayment of the funds provided by government, e.g. where expected rates and levels of non-repayment are typically low such as in a range of 5 % to 10 %. On the contrary, in cases where the impact of contingency elements is expected to be extremely high such as in a range of above 90 % to 95 %, it would be more appropriate to consider the funding not as a loan but as government expenditure (and revenue in the case of any refund).

22. If the expected loss due to the contingency is significant, partitioning of the instrument would be the most appropriate way to reflect properly the real nature of the funding in national accounts.

23. However, if at inception the information available is judged to be insufficient to assess in a satisfactory way the potential rate of repayment, the income contingent loan should not be recognised as a loan but should generally be recorded as government expenditure and any future repayment by the debtor as government revenue. The recording of a loan can be applied whenever there are well founded reasons to do so.

24. ESA 2010 paragraph 20.121 clarifies, that 'loans granted by government not likely to be repaid are recorded in the ESA as capital transfers'. This should generally apply to the situation where the contingency element, in the presence of sufficient information, would lead to an expected significant loss between e.g. 5 % to 10 % and 90 % to 95 % of the funds provided by government. In other cases, statisticians can decide to record the total amount of the funds provided as a loan (when expected losses due to the contingency have only a limited impact on the repayment, e.g. below a range of 5% to 10 %) or as capital transfer (when expected losses due to the contingency are higher than a range of 90 % to 95 %).

# 4.8 Keywords and accounting references

| | |
|---|---|
| Rearranged transactions | ESA 2010, 1.73-1.78 |
| Rerouting | ESA 2010, 1.73-1.75 |
| Financial intermediation/intermediary | ESA 2010, 2.87-2.88, 2.61 |
| Other capital transfer | ESA 2010, 4.164-4.167 |
| Valuation of transactions | ESA 2010, 5.19-5.22 |
| Valuation of assets | ESA 2010, 7.33-7.41, 7.61 |

# 5 Sale of assets

## 5.1 Overview

1. Governments sell financial and non-financial assets to raise cash or to optimise the size of assets. Governments might also transfer flows of receipts, or incur a future obligation to make payments, in return for cash today. In most cases, a sale of an asset is recorded as a sale, for the value of the transaction, in national accounts.
2. However, some cases are more complicated, particularly when:
   - sales take place through public corporations;
   - the economic risks and rewards are not fully transferred (no 'true sale');
   - the government's proceeds for the sale are not in cash or differ from the market/fair value of the assets sold;
   - the asset that appears to be sold is not recorded in the government's balance sheet in national accounts.
3. In the guidance that follows, the key principles applied are the recording of economic substance over legal form, the concept of economic ownership, the basic distinction between financial and non-financial flows and the coverage of the notion of income in national accounts.

# 5.2 Sales of financial and non-financial assets

## 5.2.1 Background

1. Privatisation normally means general government giving up control over a public enterprise by the disposal of shares and other equity in the enterprise. The scope of this chapter is larger than just that operation: it also addresses more general case of general government selling shares and other equity in enterprises, without necessarily having control on them or, if having it, without actually giving up this control. These sales may be made directly or indirectly. Sales of non-financial assets are also dealt with.
2. Four cases may be distinguished:
   a) the government sells shares or other equity in an enterprise. This sale is said to be 'direct'.
   b) assume government owns enterprise A, which sells shares or other equity in an enterprise B and gives the proceeds of the sale back to government. This sale is said to be an 'indirect' sale by government of financial assets.
   c) the government sells non-financial assets. This is said to be a 'direct' sale of non-financial assets.
   d) government owns enterprise A, which sells non-financial assets and gives the proceeds of the sale to government. This sale is said to be an 'indirect' sale by government of non-financial assets.
3. The funds provided by the enterprise to government through an indirect sale may take various forms other than cash. For example, they could consist of such as the redemption of amounts owed by the enterprise to the government. In the following, only provision of liquid assets is considered, but this assumption does not change the proposed treatments.

## 5.2.2 Treatment in national accounts

### 5.2.2.1 DIRECT SALE OF FINANCIAL ASSETS

4. The direct sale of financial assets has to be completely recorded in the financial accounts of general government and of the involved enterprise: it is a withdrawal of shares or other equity (F.5) from the enterprise which was, partially or totally, owned by government, with a counterpart entry as an increasing of a financial asset (most of the time, liquid assets (F.2). This has no impact on the net lending/borrowing (B.9) of general government.

### 5.2.2.2 INDIRECT SALE OF FINANCIAL ASSETS

5. The indirect sale of financial assets also has to be recorded in the financial accounts of general government and of the above-mentioned enterprise A: it is a withdrawal of shares or other equity from enterprise A, with a counterpart entry as an increasing of a financial asset. This is true whether or not enterprise A gives to its owner, the government, all or parts of the proceeds of the sale. The indirect sale of financial assets has no impact on the net lending/borrowing (B.9) of general government.

### 5.2.2.3 DIRECT SALE OF NON-FINANCIAL ASSETS

6. The direct sale of non-financial assets has to be recorded in the capital account of general government: it is a disposal of non-financial assets, with a positive impact of net lending/ borrowing (B.9) of general government. Non-financial assets include fixed assets, inventories, valuables, land or other non-produced non-financial assets.

### 5.2.2.4 INDIRECT SALE OF NON-FINANCIAL ASSETS

7. The general government accounts would record the indirect sale of non-financial assets as a financial transaction: it is a withdrawal of shares or other equity from the enterprise A which was, partially or totally, owned by government, with a counterpart entry as an increase in a financial asset in respect of the funds received.

#### 5.2.2.5 TIME OF RECORDING, AMOUNTS TO BE RECORDED

8. In the general government accounts:
   - in cases of direct sales, transactions have to be recorded when the change of economic ownership takes place;
   - in cases of indirect sales, when the proceeds of the sales are paid back to general government.
9. The amounts to be recorded are the full amounts of the proceeds of the sale (less any amount kept by the owning company in the case of an indirect sale), as they are paid by purchasers: they correspond to the transaction value, as defined in ESA 2010 paragraph 5.19, for the sale of the assets.
10. In particular, in the case of indirect sales, it may happen that the total or some parts of the proceeds are recorded as dividends, taxes or any other kind of flow in the internal bookkeeping of the parties to the transaction. They have nevertheless to be recorded as financial transactions in national accounts.
11. In the case of a partial refund to government of the proceeds of an indirect sale, the full payment to government is treated as financial transaction. In practice, such sales may require government to employ the services of financial intermediaries or other non-financial services. This is especially true in case of privatisation. The cost of these services has to be recorded as intermediate consumption. If they are actually paid out of the proceeds of the sales (through a reduction in the amount passed to government), an imputation should normally be made so that the total proceeds of the sale are recorded before netting off the service charge. Of course, if payments are made to general government — e.g. as dividends or taxes — in addition to the proceeds of the sales of assets, they have to be recorded, if relevant, in the specific non-financial transactions.
12. The case where a part of the proceeds of the sale is kept by enterprise A is dealt with in the following chapter 5.3 Privatisation proceeds from public corporations.
13. The cases of indirect sales addressed here deal with sales of assets of a substantial amount that are paid back to general government. Frequently these sales are part of a privatisation plan decided by the government. However, it may happen that, as part of their normal operations, enterprises sell a few assets and thus realise some capital gains. These capital gains might then be distributed to general government through dividends or specific taxation, in such a way that the proceeds of the sale of assets would be part of government revenue. The possible difficulties for obtaining information should not prevent from recording these flows as financial in all cases of rather significant proceeds of sales.

## 5.2.3 Rationale of the treatment

14. The rationale of the rules dealing with direct sales is straightforward. For the sales of financial assets, they stem from the definition of financial transactions (ESA 2010 paragraphs 5.01 and 5.02) and of the financial account (ESA 2010 paragraph 8.50). Basically, in this direct exchange of one financial asset for another in the balance sheet of the government, there is no change in wealth, nor any flow of income. For the sales of non-financial assets, they stem from the definition of the disposal of the concerned assets and of the capital account (ESA 2010 paragraph 8.46).
15. The rationale for the treatment of indirect sales is first based on the fact that the payment of the proceeds of the sales is not a transfer of income, but a transfer of wealth/assets. However, it cannot be considered a capital transfer: the definition of other capital transfer (ESA 2010 paragraph 4.165) does not make room for such a treatment. Moreover, in these cases, payments are provided only because of the rights of ownership that government has on the involved enterprises.
16. This is the rationale for the exclusion from capital transfers of the payment of privatisation proceeds, as indicated in ESA 2010 paragraph 4.165 (g): *However, the counterpart transactions of transfers to general government of the proceeds of privatisation made indirectly (through a head office for example) are recorded as financial transactions in equity and investment funds shares (F.5) and have no impact on the level of net lending/borrowing (B.9) of the general government*.
17. Paying back the proceeds of the sale to the government diminishes the assets of enterprise A. This corresponds to a partial liquidation of the corporation as it reduces its net worth, which should be reflected (decrease) in the value of equity owned by government in the corporation. This treatment of indirect privatisation must be applied to the case of sale by the corporation of any financial or non-financial asset.

18. The notion of dividend in national accounts is clear: this is a property income. Dividends must result from income streams and not from sale of assets or from revaluation of assets. Distributing income should not diminish the net wealth/net assets of the enterprise. What may be distributed to the owners is the entrepreneurial income (ESA 2010 paragraphs 8.26–8.28).

## 5.2.4 Accounting examples

In all the following examples, the counterpart flow of sales is a transaction in currency and deposits (AF.2). The enterprise of which general government sells shares or other equity or from which it receives the proceeds of such a sale is called public enterprise.

**Direct sales of financial assets**

| General government | | | | Public enterprise | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | z | | | | | AF.5 | z |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.5 | –x | | | | | | |
| F.2 | +x | B.9F | 0 | | | | |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | z–x | | | | | AF.5 | z |
| AF.2 | +x | Δ B.90 | 0 | | | Δ B.90 | 0 |

**Indirect sale of financial assets**

| General government | | | | Public enterprise A | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | z | | | AF.5 | y | AF.5 | z |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.5 | –x | | | F.5 | –x | F.5 | –x |
| F.2 | +x | B.9F | 0 | | | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | z–x | | | AF.5 | y–x | AF.5 | z–x |
| AF.2 | +x | ΔB.90 | 0 | | | ΔB.90 | 0 |

**Direct sale of non-financial assets**

**General government**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AN | z | | |

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| Disposal of AN | –x | | |
| B.9 | +x | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +x | | |
| | | B.9F | +x |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AN | z–x | | |
| ΔAF.2 | +x | ΔB.90 | 0 |

**Indirect sale of non-financial assets**

**General government**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.5 | z | | |

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| | | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.5 | –x | | |
| F.2 | +x | B.9F | 0 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.5 | z–x | | |
| ΔAF.2 | +x | ΔB.90 | 0 |

**Public enterprise A**

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AN | y | AF.5 | z |

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| AN | –x | | |
| B.9 | +x | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +x–x | F.5 | –x |
| | | B.9F | +x |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AN | y–x | AF.5 | z–x |
| | | ΔB.90 | 0 |

# 5.3 Privatisation proceeds from public corporations

## 5.3.1 Background

1. In some EU Member States, head offices[185] according to ESA 2010 have been set-up by government in order to direct and manage a group of market enterprises, with profitable and competitive objectives. In this context they may restructure the group. Thus, they may organise privatisations and transfer the proceeds of the sale of shares to other public corporations (owned by the head office or not), through grants, loans or capital injections, or to government.
2. It may also happen that, in other countries where the units exist for a long time, some could be given this same function. This may also concern some public entities like regional development agencies managing funds (including shares and other equity) belonging to government or possibly to European institutions (structural or cohesion funds).
3. The main issue is: what is the relevant sector classification of this sort of unit managing privatisation and possibly making grants to other enterprises and if this activity should be considered to take place on behalf of the government.

## 5.3.2 Treatment in national accounts

4. There are three possibilities:

   1) The public head office is a market unit and moves funds around within the group as part of a business strategy for the group, in the same way that a private corporation would behave.

      No transaction is recorded in government accounts.

   2) The public head office is a market unit and moves funds around within the group to support loss-making activities which are clearly identified as resulting from government's economic and social policy, the relevant entities acting on behalf of government and under evidenced instructions.

      Transactions are rerouted through government.

   3) The public head office is a market unit but provides grants and subsidies on behalf of government to units outside the group.

      All payments are rerouted through government.

## 5.3.3 Rationale of the treatment

5. ESA 2010 paragraph 2.14: *A head office is a unit that exercises managerial control on its subsidiaries*. Head offices may usually be considered market producers, either non-financial or financial, according to the main activity of the group.
6. A problem arises when the head office implement a development strategy for its subsidiaries (in the framework of a long-term plan for the group), but also carries out restructuring and changing the ownership status of some corporations in the group, as well as channelling the funds from one to the other, redistributing income and wealth.
7. This public sector reorganisation project, involving management of assets and redistribution of income and wealth, is a direct implementation of a central government macro-economic strategy. In many EU Member States, this is (or was) often implemented by the Treasury itself. In the case examined here, the Treasury uses an existing intermediary entity, which is supposed to manage public assets and to redistribute funds in a short or medium-term context.

[185] See chapter 1.6 Specific public entities.

8. This specific type of activity should be regarded as a management of assets for public policy purposes, taking place on behalf of the government.

9. There can be a contradiction between the economic nature of relationships and of transactions between units, and the legal presentation of these units and of their relationships. Some provisions in the ESA 2010 (notably in chapter 1) allow for a statistical treatment that might diverge from the legal arrangements:

   - **ESA 2010 paragraph 1.72: Rearranged transactions**

     *(...) however, some transactions are rearranged in order to bring out the underlying economic relationships more clearly. Transactions can be rearranged in three ways: rerouting, partitioning and recognising the principal party to a transaction*.

   - **ESA 2010 paragraph 1.75: Rerouting**

     *(...) another type of rerouting is that of transactions recorded as taking place between two or more institutional units, even though according to the parties involved no transaction takes place at all.*

   - **ESA 2010 1.78: Recognising the principal party to a transaction**

     *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 (...).*

10. These statements derive from the general principle, according to which: *the basic principles of national accounts require that all transactions occurring in different legal settings, but having the same economic effects, are to be recorded in the same way*.

11. The rerouting of flows (proceeds of the sales of the assets and payments to public corporations) is only relevant when only a minor part of its activity consists of acting for public policy purposes (privatising, supporting public corporations, etc.) on behalf of the government. Otherwise, this would mean that the unit cannot be (or no longer) considered a market producer and should be (re)classified within the government sector. Recording the payment as government grants or whatever sort of transactions is relevant in this context.

12. In the case of the transaction with the public subsidiary being a financial one (a loan for instance), it could be recorded first between the government and the public holding, and then between the public holding and the subsidiary. In the case of an investment grant, a direct recording between the government and the public enterprise would be preferable.

13. When the public head office provides grants or any other type of transfers to enterprises (whether private or public) outside of its group, there is an even stronger presumption that it is acting this way on behalf of the government.

## 5.3.4 Accounting examples

Government owns a head office that is classified in the non-financial corporation sector. This holding disposes — for an amount of 100 — of shares it has in a subsidiary A, as part of a privatisation programme decided by government. The head office keeps the proceeds of this disposal; from these proceeds, it pays 20 to another subsidiary B. This payment is analysed as being of a government nature — another subsidy on production, for instance — because there is no financial asset received in exchange and no expectation of return in form of property income. At the beginning of the period, equity of government in the head office amounts to x, equity of the head office in its subsidiary B amounts to z.

| General government | | Head office | | Subsidiary B | |
|---|---|---|---|---|---|
| | | **Opening balance sheet** | | | |
| A | L | A | L | A | L |
| AF.5 x | | AF.5 z | AF.5 x | | AF.5 z |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| | | D.39 | –20 |
| B.9 | –20 | | |

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| | | | |

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| D.39 | –20 | | |
| B.9 | +20 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +20 | | |
| F.2 | –20 | | |
| F.5 | –20 | B.9F | –20 |

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +100 | F.5 | –20 |
| F.2 | –20 | | |
| F.5 | –100 | B.9F | 0 |

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +20 | | |
| | | B.9F | +20 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.5 | x–20 | | |
| | | ΔB.90 | –20 |

| A | | L | |
|---|---|---|---|
| AF.5 | z–100 | AF.5 | x–20 |
| AF.2 | +80 | | |
| | | ΔB.90 | 0 |

| A | | L | |
|---|---|---|---|
| AF.2 | +20 | AF.5 | z |
| | | ΔB.90 | +20 |

# 5.4 Restitution and use of vouchers for privatisation

## 5.4.1 Background

1. In transition economies, the concept of privatisation can be extended to also include any transfer (disposal) to the public or former (private) owners of government assets previously nationalised or confiscated. Three cases have been identified.

### 5.4.1.1 RESTITUTION IN KIND

2. Restitution in kind refers to the return to the original owner of non-financial assets (in general land and buildings, but also production plants in some cases) formerly nationalised or confiscated by the State, and generally owned at the time of restitution by the government but in some cases by public corporations. The non-financial assets may, therefore, be fixed assets, inventories, valuables, land or other non-produced assets.

### 5.4.1.2 RESTITUTION THROUGH FINANCIAL COMPENSATION

3. In cases where the property to be returned to former owners does not exist or cannot be returned, financial compensation can be made in the form of money or other financial instruments such as bonds or shares.

### 5.4.1.3 PRIVATISATION THROUGH THE ISSUE OF VOUCHERS

4. For carrying out the privatisation of publicly owned assets in some transition economies, governments have distributed vouchers to the population, either free of charge or sold at nominal prices. Holders of vouchers can acquire shares and other equity (directly or indirectly) or non-financial assets.

## 5.4.2 Treatment in national accounts

### 5.4.2.1 RESTITUTION IN KIND

5. Restitution in kind represents a transfer of non-financial assets from the government to the sectors benefiting from the restitution. Two cases can be distinguished:

   a) **The non-financial asset to be returned is roughly the same as the one nationalised or confiscated in the past. This may be the case for land and other non-produced assets.**

   This type of restitution could be considered a reverse of an uncompensated seizure to be recorded in the other changes in volume of assets account. However, under ESA 2010, this return should rather be recorded as a transaction, a negative capital formation in the government account, counterbalanced by a ‘payment of a capital transfer in kind’ (with reversed sign in the accounts of the receiving sector). This has an impact on the stock of assets recorded in the balance sheets, and therefore increases the net worth of the sectors benefiting from the restitution and simultaneously decreases the net worth of general government.

   b) **The non-financial asset to be returned is different (in terms of appearance and value) from the one nationalised or confiscated in the past. This may be the case for dwellings and other tangible fixed assets.**

   In this case, the return should be recorded as a transaction, a negative capital formation in the government account, counterbalanced by a ‘payment of a capital transfer in kind’ (with reversed sign in the accounts of the receiving sector). As both flows are balanced in the capital account, there is no impact on the net lending/borrowing (B.9) of general government. However, the capital transfer leads to an increase of the net worth of the sectors benefiting from the restitution and simultaneously to a decrease of the government’s one.

   In both cases, the time of recording is at the time of the change in the economic ownership of the assets.

### 5.4.2.2 RESTITUTION THROUGH FINANCIAL COMPENSATION

6. Restitution through financial compensation represents a transfer of financial assets from the government sector to the sectors benefiting from the compensation. It should, therefore, be recorded in the government accounts as a decrease in financial assets, counterbalanced by a capital transfer in kind or in cash (payable), and in the accounts of the receiving sectors as an increase in financial assets, offset by a capital transfer in kind or in cash (receivable). The capital transfer has a negative impact on the net lending/borrowing (B.9) of general government, as well as on the net worth. The time of recording of the transaction is when government recognises a liability for a certain and irrevocable amount.

### 5.4.2.3 PRIVATISATION THROUGH THE ISSUE OF VOUCHERS

7. The vouchers are used (mostly by households) to acquire financial or non-financial assets and can be seen as a commitment by the government to redeem them against those financial or non-financial assets. In general, vouchers are only conditional upon the acquisition of financial and non-financial assets and therefore considered, as contingent assets not recorded in the system.

8. In the system, contingent assets are considered financial assets under certain conditions (ESA 2010 paragraph 5.05):

   1) if tradable: a market develops where they can be traded or offset on a market;

   2) if information exists on vouchers: on transactions carried out, and on market prices;

   3) if the market has a sufficient volume of transactions so that the total value of the market can be derived.

   4) if considered financial assets, vouchers may be considered special kind of financial derivatives (F.71).

9. A distinction can be made between the following two cases depending on whether vouchers are considered financial assets or not.

#### 5.4.2.3.1. Vouchers are considered to be financial assets when issued

10. In this case, the vouchers are recorded in the national accounts system at the time of their issuance.

**a) Acquisition of financial assets**

The transfer of vouchers should be recorded as a financial transaction (in financial derivatives F.71), counterbalanced by a capital transfer in kind from general government. This has a negative impact on the net lending/borrowing (B.9) of general government, as well as on the net worth.

To the extent that vouchers can be traded or offset on the market, a market will develop and their value will be determined on that market. Transactions in the vouchers are to be recorded as financial transactions between the respective sectors. Variations in the value of the vouchers during the same period should be recorded as holding gains and losses in the other changes in assets accounts (revaluation account) of the various sectors involved.

The exchange of vouchers for shares in public corporations is to be entirely recorded in the financial account of general government. This has no impact on net lending/borrowing (B.9) of general government.

**b) Acquisition of non-financial assets**

Vouchers are exchanged for commodities sold by non-financial corporations. The non-financial corporations acquire a claim against general government, and use it for bidding for shares owned and offered for sale by the general government.

The exchange of vouchers for commodities should be recorded as final consumption expenditure (P.3), counterbalanced by a decrease in financial derivatives (F.71) on the assets side of households. The government should record a decrease in financial derivatives on the liability side and a decrease of equity (F.5) in the public corporations on the asset side. As a result, there is no impact on the net lending/borrowing (B.9) and on the net worth of the general government.

#### 5.4.2.3.2. Vouchers are only contingent assets

11. If vouchers are considered to be contingent assets they are not recorded in the system at issuance. They can only be used to acquire financial or non-financial assets.

12. In this case, no recording of the vouchers is done at the time of their issuance but only when the exchange for financial or non-financial assets takes place.

**a) Acquisition of financial assets**

The exchange of vouchers for shares in public corporations should be recorded as a financial transaction in equity and investment funds shares (F.5), counterbalanced by a capital transfer in kind (D.9) from general government. This leads to an increase in shares and other equity of households on the asset side and to a decrease of shares and other equity of government on the asset side. The exchange has a negative impact on the net lending/borrowing (B.9) of general government, as well as on the net worth.

**b) Acquisition of non-financial assets**

The exchange of vouchers for non-financial assets should be recorded as a negative capital formation (P.51g), counterbalanced by a capital transfer in kind (D.9) from general government. This has no impact on net lending/borrowing (B.9) of general government. However, the exchange leads to a decrease of the net worth of general government.

#### 5.4.2.4 IMPACT OF VOUCHERS ON GOVERNMENT DEBT

13. In the ESA 2010 framework, the recording of vouchers in the balance sheet of the government (as soon as considered financial liabilities) will increase the stock of government liabilities.

14. In the Excessive Deficit Procedure framework, to the extent that we assume that the appropriate assets/liabilities for recording them are financial derivatives (F.71), vouchers would not influence the calculation of government debt (see Part 8).

## 5.4.3 Rationale of the treatment

#### 5.4.3.1 RESTITUTION IN KIND:

15. The two following cases can be analysed differently:

1) The returned asset is the same as the one seized by government: this is a unilateral restitution of wealth giving back a non-financial asset, that the government took possession of in the past without compensation. The uncompensated part of such unilateral seizures is not a capital transfer (ESA 2010 paragraphs 6.10), but to be recorded in the other changes in the volume of assets account (K.4). However, the restitution is not treated in a symmetrical way and recorded as the disposal of an asset, matched by capital transfer expenditure in government accounts.

2) The returned asset has changed: the restitution is analysed as a voluntary transfer of wealth, made by mutual agreement (unlike other changes in volume of assets). The counterpart transaction is considered a capital transfer (other capital transfers (D.99) ESA 2010 paragraph 4.164). This is concluded from the definition of capital transfers (ESA 2010 paragraph 4.146: A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash), or the cancellation of a liability by a creditor, without any counterpart being received in return). One may also consider that the transfer will require some government financing (see also ESA 2010 paragraph 6.11).

#### 5.4.3.2 RESTITUTION THOUGH FINANCIAL COMPENSATION:

16. The compensation is normally made many years after the confiscation (often 40 to 50 years). In distinction to restitution in kind (when the asset has not changed) restitution through financial compensation needs to be financed by the government. Like in all cases of transfer of wealth made by mutual agreement, the counterpart transaction is a capital transfer (other capital transfers (D.99), ESA 2010 paragraph 4.164).

#### 5.4.3.3 EXCHANGE OF VOUCHERS:

17. When considered financial assets, the exchange of vouchers for equity (AF.5) stem from the definition of financial transactions (ESA 2010 paragraph 5.02) and of the financial account (ESA 2010 paragraph 8.50): in direct exchange of one financial asset for another in the balance sheet of the government, there is no change in wealth, nor flow of income. For the exchange of vouchers for non-financial assets, the

rules stem from the definition of the disposal of the concerned assets and of the capital account (ESA 2010 paragraph 8.46).

## 5.4.4 Accounting examples

**1. Restitution in kind**

**i) The non-financial asset to be returned is roughly the same as the one nationalised or confiscated in the past.**

In the following examples, the government is assumed to return non-financial assets (land) worth 100 to the households sector.

| General government | | Households | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AN.211 | 100 | | | | | | |

**Other changes in volume of assets account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| K.4 (AN.211) | –100 | | | K.4 (AN.211) | +100 | | |
| | | B.10.2 | –100 | | | B.10.2 | +100 |

**Closing balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AN.211 | 0 | | | AN.211 | 100 | | |
| | | Δ B.90 | –100 | | | Δ B.90 | +100 |

**ii) The non-financial asset to be returned is different (in terms of appearance and value) from the one nationalised or confiscated in the past.**

In the following example, the government sector is assumed to return dwellings worth 100 to the households sector.

| General government | | Households | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AN.111 | 100 | | | | | | |

**Capital account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| P.51g | –100 | D.9 | –100 | P.51g | +100 | D.9 | +100 |
| B.9 | 0 | B.10.1 | –100 | B.9 | 0 | B.10.1 | +100 |

**Closing balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AN.111 | 0 | | | AN.111 | 100 | | |
| | | Δ B.90 | –100 | | | Δ B.90 | +100 |

**2. Restitution through financial compensation**

In the following example, the government is assumed to compensate former owners of e.g. land or dwellings (households) with shares worth 100.

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | 100 | | | | | | |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | D.9 | –100 | | | D.9 | +100 |
| B.9 | –100 | B.10.1 | –100 | B.9 | +100 | B.10.1 | +100 |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.5 | –100 | | | F.5 | +100 | | |
| | | B.9F | –100 | | | B.9F | +100 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | 0 | | | AF.5 | 100 | | |
| | | Δ B.90 | –100 | | | Δ B.90 | +100 |

**3. Privatisation through the issue of vouchers**

In the following examples, a privatisation agency (belonging to the general government sector) is assumed to issue vouchers to be distributed to the household sector, free of charge. Households can, during a stipulated period of time, be used to acquire shares and other equity owned by the government in public corporations and/or non-financial assets (e.g. fixed assets (AN.11)).

**i) Vouchers are considered financial assets when issued**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| | | AF.71 | 0 | AF.71 | 0 | | |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | D.9 | –100 | | | D.9 | +100 |
| B.9 | –100 | B.10.1 | –100 | B.9 | +100 | B.10.1 | +100 |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | F.71 | +100 | F.71 | +100 | | |
| | | B.9F | –100 | | | B.9F | +100 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| | | AF.71 | 100 | AF.71 | 100 | | |
| | | Δ B.90 | –100 | | | Δ B.90 | +100 |

**Acquisition of financial assets**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | 100 | AF.71 | 100 | AF.71 | 100 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.5 | –100 | F.71 | –100 | F.71 | –100 | | |
| | | | | F.5 | +100 | | |
| | | B.9F | 0 | | | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| | | AF.71 | 0 | AF.5 | 100 | | |
| | | Δ B.90 | 0 | | | Δ B.90 | 0 |

**ii) Vouchers are only contingent assets and therefore are not recorded in the system at issuance. They can only be used to acquire financial or non-financial assets**

**Acquisition of financial assets**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | 100 | | | | | | |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | D.9 | –100 | | | D.9 | +100 |
| B.9 | –100 | B.10.1 | –100 | B.9 | +100 | B.10.1 | +100 |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.5 | –100 | | | F.5 | +100 | | |
| | | B.9F | –100 | | | B.9F | +100 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | 0 | | | AF.5 | 100 | | |
| | | Δ B.90 | –100 | | | Δ B.90 | +100 |

**Acquisition of produced non-financial assets**

| General government | | | | Households | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AN.11 | 100 | | | | | | |

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| P.51g | –100 | D.9 | –100 |
| B.9 | 0 | B.10.1 | –100 |

| ΔA | | | ΔL |
|---|---|---|---|
| P.51g | +100 | D.9 | +100 |
| B.9 | 0 | B.10.1 | +100 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 0 | | |
| | | Δ B.90 | –100 |

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | | |
| | | Δ B.90 | +100 |

# 5.5 Securitisation operations undertaken by general government

## 5.5.1 Background

1. Governments may be involved in securitisation arrangements, an operation commonly undertaken by bank.

2. The government finance statistics issue is whether a securitisation operation by government entails a government borrowing, thus entering government debt, or a government sale of an asset.

### 5.5.1.1 SECURITISATION ARRANGEMENTS AND DEFINITION

3. Securitisation is a financial technique that is described in ESA 2010 paragraph 5.104 as follows: *Securitisation is the issuance of debt securities for which coupon or principal payments are backed by specified assets or by future income streams. A variety of assets or future income streams may be securitised including, among others, residential and commercial mortgage loans; consumer loans; corporate loans, government loans; insurance contracts; credit derivatives; and future revenue*.[186]

4. ESA 2010 paragraph 5.105 also specifies that: *Securitisation of assets or of future income streams has been an important financial innovation that has led to the creation and extensive use of new financial corporations to facilitate the creation, marketing, and issuance of debt securities. Securitisation has been driven by different considerations. For corporations, these include: cheaper funding than available through banking facilities; the reduction in regulatory capital requirements; the transfer of various types of risk like credit risk or insurance risk; and the diversification of funding sources*.

5. The originator conveys the legal ownership rights over assets and/or over specific future flows, to a securitisation entity, which in return pays an amount to the originator. The securitisation entity finances this payment by issuing securities using the assets and/or rights to future flows transferred by the originator as collateral. Such a securitisation entity is often, though not always, a special purpose entity (SPE) specially established for the purpose of the securitisation and legally separated from the originator (see below the classification of the unit engaged in securitisation). Issuance of securities is generally organised by a third party, for example a private bank, however, this third party usually takes on no risk or reward within the operation.

6. Investors buy securities issued by the securitisation entity only on the basis of the flows that are generated by the assets/rights, and not on the basis of the credit position of the originator. The investors usually have a direct and legal claim on the receipts generated by the assets or other rights in the event that the securitisation entity does not pay the interest and capital due.[187]

### 5.5.1.2 ISSUES FOR NATIONAL ACCOUNTS

7. The key question is how to record in national accounts the proceeds received by government from a securitisation and whether there should be an impact on government debt and/or government net lending/borrowing (B.9).

8. It is necessary to determine whether the securitisation entails a sale of an existing ESA 2010 asset to the securitisation entity, or entails borrowing using future cash receipts as collateral. A secondary issue deals with the impact on the government net lending/borrowing (B.9), which may be affected when non-financial assets are the object of the securitisation operation.

---

[186] This definition of securitisation — linked to most cases involving government units which has been effectively observed in EU — may be considered a 'narrow' (or financial-market oriented) definition of securitisation. On one hand, there may be issuance of securities on which are attached direct rights on segregated assets by the holders of the securities ('on-balance sheet securitisation'). Such operations would not need specific guidance, as the main point is the incurrence of new liability, not the specific rights and obligations attached to the debt instruments. On the other hand, government may 'monetise' (transform into liquidity, which is the same result as in the case of securitisation operations considered here) any asset (financial or non-financial) by a transaction on organised markets or over the counter. This is matter of time (anything is finally monetised) and of the degree of discount compared to the fundamental value which government would accept to endure (see the 'extreme' case of 'fire sales'). In the latter case, the same basic principles related to the recognition of a 'true sale' should fully apply.

[187] As securitisation operation typically differs from a collateralised borrowing operation (such as for covered bonds which are normally not issued by government units): in the latter case the investor has both a claim on assets or other rights and a claim on the initial owner. Most securitisations operations do not provide for recourse for investors against the originator.

9. A disposal of assets by a general government originator is recorded in national accounts at the time the securitisation operation takes place if:
   - the items subject to the securitisation operation are assets recognised as such in national accounts and as transferable, and
   - the operation is designed in such a way that all the risks[188] and rewards attached to these assets are fully transferred to the securitisation entity, and
   - the securitisation entity that acquires the assets from the originator is an institutional unit that is not part of the general government sector.
10. The aim of this chapter is to provide rules on what can be recorded as a sale in national accounts in the context of a securitisation arrangement involving the government. The chapter not only discusses the securitisation by government of its assets, but also considers the case where a non-government unit securitises a flow of future payments from government to it, such as grants.

## 5.5.2 Treatment in national accounts

11. There are two possible recording options in national accounts (see ESA 2010 paragraphs 20.262–20.271) for securitisation proceeds collected by a government originator:
    - sale of an asset, i.e. the disposal of economic ownership of assets by government, in exchange for cash or other assets; or
    - government borrowing (incurring a liability).
12. The consecutive criteria used to decide the appropriate recording are shown in the decision tree below.

### 5.5.2.1 RECOGNITION OF ASSETS IN NATIONAL ACCOUNTS

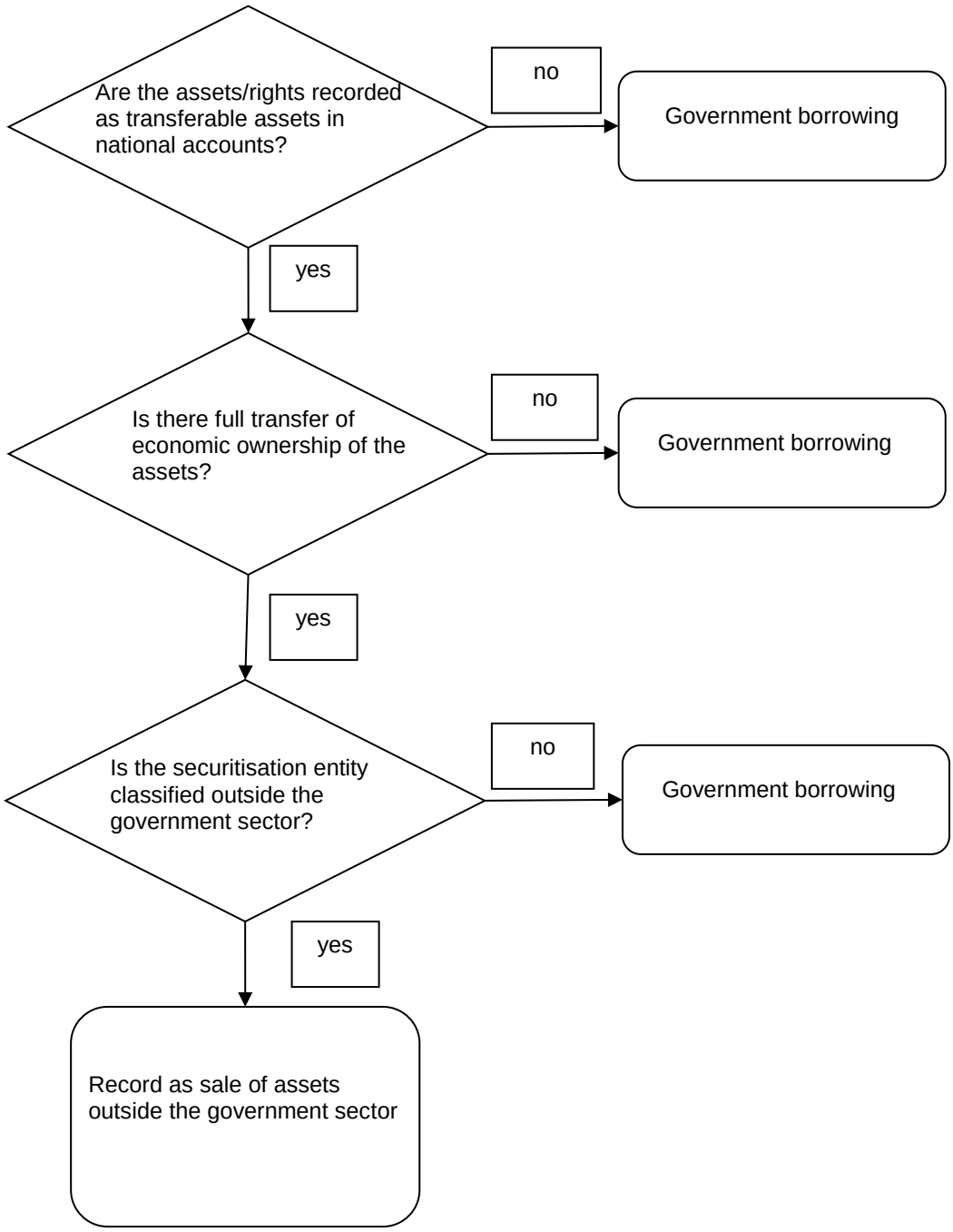
13. A necessary, but not sufficient, condition for a securitisation operation to be recorded as the sale of assets by government is that the assets are recognised in national accounts as assets, and therefore recorded as such in the national accounts balance sheet of government at the time the securitisation takes place. In this context it is useful to distinguish between financial assets and non-financial assets, when discussing the notion of risks and rewards. The following paragraphs deal with cases where the securitised items are not recognised as assets or are not considered transferable in national accounts. In all these cases, the securitisation is recorded as government borrowing.

### 5.5.2.2 SECURITISATION OF FLOWS ATTACHED TO UNRECOGNISED ASSET

14. Government may securitise future revenues that are unrequited transfers, such as future tax revenue. However, since the entitlement to receive such transfers is not recognised as an asset in national accounts, it is not possible to record the sale of an asset in such cases. The revenue has not yet accrued, presumably because the event that leads to the tax liability has not yet taken place, and consequently no asset exists in the national accounts balance sheet. Thus, the securitisation by government of future tax revenue before the taxpayer's liability accrues is always recorded as government borrowing in national accounts.
15. The same recording (government borrowing) applies to the securitisation of transfers that government units may expect to receive from EU institutions or other international bodies, or from lottery receipts, licence fees or fines. More generally all unrequited distributive transactions should be treated as government borrowing, as long as no entry has been reported in the national accounts balance sheet.
16. Loans assets that were not recognised as such in national accounts at inception, due to the low likelihood of recovery — and thus which have been considered non-financial capital transfers in government accounts, are recorded as borrowing when securitised.

[188] However, under market standards for such transactions, a part of operational risks is usually kept by the originator, here government, together with the arranger. Such risks are frequently referred as losses resulting from execution, delivery, process management, internal and external frauds, business continuity, and system failure, damage to physical assets, inadequate or inefficient documentation, and legal risks. They do not result from the risks associated to holding the assets (market/credit risks). However, in securitisations undertaken by government, it should be checked whether the operational risk borne by government is strictly restricted to the usual market practice.

**Decision tree: Sale of an asset or government borrowing**




### 5.5.2.3 SECURITISATION OF FISCAL FLOWS

17. The ownership of certain assets recorded in the government's balance sheet in national accounts may be deemed economically non-transferable. In these cases, their securitisation is necessarily treated as government borrowing.

18. An example is financial claims in respect of taxes already accrued and recorded as financial assets in the national accounts balance sheet, sometimes referred to as 'fiscal claims'. These fiscal claims (receivables) differ from the rights over future tax revenue (discussed in the previous sub-section 5.5.2.3 Securitisation of flows attached to unrecognised asset). The revenue has been recorded in national accounts, together with a financial asset in the national accounts balance sheet (fiscal claims).

19. The national accounts balance sheet entry for fiscal claims should not be confused with the government's bookkeeping accounts, as the former excludes the amounts deemed to be uncollectible. The securitisation of amounts deemed uncollectible is also recorded as government borrowing in national accounts.

20. Even if government outsources their collection, taxes (and compulsory social contributions) are still considered government revenue.

### 5.5.2.4 SECURITISATION OF FLOWS FROM NON-TRANSFERRED ASSETS

21. Government may securitise the 'income stream' flows generated by assets that are recorded in the national accounts balance sheet. These flows include rentals, rents, interest, dividends and other property incomes (P.1 and D.4). For instance, non-residential buildings generate rentals paid by the buildings' occupiers.

22. When government securitises several rental periods only amongst all the future rentals that they expect to receive, it does not dispose of the full risks and rewards of the assets, and therefore of the economic ownership on the buildings themselves. In such cases, the securitisation arrangement should be recorded as government borrowing in national accounts.

23. Similarly, the securitisation of (partial) future streams of property income generated by financial assets is also recorded as government borrowing when the economic ownership of the financial assets is not fully transferred. For criteria to determine the economic ownership, see 2008 SNA 3.26.

### 5.5.2.5 TRANSFER OF OWNERSHIP: RISKS AND REWARDS

24. Assuming that the securitised items are recognised as transferable assets in national accounts, a sale of these can only be recorded in national accounts if there is transfer of economic ownership from government to the securitisation entity. There is transfer of economic ownership of assets when the risks and rewards that are attached to these are completely transferred. If the risks and rewards are not completely transferred from government to the securitisation entity, the securitisation is recorded as government borrowing.

### 5.5.2.6 NOTION OF RISKS AND REWARDS

**Financial assets**

25. The rewards associated with financial assets are the remuneration (unconditional as interest or contingent as dividends) and the holding gains which can result from their fluctuating market value, whereas the risks are usually mainly designed as:

- market risk: decrease in the value of a portfolio, either an investment portfolio or a trading portfolio, due to change in value of the market risk factors: equity risk (change in prices), interest rate risk (change with an impact on the value of fixed rate securities and on refinancing), currency risk (floating exchange rates and realignment), commodity risk (change in commodity prices); it includes also the risk that a corporation will not provide a 'normal' and sufficient rate of return on equity;
- credit risk: incapacity of a borrower to face its contractual liability obligations on time with delay or definitively, or risk that a corporation to go bankrupt;
- counterpart risk: incapacity of a party in a transaction to fully execute it;
- operational risk (see above footnote).

26. In some cases, the government, in return for a fee, acts as an agent collecting the property income from financial assets sold, which it then passes to the purchaser. This might be because it would be costly to transfer such operations to the new owner or because of agreements with borrowers when the assets were first created. The originator's retention of the collection function is frequently observed in the private financial sector. In such circumstances, the sale can still be recorded as a disposal of financial assets, provided that the collection arrangement does not affect the transfer of risks and rewards to the securitisation entity and is covering the actual management costs of the transferred assets. The sole fact that government is collecting the property income alone would not affect the economic ownership being with the purchaser.

**Loans**

27. Loans are also frequently sold together — as a 'loan book' or 'loans pooling' — rather than sold individually. In this context, a partial sale of a loan book often takes place, which can be arranged in different ways, such as by randomly selecting (at time of securitisation) borrowers whose repayments are sold to the purchaser, or by selling a fixed proportion of the portfolio repayments received every day from the loan book. The partial sale of loan book through the sale of claims specifically selected can be recorded as a sale of loans in national accounts. The sale by government of a fixed proportion of the total repayments, without any straightforward allocation to some identified assets, cannot be recorded as a sale of loans in national accounts, and is to be recorded as government borrowing.

**Non-financial assets**

28. Frequently, the securitisation entity does not take possession of non-financial assets with the intention of holding them until the end of their economic life; instead, it intends to resell them. Therefore, in addition to the risks of default on the income (rentals and rents) that may be associated with these assets, there is a risk of holding losses, and conversely there are possible rewards if holding gains arise (as for financial assets) which may lead to lower or higher than expected revenue from the eventual sale of the assets.

29. The transfer of risks and rewards, such as the variability of maintenance and insurance costs, must also be considered when judging risk transfer in cases of securitisations involving non-financial assets.

### 5.5.2.7 JUDGING RISKS AND REWARDS TRANSFER

30. The risks and rewards associated with the asset are judged as not fully transferred, leading to a recording as government borrowing, if any of the following applies:

- restrictions are imposed by government on the securitisation entity's right to subsequently sell the assets;
- securitised flows concern only a fraction of flows associated to a given asset;
- there exists a 'Deferred purchase price (DPP)' clause or equivalent, which demonstrates some residual ownership by government;
- government provides guarantees or other forms of risk alleviation to securitisation entities, including by way of a 'substitution clause' or other arrangements;
- other on-going involvement of government in the asset which prevents a full transfer of risks and rewards.

**Equity tranche and DPP**

31. In some securitisations, different tranches of securities issued are backed by different parts of the flows from the securitised assets. This means that there is a differentiation in the risks and rewards that are born by investors. By this process, it is possible to include some mechanisms by which the originator, government, keeps a residual risk/reward (sometimes called an 'equity tranche' or 'last tranche'), to protect investors against an excessive under-performance of the securitised assets. This makes the securities more attractive to investors. This mechanism prevents a full transfer of risks to the securitisation entity and leads to the recording of the securitisation arrangement as government borrowing.

32. In a securitisation contract, a 'Deferred purchase price (DPP)' is another device of credit enhancement whereby the securitisation entity is obliged to pay (performance related) to the originator additional proceeds from a sale at a later date. When such clauses exist, the assets are disposed of at a value (a sale price) set below their market/fair value. A DPP should not be confused with delayed settlements of a fixed price, which must appear as originator's receivables and as the securitisation entity's liabilities at inception, in accordance with the accrual principle.

33. Securitisation arrangements including equity tranches, DPPs or similar clauses giving rights to further payments for the seller of the assets, are recorded as government borrowing, because such clauses provide evidence that not all the risks and rewards of the operation have been transferred to the securitisation entity.

**Guaranteed payments after the sale**

34. Government guarantees may be granted in the context of a securitisation. In a securitisation contract, government may commit itself to repay the debt incurred by the securitisation entity in the event of the latter being unable to do so from its own resources, because of insufficient performing assets.[189] Government securitisation arrangements that include ex ante guarantees are recorded as government borrowing. This rule does not apply to guarantees that have a general purpose and that are offered to other units for similar events, such as covering against the consequences of limited external events such as natural disaster, terrorism and war.

35. Substitution clauses are a specific kind of guarantee. These typically involve an option to substitute the original assets transferred to the securitisation entity with new ones, for example if the transferred 'asset' is later found not to exist or impossible to collect. The existence of a substitution clause is important when judging the transfer of risks and rewards between the government and the securitisation vehicle.

36. Except for marginal cases limited in scope and deriving purely from technical reasons or material errors, and where the substituted assets have the same value as the new ones, the existence of a substitution clause leads to a recording as government borrowing.

37. Government may compensate later the securitisation entity, although this was not a requirement of the contract. Such compensation may take the form of cash, debt assumption, or a direct or indirect guarantee granted as response to unfavourable trends. A further situation is where government introduces or modifies legislation, which leads to a *de facto* compensation of the securitisation entity.

38. At the time compensation is decided, the event is recorded as a simultaneous purchase by government of the assets securitised, against an incurrence of a government liability (loan) towards the securitisation entity. This should be equal to the amount of the securitisation entity's outstanding debt securities issued to finance the acquisition of the securitised assets.

39. If the market value of the purchased asset is lower than the liability incurred, a capital transfer is recorded from government to the securitisation entity for the difference.

40. A purchase of a financial asset will not affect government net lending/borrowing (B.9), unless the market value of the assets acquired is lower than the debt incurred.

41. A purchase of a non-financial asset increases government deficit (or reduces surplus) because the acquisition of non-financial assets (negative GFCF) impacts net lending/borrowing (B.9).

42. The same rule applies when there is no contractual clause for the substitution of assets, but it is observed in practice that a significant amount of the securitised assets are replaced by others of higher market value. The incurrence of a government liability should be imputed against a repurchase of the asset at the time the substitution is decided.

43. These rules do not apply if compensation is paid by government to the securitisation entity as a result of an actual or potential court decision arising from government breaking the terms and conditions of the sale contract.

**Restriction to subsequent sales**

44. Any restriction to on selling the acquired assets, or other rights to future cash flows, would provide evidence that economic ownership has not been transferred.

### 5.5.2.8 CLASSIFICATION OF THE SECURITISATION ENTITY

45. ESA 2010 paragraph 5.108*: It is essential to establish, in particular, whether the financial corporation engaged in the securitisation of assets actively manages its portfolio by issuing debt securities, rather than simply acting as a trust that passively manages assets or holds debt securities. When the financial corporation is the legal owner of a portfolio of assets, issues debt securities that present an interest in the portfolio, has a full set of accounts, it is acting as a financial intermediary classified in other financial intermediaries. Financial corporations engaged in the securitisation of assets are distinguished from entities that are created solely to hold specific portfolios of financial assets and liabilities. The latter*

[189] It does not necessarily take the form of an explicit guarantee on the debt issued by the securitisation unit (thus not enforceable by third parties) but it may be a specific clause in the contract.

*entities are combined with their parent corporation, if resident in the same country as the parent. However, as non-resident entities they are treated as separate institutional units and are classified as captive financial institutions*. If the securitisation entity has no autonomy of decision concerning the management or disposal of the transferred assets or concerning its liabilities, the securitisation entity is not a separate institutional unit according to national accounts criteria (as stated in ESA 2010 paragraph 2.12).

46. Where the securitisation entity has been established to serve a government unit, a lack of autonomy of decision could be indicated, among other factors, by:

- actual management of the securitisation entity's debt by government;
- absence of the right or capacity to actively manage its assets in response to market conditions, such as government having the right to approve any significant disposal.

47. In most cases, a securitisation entity will be formally set up by a private (financial) institution to purchase and securitise government assets. In these cases, if the securitisation entity does not have autonomy of decision (see above), it is classified within the government sector to the extent that the government initiates the transaction is entitled to take make significant decisions during the life of the securitisation.

48. If the securitisation entity meets the conditions to be considered a separate unit, i.e. it places itself at risk and the securitisation and fully controls assets and liabilities during their life time, it is classified as a financial corporation (S.12). Notably, ESA 2010 paragraph 2.90: *Financial vehicle corporations (FVC) engaged in securitisation transactions are undertakings carrying out securitisation transactions. FVC that satisfy the criteria of an institutional unit are classified in S.125*. Conversely, it is not because a securitisation unit has been considered by supervisory authorities as an FVC, submitted to the reporting and regulatory obligations of this category of financial units, that it should be automatically excluded from the general government sector. The analysis for national accounts purpose must be totally independent from such considerations.

## 5.5.3 Recording rules

### 5.5.3.1 RECORDING AS A SALE OF AN ASSET

49. The transaction with the securitisation entity is recorded as a sale of a general government asset outside the general government sector if the three conditions set out in paragraph 9 above are met.

50. When the transaction is recorded as the sale of an asset, there is no direct impact on government debt. There would be an indirect (downward) effect if the proceeds from the securitisation were used directly to reduce government debt or as a substitute to required borrowing for financing an excess of expenditure.

**Financial assets**

51. The sale of a financial asset to the securitisation entity will not affect the government net lending/borrowing (B.9). In some cases, the government unit, in return for a fixed fee, acts as an 'arms-length' agent for the collection of debt repayments and property income from the sold financial assets, which it passes to the purchaser. This would be recorded as government output.

**Non-financial assets**

52. The sale of a non-financial asset to the securitisation entity will improve the government net lending/borrowing (B.9). However, some non-financial assets may continue to be used by government. As an example, in the case of the sale of residential buildings, the securitisation entity will typically acquire such buildings for the purpose of their resale. However, during the time between their acquisition and their resale, the buildings frequently continue generating income in the form of rentals. Assuming that all the conditions relating to the transfer of ownership are fulfilled, the fact that the securitisation entity has the economic ownership of the securitised buildings implies that, in national accounts, the operating surplus that they generate is recorded with the securitisation entity (see chapter 6.2 Sale and leaseback).

53. The production process consisting of operating the buildings for residential purposes may be allocated directly to the securitisation entity. This treatment should be adopted when the entity takes on board all the daily management of the buildings and has a full access to the rentals generated by the buildings. If the former owner, i.e. the government unit, keeps the daily management of the securitised buildings, and retains as management fees a part of the rentals generated by the buildings, most of the income should still be allocated to the securitisation entity.

**The price fixed in the securitisation arrangement**

54. In national accounts, the disposal of assets should be recorded at the market price that prevails at the time the transaction takes place. It is generally the observed sale price, the price agreed in the contract. However, if there is evidence that the observed sale price is lower than the market value:

- it may indicate that the operation is not carried out on a pure commercial basis and that there is an implicit support of the securitisation entity. In such a case, it is necessary to record a capital transfer from government to make up the difference between the observed price and the market value as the sale is recorded at market price in national accounts (see ESA 2010 paragraph 5.21);
- it may be associated with the existence of DPP clauses (see above) and the transaction should not be recorded as a sale but as government borrowing.

55. If there is no obvious market price for specific assets, then, in order for an arrangement to be recorded as a sale, there should be a process by independent bodies to determine an equivalent market price, on the basis of the usual valuation methods used in business areas.[190] The absence of such a process could be interpreted as a lack of autonomy of the securitisation entity, such that it should be classified to government.

### 5.5.3.2 RECORDING AS GOVERNMENT BORROWING

56. If the securitisation operation does not fulfil the criteria necessary for it to be recorded as a sale of assets in national accounts, the securitisation proceeds collected by government should be recorded as the incurrence of a government liability, with an impact on the government debt. If the securitisation entity is classified to the government sector, the securities (AF.33) it issues are part of government debt. If the securitisation entity is not classified to the government sector: either no sale is recognised, and the securities (AF.33) the securitisation entity issues are not directly part of government debt, and instead a loan is imputed from the securitisation entity to government is part of government debt; or a true sale is recognised, and there is no entry in government debt. This is particularly the case when the securitisation has been set up in another country where markets for such transactions are more developed and/or efficient.

57. The cash flows generated by the securitised items (such as the rental income generated by buildings), first received by government and then passed over to the securitisation entity, continue to be recorded in the government accounts, as if no securitisation operation had occurred: as revenue, or as the disposal of a nonfinancial or financial asset, as appropriate. Payments made by government to the securitisation entity, when government continues to manage the assets, are recorded as government servicing its loan liability; these are imputed flows of interest and loan repayment. Any fee retained by the securitisation entity to cover its operating costs is recorded as intermediate consumption of government. This holds even if the fee is paid up-front, reducing the funds provided to the government unit, in which case an imputation is to be made.

### 5.5.3.3 RECORDING AT THE END OF THE ARRANGEMENT

58. If at the end of the operation the payments made by government to the securitisation entity, when government continues to manage the assets, exceed the government liability, no further redemption of government debt can be recorded, and payments to the securitisation entity are recorded as a current transfer expenditure of government.

59. If payments made to the securitisation entity terminate before extinction of the government liability, for example because of the depletion of the assets, the remaining liability is removed from the government balance sheet in national accounts by way of other changes in the volume.

[190] 'Adjusted book value', 'capitalised adjusted earnings', 'discounted future earnings', 'cash flow method', 'gross revenue multiplier', 'capital asset pricing model', 'weighted average cost of capital', 'market comparisons techniques', 'option pricing approaches', etc.

60. When the securitisation arrangement is treated as government borrowing and the securitisation entity subsequently sells the (recognised) underlying assets to a non-government unit with a full transfer of ownership rights, the sale is recorded as a disposal of assets by general government and the securitisation is simply deemed to act as an agent of government. The effect of such an arrangement is to postpone the disposal/sale of assets by the government from the time of securitisation to the time of actual sale by the securitisation entity. The correct time of recording is particularly important when non-financial assets are involved due to the impact on government net lending/borrowing (B.9).

#### 5.5.3.4 SECURITISATION BY NON-GOVERNMENT UNITS OF RECEIPTS FROM GOVERNMENT

61. In some cases, a non-government unit will, for its own purposes, securitise regular receipts from government.

62. When this occurs, the contractual obligations of government must be examined to check whether the substance of the transaction is such that the government has incurred a new outright obligation to provide sufficient funds to finance the borrowing of the non-government unit.

63. If the securitisation by the non-government unit has no impact on the government's contractual obligations to make future payments, there should be no impact on the government sector accounts as a result of the securitisation.

64. If there is in effect a new government liability, a capital transfer should be recorded from government to the non-government unit equivalent to the net present value of all the promised future payments; and a loan of the same size recorded from the non-government unit. The future government payments are recorded as interest and loan repayments.

## 5.5.4 Rationale of the treatment

#### 5.5.4.1 RECOGNISING A TRANSFERABLE ASSET IN NATIONAL ACCOUNTS

65. Transfers, i.e. unrequited distributive transactions, are not generated by assets. For instance, the capacity of governments to raise taxes does not constitute an asset recognised in national accounts. Expected future receipts of international transfers, lottery tickets, licence fees or fines are not classified as assets. The future flow of these transfers does not meet the definition of assets in ESA 2010 paragraph 7.15. It is not possible to record a transaction in assets if the asset does not exist in the national accounts balance sheet to start with. So, as the assets are not recognised in national accounts, only a government borrowing can be recorded for securitisation of these items.

66. Future streams of income on assets — which will be recorded in P.1 and D.4 when they accrue — also do not constitute assets by themselves according to ESA 2010. Unless the ownership of the underlying assets is deemed to have been transferred, the securitisation of such flows can therefore not be recorded as a sale of assets in national accounts.

67. Similarly, a sale cannot concern a limited set of several future periods of use of an asset, for instance several future streams of property income to be earned on financial assets, or several future streams of rentals/rents to be derived from the use of non-financial assets, unless the corresponding assets are wholly sold themselves.

#### 5.5.4.2 THE CASE OF FISCAL CLAIMS

68. Taxes are uniquely established by the taxing powers of governments and can only be raised by governments or international organisations. Specific rules for the recording of taxes are defined in ESA 2010 paragraphs 4.26–4.29, 4.82 and ESA 2010 paragraph 20.174 and also in chapter 2.2 Recording of taxes and social contributions. One must distinguish securitisation of future taxes from securitisation of tax receivables (fiscal claims).

69. Securitisation of taxes that will accrue in the future, on future income or on future events, cannot give rise to a disposal of an asset because no asset exists in national accounts. Therefore, they must be considered a borrowing. Securitised taxes that accrue in the future must be attributed to general government in the national accounts system, whatever the specific collection arrangements under a securitisation.

70. Fiscal claims, which reflect taxes accrued in the past but not yet settled because they are either not yet due or in arrears, are financial assets and are recorded as AF.8 in national accounts. However, they cannot be transferred to non-tax-raising units given that — by convention — in ESA 2010 only general government, the institutions of the European Union or the rest of the world can levy taxes (ESA 2010 paragraphs 4.14 and 4.77). In ESA 2010, social contributions may be considered the resource of any sector. Nonetheless, given the proximity between taxes and social contributions, securitisations of all fiscal claims follow the same rule (recording as borrowing), be they tax receivables or social contributions receivables to be collected by government, private units or by other non-government units (at least for compulsory social contributions).

### 5.5.4.3 TRANSFER OF RISKS AND REWARDS

71. One condition for a securitisation to be recorded as a sale in national accounts is that the risks and rewards associated with the asset are transferred to the securitisation entity. According to ESA 2010 paragraph 7.10, *an economic asset is a store of value representing the benefits accruing to the economic owner by holding them or using them over a period of time*. Furthermore ESA 2010 rules on financial leasing that corresponds to a situation in which 'all risks and rewards of ownership are, *de facto* though not *de jure*, transferred from lessor to lessee' (see ESA 2010, chapter 15 Contracts, leases and licences), indicate that economic ownership is determined by the allocation of risks and rewards of ownership.

72. The economic reality rather than legal formalities determines ownership in national accounts. Most guarantees, substitution clauses, last tranches or DPPs indicate that the risks and rewards associated with the asset have not been transferred. In those cases government borrowing is recorded. Furthermore, any restriction imposed by government on the securitisation entity's right to subsequently sell the assets on to a third party is regarded as strong indication that there is not a sale since it could give the government exposure to potential rewards from the asset.

### 5.5.4.4 RISKS AND REWARDS ASSOCIATED WITH FINANCIAL ASSETS

73. Economic benefits that may be derived from financial assets consist of the property incomes that are earned through holding them and of the holding gains that accrue on them, which may be realised when assets are sold. Symmetrically, holding losses are also possible and are thus part of the risks associated with ownership.

74. Usually the most important risk associated with financial assets in the context of securitisation is the credit risk. Credit risk refers to possible defaults on payments due, which may be distinguished between payment of interest and repayment of principal. The economic owner of a financial asset is the unit that, ultimately, bears the credit risk associated with these assets. The economic owner may subsequently acquire insurance or derivatives to offset that risk, but that does not change the ownership.

### 5.5.4.5 RISKS AND REWARDS ASSOCIATED WITH NON-FINANCIAL ASSETS

75. The rewards that are associated with non-financial assets consist of the operating surpluses that accrue from the operation of fixed assets, and net rents derived from renting non-produced assets. In addition, non-financial assets may generate holding gains and losses, which is an important feature when they are acquired for resale. The owner bears costs in order to avoid the non-performance of the assets in terms of generating income, by undertaking their maintenance, or buying insurance for compensation in case they accidentally degrade, deplete or destruct. Attributes of ownership include deciding:

- the level of the rentals/rents;
- the time at which assets are sold.

### 5.5.4.6 CLASSIFICATION OF THE SECURITISATION ENTITY

76. Concerning the sector classification of the securitisation entity when it is an SPE, ESA 2010 paragraph 2.90 (f) states that it should be classified within other financial intermediaries subsector (S.125). This is based on the assumption that such 'vehicles' are institutional units and they conduct financial intermediation (or other auxiliary services).

77. To be a separate institutional unit, the criteria stated in ESA 2010 paragraph 2.12 must be met. In order to be classified to S.125, the SPE should have autonomy of decision in respect of the management of the debt securities that it issues: indicators of this are issuance rhythm, debt management, repayment

strategy, etc. It should be clear that the SPE does not act on behalf of government. It should also have complete autonomy concerning the management and disposal of its assets. Otherwise, the SPE should not be recorded as separate institutional unit.

78. Concerning the recognition of when an institutional unit is a financial intermediary, ESA 2010 paragraph 2.57 states that *a financial intermediary does not only act as an agent for these other institutional units but places itself at risk by acquiring financial assets and incurring liabilities on its own account*.

79. Concerning the classification of new financial assets resulting from a securitisation, ESA 2010 paragraph 5.104 states that securities issued in the context of securitisation are classified under debt securities (AF.3).

#### 5.5.4.7 SECURITISATION BY NON-GOVERNMENT UNIT OF RECEIPTS FROM GOVERNMENT

80. In some cases a non-government unit will, for its own purposes, securitise receipts from government. Though these unilateral actions might have at first sight no consequence for government sector accounts, the arrangement must be examined to correctly identify the contractual obligations of government. It is necessary to check whether the contract promising the future payments commits the government to pay a sufficient amount to service the debt of the non-government unit receiving these payments.

81. If the government takes an obvious commitment to pay a sufficient amount to cover the debt servicing or other commitments of the non-government unit, the operation should be classified as government borrowing. Government borrowing is not recorded when the government's obligations are conditional on the performance of the non-government unit in delivering the government's policy objectives.

## 5.5.5 Accounting examples

The examples only show those transactions with an impact on the government accounts.

**Example 1: Building sold with DPP**

Government sells buildings to a private sector bank that intends to resell them in the following year as market conditions improve. The buildings are estimated to be worth 100.

Government:

- receives 90 immediately for the sale of the buildings
- also has a DPP agreement such that, if the bank receives more than 90 for the resale of the buildings, the receipts above 90 shall be given to government up to a maximum of 25

The bank, via an SPE it owns and sets up, issues bonds to the value of 90

In the second year the buildings are resold for 120:

- the government receives an additional payment of 25 in DPP
- the bank makes a profit of 5 after the SPE has repaid its borrowing

**Analysis and national accounts treatment**

The transaction is judged not to be a genuine sale because of the existence of the DPP.

- it has to be recorded as government borrowing in year 1 of 90
- the building is shown as a negative GFCF by government in year 2, when sold at a market price
- the bank's profit is recorded as bonus interest earned on the imputed loan which is shown as being redeemed when the arrangement is completed. For simplicity of recording this is shown as being retained in the SPE at the end of year 2.

## YEAR 1

### General government

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AN.11 | 100 | | |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| | | F.4 | +90 |
| F.2 | +90 | | |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AN.11 | 100 | AF.4 | 90 |
| AF.2 | 90 | | |

### SPE

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.2 | 0 | | |

**Non-financial account**

| U/ΔA | | R/ΔL | |
|---|---|---|---|
| B.9 | 0 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.4 | +90 | F.3 | +90 |
| F.2 | 0 | | |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.2 | 0 | AF.3 | 90 |
| AF.4 | 90 | | |

## YEAR 2

### General government

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AN.11 | 100 | AF.4 | 90 |
| AF.2 | 90 | | |

**Current account**

| U | | R | |
|---|---|---|---|
| D.41 | 5 | | |
| B.8 | –5 | | |

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| P.5 | –120 | B.8 | –5 |
| B.9 | +115 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +25 | | |
| | | F.4 | –90 |
| | | B.9F | +115 |

### SPE

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.2 | 0 | AF.3 | 90 |
| AF.4 | 90 | | |

**Current account**

| U | | R | |
|---|---|---|---|
| | | D.41 | 5 |
| B.8 | 5 | | |

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| | | B.8 | 5 |
| B.9 | +5 | | |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.2 | +5 | F.3 | –90 |
| F.4 | –90 | | |
| | | B.9F | +5 |

From the sale to the market, government receives 25 and the SPE receives 95; the SPE then uses 90 of AF.2 to repay its bonds (AF.3).

**Revaluation account**

| ΔA | | ΔL | |
|---|---|---|---|
| AN.11 | +20 | | |

**Closing balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AN.11 | 0 | F.4 | 0 | F.4 | 0 | AF.3 | 0 |
| AF.2 | 115 | | | F.2 | 5 | | |

**Example 2: Building sold without a DPP**

Government sells buildings to a private sector bank that intends to resell them on the market in the following year. The buildings are estimated to be worth 100 and are sold for that price.

The bank transfers the buildings to an SPE that it sets up and owns:

- the SPE issues 5-year bonds for 100
- there is no DPP, nor are there any guarantees
- the SPE services the debt interest from rental income and sells the buildings for 110
- the bank extracts profit of 10 from the SPE

**Analysis and national accounts treatment**

This is recorded as a sale — negative GFCF — by government since government is no longer exposed to the risks and rewards of ownership.

**YEAR 1**

**General government** **SPE**

**Opening balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AN.1 | 100 | | | AF.2 | 100 | | |

**Capital account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| P.5 | –100 | | | P.5 | +100 | | |
| B.9 | +100 | | | B.9 | –100 | | |

**Financial account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| F.2 | +100 | | | F.2 | 0 | F.3 | 100 |
| | | B.9F | +100 | | | B.9F | –100 |

**Closing balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AF.2 | 100 | | | AN.11 | 100 | AF.3 | 100 |

**Example 3: a company securitises subsidies from government**

A government unit promises to pay future subsidies of up to 20 per year to a private company over 5 years so that it can provide public transport services.

With government approval the unit establishes an SPE to receive the future subsidies:

- the SPE issues bonds to the value of 60 which it passes to the company to finance the purchase of a fleet of buses
- the SPE uses the subsidy receipts firstly to finance its debt, and passes the remainder to the company which it uses as a contribution to operating the buses.

Part of the government subsidy payments are unconditional in that a minimum of 15 must be paid each year to the SPE even in the event of the company failing to supply public transport services and/or becoming

insolvent. The remaining payments, up to 5 per year, depend on the performance of the bus service. In the example, the full amount is paid each year.

**Analysis and national accounts treatment**

The transaction would be classified as a capital transfer to the bus company and borrowing of the same amount, in respect of the minimum guaranteed payments of 15, and annual subsides for the remaining amounts paid. The 15 is split into 12 repayments of capital, and 3 of interest. For simplicity, the transactions between the SPE and bus company are not shown in the tables below.

**YEAR 1**

**General government** | **SPE**

**Opening balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AF.2 | 100 | | | | | | |

**Current account**

| U | | R | | U | | R | |
|---|---|---|---|---|---|---|---|
| D.41 | 3 | D.3 | –5 | D.3 | –5 | D.41 | 3 |
| B.8 | –8 | | | B.8 | 8 | | |

Regular payment of 20: 5 is a subsidy; 12 is repayment of capital and 3 is interest in respect of the imputed loan.

**Capital account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| | | B.8 | –8 | | | B.8 | 8 |
| | | D.99 | –60 | | | D.99 | +60 |
| B.9 | –68 | | | B.9 | +68 | | |

**Financial account**

| ΔA | | ΔL | | ΔA | | ΔL | |
|---|---|---|---|---|---|---|---|
| | | F.4 new | +60 | F.4 | +48 | F.3 | +48 |
| F.2 | –20 | F.4 repay | –12 | F.2 | +68 | | |
| | | B.9F | –68 | | | B.9F | +68 |

**Closing balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AF.2 | 80 | AF.4 | 48 | AF.2 | 68 | AF.3 | 48 |
| | | | | AF.4 | 48 | | |

**YEAR 2**

**General government** | **SPE**

**Opening balance sheet**

| A | | L | | A | | L | |
|---|---|---|---|---|---|---|---|
| AF.2 | 80 | AF.4 | 48 | AF.2 | 20 | | |
| | | | | AF.4 | 48 | | |

**Current account**

| U | | | R |
|---|---|---|---|
| D.41 | 3 | D.3 | –5 |
| B.8 | –8 | | |

| U | | | R |
|---|---|---|---|
| D.3 | –5 | D.41 | 3 |
| B.8 | +8 | | |

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | B.8 | –8 |
| B.9 | –8 | | |

| ΔA | | | ΔL |
|---|---|---|---|
| | | B.8 | +8 |
| B.9 | +8 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –20 | F.4 | –12 |
| | | B.9F | –8 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +20 | | |
| F.4 | –12 | | |
| | | B.9F | +8 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 60 | AF.4 | 48 |

| A | | | L |
|---|---|---|---|
| AF.2 | 40 | | |
| AF.4 | 36 | | |

**Example 4: Building sold, guarantees payments after the sale**

In year 1 government sells an office building with a market value of 100 to an SPE for 100. The SPE issues bonds to the value of 100.

In year 2 the demand for office accommodation falls sharply and the rentals are insufficient to service the bonds. The market value of the building falls to 80. Government fears a collapse of the financial institutions that finance property deals and so pays the interest of 5 due on the SPE's bonds, even though it had no contractual obligation to do so.

The receipts of building rentals and interest on the bonds are ignored for the sake of simplicity.

**Analysis and national accounts treatment**

By activating an ex-post guarantee, it is demonstrated that the debt of the SPE should have been attributed to government, and that the building should not have been treated as sold by the government to the SPE.

Therefore, the entire outstanding debt of the SPE, and the associated building, are transferred to the government balance sheet in year 2, along with capital transfers of 5 and 20, to reflect respectively the interest paid by government and the difference in value between the SPE debt and the building.

**YEAR 1**

**General government** | **SPE**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | | |

| A | | | L |
|---|---|---|---|
| AF.2 | 0 | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| P.5 | –100 | | |
| B.9 | +100 | | |

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| P.5 | +100 | | |
| B.9 | –100 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +100 | B.9F | +100 |

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.3 | +100 |
| F.2 | 0 | B.9F | –100 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 0 | | |
| AF.2 | 100 | | |

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | AF.3 | 100 |
| AF.2 | 0 | | |

**YEAR 2**

**General government** **SPE**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 0 | | |
| AF.2 | 100 | | |

| A | | | L |
|---|---|---|---|
| AN.11 | 100 | AF.3 | 100 |
| AF.2 | 0 | | |

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| P.5 | +80 | | |
| D.9 | +20 | | |
| D.9 | +5 | B.9 | –105 |

| ΔA | | | ΔL |
|---|---|---|---|
| P.5 | –80 | B.9 | -105 |
| D.9 | –20 | | |
| D.9 | –5 | | |

D.9: 5 cash compensation; 20 imputed for the difference between the value of building and outstanding bond debt.

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –5 | F.4 | +100 |
| | | B.9F | –105 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +5 | | |
| F.4 | +100 | B.9F | +105 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |

| ΔA | | | ΔL |
|---|---|---|---|
| AN.11 | –20 | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AN.11 | 80 | AF.4 | 100 |
| AF.2 | 95 | | |

| A | | | L |
|---|---|---|---|
| AN.11 | 0 | AF.3 | 100 |
| AF.2 | 5 | | |
| AF.4 | 100 | | |

The SPE's cash would be used to pay the interest on the bonds.

# 5.6 Low interest rate loans and sale of government low interest loans to third parties

## 5.6.1 Background

1. As a part of public policy activities, governments provide loans at a lower interest rate than the market rate observed at the time of loan issuance (sometimes called 'concessional loans').

## 5.6.2 Recording of low interest rate loans at inception

2. A granting of low interest rate loans is a specific public policy activity carried out by government, which frequently results in transactions not undertaken at market conditions. Such loans directly provided by government to students at low interest rate, real estate loans provided to households in specific circumstance, loans to newly created companies, etc.
3. When government provides a loan to households or companies at a lower interest rate than the market rate in order to support their activities, the operation implies a benefit for the debtor. The benefit reflects the difference between the contractually agreed interest rate and the market interest rate that would have been paid by the debtor if the loan were granted at the market interest rate.
4. The ESA 2010 rules do not require to record in national accounts the implicit benefit element, i. e. the difference between the market interest rate and the interest rate contractually agreed, in order to reflect all transactions undertaken by government by reference to market conditions. As set out in ESA 2010, the amount of interest recorded on an accrual basis follows the contractual interest rate agreed at inception between the creditor and the debtor.
5. It must be stressed that the impact on net lending/borrowing (B.9) is already reflected implicitly in national accounts as a difference between the cost of government financing and the low interest revenue received from the loans granted by government in the context of its public policy.
6. In this context, the interest has to be recorded on the basis of the contractually agreed interest rate. Consequently, no implicit benefit for the debtor is recorded in national accounts.

## 5.6.3 Recording of sales of low interest loans

7. The issue refers to the cases when well-performing loans, provided by government under public policy activities, are sold to a third party at discount (i.e. below their nominal value). Such operation is related to liquidity management (refinancing purpose) and is not part of public policy as the original beneficiary is not at all involved. At the time of the sale of the loan, the discount reflects the difference between the current market interest rate (that the purchaser of the credit could have charged on its own lending operations) and the lower interest rate contractually agreed between the debtor and the original creditor at time the loans had been granted. From this point of view, as far as recording revaluation effect is concerned, sales of loans not granted by government at market conditions for public policy purpose are treated similarly to loans granted by financial intermediaries for commercial purpose at prevailing market rates and further resold on the basis of different market rates.
8. Paragraph 6.58 in ESA 2010 indicates that …*when an existing loan is sold to another institutional unit, the write-down of the loan, which is the difference between the redemption price and the transaction price, is recorded under the revaluation account of the seller and the purchaser at the time of transaction*.
9. In the case of sale of low interest rate loans to a third party below the nominal value, the discount as a difference between the nominal value and sales price, has to be recorded as revaluation. This concerns only the sales of loans that are not a subject to any rescheduling or other change in the contractual obligations of the debtor.

# 5.7 Keywords and accounting references

| | |
|---|---|
| Capital account | ESA 2010, 8.46 |
| Contingent assets | ESA 2010, 5.08-5.11 |
| Entrepreneurial income | ESA 2010, 8.26-8.28 |
| Equity | ESA 2010, 5.151 and following |
| Financial account | ESA 2010, 8.50 |
| Financial transaction | ESA 2010, 5.16 and following |
| Head office | ESA 2010, 2.14 and 20.35-20.37 |
| Market/non-market units | ESA 2010, 2.19-2.34 |
| Non-financial non-produced assets | ESA 2010, 7.24 |
| Non-financial produced assets | ESA 2010, 7.22 |
| Other changes in volume of assets account | ESA 2010, 8.53 |
| Privatisation | ESA 2010, 20.210-20.213 |
| Rearranged transactions | ESA 2010, 1.72-1.78 |

# 6 Leases, concessions and PPPs

## 6.1 Overview

### 6.1.1 Background on general principles

1. Among government receipts, there are rents, rentals, licence fees, royalties, leases, franchises, tolls, administrative charges, concessions and public-private partnerships (PPPs) fees. They cover different types of transactions in national accounts, explained in various chapters in ESA 2010, principally in chapters 15 (Contracts, leases and licences) and 20 (The government accounts).
2. Chapter 6.1 of this Manual highlights the problem of distinguishing between output of government (revenue from sales of goods and services), taxes, rent, and sales of assets. The analysis is categorised as follows:

   a) receipts from sale of goods and services produced by government (that could be supplied by other units in the economy);

   b) receipts for the use of a produced asset owned by government;

   c) receipts for the use of natural resources owned by government;

   d) receipts in return for permission from government to undertake an activity.

   In chapter 6.2, the recording of sale and leaseback of government's non-financial assets is explained. Chapter 6.3 covers contracts with non-government units related to fixed assets, including concessions, and chapter 6.4 details PPPs. Chapter 6.5 covers the trading of emission allowances.

**Terminology**

3. The development of various forms of long-term contracts between government units and corporations, notably under the heading of 'public-private partnerships' or 'concessions', requires a clarification of the terminology used in the context of national accounts. This terminology may be used differently here than it is elsewhere.
4. Concessions are commonly contracts for infrastructure equipment that can be subject to commercial exploitation. In this type of long-term contract, the corporation (or group of corporations) is responsible for the construction, operation and maintenance of the assets and is predominantly remunerated by the final users (households, corporations, etc.) of the assets via tolls or other fees.

5. PPPs are long-term contracts between government and corporations involving the construction, operation and maintenance of assets that deliver public services (such as: public hospitals, schools and universities, prisons, etc.) but in this case the partner is predominantly remunerated by government.

## 6.1.2 General treatment in national accounts

### 6.1.2.1 GOVERNMENT RECEIPTS FOR GOODS AND SERVICES (THAT COULD BE SUPPLIED BY OTHER UNITS)

6. The receipts could be less than, the same as, or more than the costs of production: it does not affect the classification.

   **Treatment:** record as a sale — output (P.1), notably market output (P.11) if the prices charged are economically significant and as payments for non-market output (P.131) otherwise. Examples are receipts for provision of training, fees charged for advice to businesses, fees for research contracts. Another example is testing the competence of somebody to carry out an activity (e.g. drive a vehicle). Only when the charges for such regulatory activities are not out of proportion to the costs, is the revenue classified as P.131, otherwise tax revenue is recorded (see also sub-section 6.1.2.5 Government receipts in return for granting permission to undertake an activity).

### 6.1.2.2 GOVERNMENT RECEIPT FOR THE USE OF A PRODUCED ASSET

7. The receipts could be less than, the same as, or more than the costs of production: it does not affect the classification.

8. Three sub-categories of receipts may be distinguished depending on the time period of use:

   i) receipts are made each time the asset is used, or there is a single receipt allowing use of the asset for a period of time less than one year (and this is not part of a contract requiring receipts for use over a longer period).

      **Treatment**: record as a sale — output (P.1): market output (P.11) if the prices charged are economically significant and as payments for non-market output (P.131) otherwise.

      Examples: rental of a government-owned building; road and bridge tolls; vignette for use of specific government-owned roads for a certain length of time; charges for use of a sports centre or swimming pool; entry fee to a public building.

   ii) the receipt is part of a contract that allows the use of the asset for a period of more than one year, but for less than its economic life, e.g. in concession or PPPs-type contracts. The number of individual payments required under the contract is not important. It is the time period of the contract that matters.

      **Treatment**: apply the operating lease/financial lease test (ESA 2010 paragraphs 15.11 and 15.16–15.18) and in the case of PPPs, the assessment of the distribution of risks (see chapter 6.4 Public-Private Partnerships). Although it is unlikely that government would see itself as being in the business of providing financial leasing, it could be appropriate to record the sale of the existing asset by government when the purchasing unit assumes most of the risks and rewards of ownership for the period of the contract and if the contract has the clear features of a financial lease.

      Operating leases and PPPs where government is deemed as being the economic owner of the assets: record as rental (P.1), in the case of one initial receipt it would be necessary to accrue it over the period of the contract and record the prepayment as trade credits and advances (F.81).

      Examples are a single up-front receipt from a company to occupy a government-owned building for five years: record as rentals (P.1), accrue it over the five years, and record a financial liability in other accounts payable (F.81).

   iii) the receipt is for a period of more than the economic life of the asset.

      **Treatment**: economic sale of the produced asset (P.51).

### 6.1.2.3 GOVERNMENT RECEIPTS FOR THE USE OF NATURAL RESOURCES

9. Government natural resources (AN.21) include land, sub-soil assets, and other tangible natural assets over which ownership rights of government have been enforced, either through legal ownership or

international agreement or convention. Such assets may or may not be owned and traded by units in other sectors of the economy. This category excludes the following:

- government receipts for the use of natural resources if such revenue arises from special legislation giving government the right to demand such payments when it is not the legal or economic owner of the assets;
- government receipts when it is not the economic owner, or when economic ownership is not established and it is not credible to regard government as the economic owner of the assets;
- 'environmental assets' which are not regarded as economic assets (see ESA 2010 chapter 7, Balance sheets, Annex 7.1);
- indirect revenue from natural resources, for example dividends from public corporations exploiting natural resources and corporate tax from corporations exploiting natural resources (ESA 2010 paragraph 15.30).

10. Revenue for the use of natural resources includes the following two types of receipts:

- those made each time the asset is used, or there is a single receipt allowing use of the asset for a finite period of time;
- the natural resource is made available by government through a lease, licence or permit, for a limited period of time.

11. Treatment: record as rent (D.45). In the case of one initial receipt, it is necessary to accrue it over the period of the contract and to record the prepayment as a financial advance liability (F.89) of government. An example is when government receives royalties paid for the extraction of oil.

12. If, for example, there is a single receipt from a company to exploit offshore oil reserves for five years: record as rent (D.45) accrued over the five years and record a prepayment in F.89. Note that a non-produced asset (AN.22: 'contracts, leases and licences') will appear on the balance sheet of the lessee company if subsequently the market rent rises above the rent agreed in the contract, and the company has the right to transfer the rights to a third party (a transferable lease).

13. If the government receipt for the use of its natural resources covers a period equal to or longer than the rest of its economic life, then it is recorded as the economic sale of a non-produced asset (natural resources: NP.1). For example, government economically acts in the same manner as if selling land when it grants an infinite lease for its use. This situation may be rare for finite leases, since natural resources do not 'depreciate' in the same manner as produced assets and hence often have infinite economic life lengths, but it is possible in cases such as the depletion of oil reserves and technological obsolescence.

### 6.1.2.4 NOTE ON NON-PRODUCED ASSETS (AN.22)

14. Acquisitions or disposals of non-produced assets (NP.1–NP.3) are to be recorded only in certain defined circumstances. In general, payments for using assets made under leases, franchises, or concessions are recorded as sales of services ('rental' P.1) or rent (D.45) or as a sale of the asset being exploited (P.51g in a financial lease, NP.1 in a resource lease) if the contract covers at least the economic life of the asset.

15. It is important to acknowledge that the recording of service concession contracts (as defined in ESA 2010 paragraph 15.42) should follow the rules set in this Manual for concessions. Such contracts cannot be assimilated with a sale of the underlying asset (fixed asset, land, etc.) but with a sale of a permit to conduct an activity. Any amounts due are recorded as a financial advance (with a receivable for the difference with the cash received at inception). When the concession is transferrable, an additional non-produced asset is created at a zero value at inception.

16. ESA 2010 paragraph 6.06 (g) describes the case where a non-produced asset should be recorded for contracts, leases, licenses or permits: when a unit (the second party) has a right to buy services or rent at a particular price from a first party, and that price is lower than the current market price, and it can transfer that right to another unit (the third party). Such assets arise, for example, when the price to be paid for the consumption of services is agreed, or paid, in advance under a contract for a number of years, and subsequently the actual market price becomes higher than the contract price. A transaction in non-produced asset (NP.2) occurs at the time the second party resells or retransfers the lease or

permit to a third party for an amount equal to 'the benefits to the holder in excess of the value accruing to the issuer' (ESA 2010 paragraphs 15.27 and 15.34)

17. Example: a unit (Unit B) buys five years' worth of services from another unit (Unit A) at the market value at the time the contract is agreed. Unit B pays in advance. The accounts of unit B record regular payments for the services and a financial asset in F.81, in respect of the pre-payment, which is gradually reduced over the contract period. Suppose that after two years unit B transfers the rights to the services to a third unit (Unit C) for an amount greater than it would have had to pay itself (the value of its remaining prepayment financial asset). The accounts of Unit B show the receipt split between an amount to purchase the AF.81 pre-payment financial asset and the sale of a non-produced asset (AN.22), which arose in the accounts of Unit B under K.7 holding gains and losses. If a transferable value was present at the inception of the contract, then the AN.22 asset initially appears via economic appearance of assets (K.1) in the other changes in volume of assets accounts and is recorded in the balance sheet of Unit B as an AN.22 asset (contracts, leases and licences). The sale of the AN.22 non-produced non-financial asset is recorded under NP.2. The purchaser (Unit C) now has both the financial asset and the non-produced asset on its balance sheet, and will record payments for services, at the original contract price (corresponding to the financial asset), while, assuming the market value remains constant, the amortisation of the non-produced asset is recorded over time in the accounts of Unit C under the item economic disappearance of non-produced assets (K.2), see ESA 2010 paragraph 6.07.

18. It is thus possible to record the sale of non-produced assets of an NP.2 type in government accounts in cases when government, as second party of a lease (i.e. as tenant), sells or transfers the lease to a third party.

### 6.1.2.5 GOVERNMENT RECEIPTS IN RETURN FOR GRANTING PERMISSION TO UNDERTAKE AN ACTIVITY

19. This category excludes receipts for the use of an asset owned by government — these have already been described above. The receipts under consideration might involve those associated with an asset owned by the payer, an asset owned by neither the payer nor government, or no assets at all. The key point is that legally the activity requires permission from government, and so it is not a payment that could be demanded by other units in the economy. In addition to the administrative procedures required to give the permission and enforce the rules, the government may (or may not) provide a service to the payer, or to society (assessment of conformity, quality checks, etc.). This is recorded as a sale of a service (case a) or a tax (case b), depending on the circumstances as described below and in ESA 2010 paragraphs 4.23 (e) and 4.79 (d), or in specified circumstances as the sale of a non-financial non-produced asset (case c).

**Treatment:**

**a) Sale of service**

20. Record as sale of a service (P.1) if government undertakes regulatory work specifically related to the payer (typically to assess whether the payer should be granted the permission requested) and the receipt is deemed to only cover an amount up to the cost of the work undertaken.

21. The calculation of costs, to assess whether they are in proportion, should include all costs that a private company would need to cover when setting a price and so includes compensation of employees, intermediate consumption, capital consumption and other taxes on production (see ESA 2010 paragraph 3.33) directly associated with the service performed. A government unit might provide a range of similar services but price them differently to reflect the different costs required, for example, in order to influence demand in a way that allows the service to be delivered more efficiently (the price might be higher at certain times of the day when demand is normally highest, or the price of a service delivered over the internet might be lower than a more personal delivery of the service). If there is, by design, a surplus compared to the cost of the service, then, the whole payment should be considered as a tax. Although ESA 2010 allows for partitioning of some transactions (ESA 2010 paragraphs 1.76–1.77), this does not apply here as taxes are recorded gross of any service element. The term, used in ESA 2010 paragraph 4.79, '…out of all proportion', is not specified but in this instance covers situations whereby the unit deliberately charges prices to generate a surplus over costs to provide funds for government to be used for other purposes. The receipt is for a service, and not for a permission, so it should be

recorded at the time when the work is undertaken irrespective of the length of time the permission is granted for. ESA 2010 paragraph 4.79 (d) describes this in more detail.

**b) Tax**

22. Record as a tax if the conditions for a service above do not apply. This is when the fees charged to grant permission exceed the cost of any service received in return and associated with the granting of the permission.

23. The tax is recorded as D.29 if paid by corporations and D.59 if paid by households. A capital tax D.91 would be recorded if it were an infrequent levy on a permission to own an asset, or a levy on the increase in value of an asset as a result of government permission — perhaps to construct a building on a particular parcel of land (see ESA 2010 paragraph 4.149 (b) on betterment levies).

24. Examples are: annual permission to use a motor vehicle irrespective of where and when it is used; a licence to fish or hunt that is required wherever the hunting and fishing takes place; a charge for the use of buildings or other assets when government does not own them; charges for permission to own particular types of assets; fees levied on industries to fund consumer protection or research where the work is undertaken to benefit consumers and/or the industry in general rather than funding services delivered directly to the individual business paying the levy (ESA 2010 paragraph 15.32).

**c) Sale of non-produced non-financial asset**

25. When a government receipt arises from granting permission to undertake an activity (unconnected to an asset owned by government) and permission is given exclusively to one unit, or to a restricted number of units, a monopoly or near-monopoly can be created for the holders of the permission. Other units cannot obtain government permission to undertake the activity, and government ensures that the restriction is enforced. This exclusion of other units may give rise to a non-financial non-produced asset on the balance sheets of the units that have the permission. ESA 2010 paragraph 15.37 states four conditions to recognise such an asset: no use of a government asset; no qualifying criterion for the permission; limited number of permits leading to monopoly (oligopoly) profits; and the possibility to sell the permit to a third party.

26. When no government asset is used and if the other three conditions mentioned above are not met, the receipts are recorded as taxes (ESA 2010 paragraph 15.32).

27. The appearance of an AN.223 asset in the purchaser's balance sheet needs to be accounted for through other flows (K.1). Before the sale of the asset to a third party takes place, the amount equal to the benefit to the holder in excess of the value accruing to the issuer should be recorded under K.7 (see ESA 2010 paragraphs 6.06 (g) and 7.57). If the permission granted is time limited, the balance sheet of the asset holder would show a decrease in the value of the non-produced asset using other flows (K.2) (amortisation of the asset for the amount that appeared through K1), see ESA 2010 paragraph 6.07 (b).

28. One example of receipts involving granting permission to undertake an activity unconnected to a government-owned asset is constituted by (carbon) emission permits. Such receipts are recorded as prepayments of taxes while at the same time a non-produced asset is recognised (ESA 2010 paragraph 15.40) for an amount equal to the benefit to the holder in excess of the value accruing to the issuer (that is, in this case: the market value of the permit less the payment originally made to government to acquire that permit). See Chapter 6.5 Emission trading allowances.

### 6.1.2.6 TIME OF RECORDING: SPECIFIC CASE OF PERMITS SOLD IN ADVANCE OF AVAILABILITY

29. Sometimes, a time-lag exists between the time permit/licence is sold off, issued, transferred or otherwise officially allocated, and the time when the permitted/licenced activity may take place, i.e., licensed asset is actually available. This has been observed for mobile phone licences, which are sometimes allocated, and thus the related asset is potentially transferrable, significantly ahead of when the frequencies actually become available for use. During that time, the frequencies may be used by another permit/licence holder, or by the same one but under a separate licence.

30. This selling of a permit/licence ahead of the use date can occur for any type of licences or permits, whether it be for using a fixed asset, for using a non-produced asset, for obtaining the right to engage in an activity (including pollution), or for obtaining the right to undertake a transaction at a pre-determined price.

31. According to the accrual principle, the recording of the associated revenue (rent, production or tax, according to the classification of the underlying asset the permit allows use of — rent in case of mobile phone licences) or as a disposal of asset (of the underlying asset, NP.1 or P.51g) can be recorded only at the point in time when the asset is available for use (for example when the frequencies become available for commercial use in the case of mobile phone licences) for a production activity.

32. Receipts collected by government before the asset is available for use (at time of auction, or of allocation of the licence) are financial advances: a prepayment to be recorded as other accounts payable (AF.8).

33. When a permit or licence is transferrable, the purchaser records in its balance sheet, in addition to the financial advance, a non-produced asset of the 'contract, leases and licences' type (AN.22), for a value initially of zero and more generally for an amount equal to *the benefits to the holder in excess of the value accruing to the issuer* according to ESA paragraphs 15.27 and 15.34 (see also ESA paragraph 7.57: *the value of the asset is equal to the net present value of the excess of the prevailing price over that fixed in the agreement*). When the permit/licence holder resells or retransfers the permit or licence, it records a disposal of its receivable asset (F.8) for the amount accrued in its balance sheet (AF.8) together with a transaction in a non-financial asset (NP.2) for the difference with the fair value of the consideration received in exchange (purchase price).

34. If the granting of the permit or licence involves the de facto economic disposal of the underlying asset, the permit is transferrable before the effective availability of the asset for use, the purchaser records in its balance sheet, in addition to the financial advance, a financial derivative (forward), if it meets the definition of a derivative, pending the effective availability of the asset. This derivative captures the changes in market price that may occur between the sale of the permit and the effective availability of the underlying asset. If the permit buyer resells the permit prior to availability, a transaction in derivatives takes place for the difference between the pre-payment component (F.8) and the value agreed in the resale. When the underlying asset becomes available, the permit holder records an acquisition of the underlying asset for its then market value (and government a disposal of asset for this value) matched by a liquidation of the receivable (payable of government) and a transaction in derivatives for the difference.

35. When the permit or licence makes the underlying asset available only progressively (for instance the licence might initially allow coverage of a small geographic area but later be extended to a larger area), the proceeds to record (e.g. rent) should be apportioned accordingly[(191)], using relevant indicators. For the mobile phone case, the population covered or the expected/observed turnover might be a suitable indicator.

## 6.1.3 Rationale of the general treatment

### 6.1.3.1 GOVERNMENT RECEIPTS FROM SALE OF GOODS AND SERVICES (THAT COULD BE SUPPLIED BY OTHER UNITS)

36. Once it has been determined that the treatment is to record government output (P.1), the difficulty is to distinguish between market output (P.11) and payments for non-market output (P.131). The distinction refers to the notion of economically significant price (see ESA 2010 paragraphs 20.19–20.34 and Part 1 Delimitation of the general government sector of this Manual).

### 6.1.3.2 GOVERNMENT RECEIPTS FOR THE USE OF A PRODUCED ASSET

37. The main distinction is to be made between operating lease (output, P.1) and financial lease (sale of an asset, P.51). According to ESA 2010 chapter 15 (Contracts, leases and licences):

    a) An operating lease of an asset or a durable good:

    - covers a certain period of time which may be long or short and not necessarily settled in advance,
    - implies no transfer of economic ownership, the legal owners retain the risks and rewards, one indicator being that they provide repairs and maintenance.

(191) In consultation with Eurostat.

b) A financial lease:

- covers a predetermined and protracted period of time, usually all, or most of, the economic lifetime of the asset[192],
- risks and rewards from using the asset are transferred from lessor to lessee, one indicator being that the lessee provides repair and maintenance.

38. In a financial lease, economic ownership of the good has been transferred. The lessor's role is purely financial. National accounts recognise the economic reality behind financial leasing as the equivalent to the lessor providing the lessee with a loan enabling it to purchase an asset, of which the lessee becomes the *de facto* owner.

39. In the specific case of concessions under public law for financing and exploiting public infrastructure and PPPs, see further in chapters 6.3 and 6.4, respectively.

### 6.1.3.3 GOVERNMENT RECEIPTS FOR THE USE OF A NON-PRODUCED ASSET

40. A distinction is made between the usual case of using (or exploiting) a non-produced asset (natural resources like land, sub-soil assets or other natural resources — ESA 2010 paragraphs 4.72 to 4.76) for a limited time (D.45 rent) and the availability to use until depletion of the economic value of the asset (sale of the asset).

### 6.1.3.4 GOVERNMENT RECEIPTS FOR PERMISSION GRANTED TO UNDERTAKE AN ACTIVITY

41. A distinction is made between the recording of a tax and of sale of services (output, P.1).

**Distinction between taxes and sales of services**

42. ESA 2010 paragraph 4.79 (d) mentions the criteria to distinguish taxes and sales of services:

*The distinction between taxes and purchases of services from government is defined according to the same criteria as those used in the case of payments made by enterprises namely, if the issue of licenses involves little or no work on the part of government, the licences being granted automatically on payment of the amounts due, it is likely that they are simply a device to raise revenue, even though the government may provide some kind of certificate, or authorisation, in return; in such cases their payment is treated as taxes. If, however, the government uses the issue of licences to organise some proper regulatory function (such as checking the competence, or qualifications, of the person concerned), the payments made are treated as purchases of services from government rather than payments of taxes, unless the payments are clearly out of all proportion to the cost of providing the services*.

43. Government acts in an economy in two relevant ways:

**Civil commercial law**

- Under civil commercial law government undertakes economic transactions that can also be undertaken by other units. For example, it employs staff, consumes goods and services, rents land, owns fixed capital assets, and sells the output of services using assets, and so on. For government transactions under civil law, ESA 2010 chapter 3 is applied to classify the productive activity of government; chapter 4 is relevant for classifying the compensation of employees and property income.
- ESA 2010 paragraph 3.39 explains that it is possible for government revenue from selling goods and services to be classified as either market output or as payments for non-market output. Under ESA 2010 paragraph 3.26, a non-market institutional unit can have market output, but the major part of the output is provided for free or at not economically significant prices. ESA 2010 paragraph 4.73 explains that charges for the use of produced fixed assets situated on land are treated as sales of services, not rent, and also what to do when the charges cover both land and buildings and cannot be distinguished. ESA 2010 chapters 6 and 15 describe when to record transactions in contracts, leases and licences.

[192] However, ESA 2010 paragraph 15.18 stresses that the length of the lease should not be the predominant criterion for the classification of the contract.

**Public law**

- Under public law, government undertakes economic transactions that are unique to it. For example, in the context of government receipts, government can raise taxes, enforce social security schemes, grant permissions/licences, and impose fines.
- The paragraphs in ESA 2010, chapter 4 Distributive transactions, in part on taxes and social security contributions are relevant here. ESA 2010 paragraphs 4.23 (e) and 4.79 (d) explain the differences between sales of services and taxes.
- ESA 2010 paragraph 4.79 (d) concerns payments by households for the use of assets (vehicles, boats, and aircraft) owned by the payer or hired to the payer. It does not apply to charges for the use of assets owned by government: this is either output (for sale of a service) or rent, not tax.

## Box 1 — Allocation of mobile phone licences

1. In most EU Member States, mobile phone licences (in most cases UMTS — Universal Mobile Telecommunications System, '3G', then more recently '4G') have been allocated to operators from 1999 onwards, through diverse methods according to country, including for free.

2. Initially, according to the ESA 1995 interpretation, payments to government had to be recorded as rent (D.45) if the contract applied to a period by convention of five years or less, or if the contract did not name the total price of the disposal, depending, on the economic performance of the corporation, at least for a large part of total receipts over the life time of the contract. The electromagnetic spectrum (the radio waves) was deemed to satisfy the definition of an asset in national accounts.

3. Under ESA 2010, the radio spectrum is explicitly identified as a natural resource (AN.2151). There is no specific mention for UMTS or mobile phone licences but chapter 15 (ESA 2010 paragraphs 15.23 to 15.30) covers leases on natural resources, including reference to leases of radio spectrum. It is specified that if government issues a permit which gives the control on the natural resource asset to its holder during an extended period, bearing the associated risks and rewards, a new asset may be recorded in the accounts of the licence/permit holder (AN.222 'permits to use natural resources') provided that 'the transfer of risks and rewards results in a separate and transferable permit with a realisable value' (ESA 2010 paragraph 15.28)

4. Thus, to recognise a non-produced asset, the permit/licence holder must be able, over the lifetime of the licence, to realise value from the permit if it wishes to exit from the activity. To achieve this, the licence must be transferable to a third party. Generally, these transactions have to follow a specific procedure. Similarly to other cases of licences or concessions/PPPs, this may require a government authorisation for the licence's resale or transfer, notably in order to assess the technical capacity of the acquirer to undertake the related activity, together with its financial strength.

5. The contract may also foresee that the transaction must only take place through government and not directly between the agents involved in the transaction. Under the above conditions, the licence could be considered transferable and an AN.22 asset is, thus, recognised in the accounts of the licence buyer/holder.

6. On the contrary, if government has the right to oppose the transfer for any reason, or if the contract requires the permit holder to keep the licence until its extinction, no AN.22 asset is recognised in the accounts of the licence buyer/holder.

7. Government receipts are in any case to be recorded as rents (see ESA 2010 Table 15.3 – The recording of three different types of permits for the use of natural resources).

**Table 15.3** — The recording of three different types of permits for the use of natural resources

| Type of use | Method of recording |
|---|---|
| Permission for temporary use, possibly for a long time | Resource lease: rent (property income) |
| Control by user during an extended period, risks and rewards borne by the user, transferability of permit at a realisable value | Rent and creation of new asset for the right to use the natural resource |
| Use to extinction; permanent use (all risks and rewards borne by the user) | Sale of natural resource |

8. A recording of NP.2 in the government accounts on licence transactions can nonetheless arise, for instances in the rare case where a unit classified inside government resells or retransfers, for a gain or a loss, a permit previously acquired at auction, or purchases such a licence on the secondary market (for a value different than the receivable accrued in the books of the seller).

## 6.1.4 Accounting example

A mobile phone license is sold during year 1 to a 1st purchaser (Telecom A) for 100. It allows access to the radio spectrum for 10 years, but only starting from the beginning of year 2 onwards. Owing to market changes, the market price of this access gains 20 towards the end of year 2, which leads to an entry in K.7. In year 3, the licence holder sells the licence to a 2nd purchaser (Telecom B) at the end of the 1st quarter. The selling price is 107 (= 100–12.5+20–0.5=90–2.5+20–0.5). The non-produced asset is amortising at approximately 2 per year (0.5 per quarter), which may be recorded in K.2 or alternatively in K.7. In this example, the licence value of 100 is spread linearly (instead of considering the present value of the transactions) for simplification purposes.

**Opening balance sheet year 1**

| A | | L | |
|---|---|---|---|
| Government | | | |
| AF.2 | 0 | | |
| | | B.90 | 0 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| AF.2 | 100 | | |
| | | B.90 | 100 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| AF.2 | 200 | | |
| | | B.90 | 200 |

**Non-financial accounts year 1**

| U | | R | |
|---|---|---|---|
| Government | | | |
| B.9 | 0 | | |

| U | | R | |
|---|---|---|---|
| Telecom A | | | |
| B.9 | 0 | | |

| U | | R | |
|---|---|---|---|
| Telecom B | | | |
| B.9 | 0 | | |

**Financial accounts year 1**

| A | | L | |
|---|---|---|---|
| Government | | | |
| F.2 | +100 | F.8 | +100 |
| | | B.9f | 0 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| F.2 | -100 | | |
| F.8 | +100 | | |
| | | B.9f | 0 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| | | B.9f | 0 |

**Closing balance sheet year 1**

| A | | L | |
|---|---|---|---|
| Government | | | |
| AF.2 | 100 | AF.8 | 100 |
| | | B.90 | 0 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| AF.2 | 0 | | |
| AF.8 | 100 | | |
| | | B.90 | 100 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| AF.2 | 200 | | |
| | | B.90 | 200 |

### Non-financial accounts year 2

| U | | R | |
|---|---|---|---|
| Government | | | |
| | | D.45 | 10 |
| B.9 | 10 | | |

| U | | R | |
|---|---|---|---|
| Telecom A | | | |
| D.45 | 10 | | |
| B.9 | –10 | | |

| U | | R | |
|---|---|---|---|
| Telecom B | | | |
| | | | |
| B.9 | 0 | | |

### Financial accounts year 2

| A | | L | |
|---|---|---|---|
| Government | | | |
| | | F.8 | –10 |
| | | B.9f | 10 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| F.8 | –10 | | |
| | | B.9f | –10 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| | | | |
| | | B.9f | 0 |

### Other economic flows year 2

| A | | L | |
|---|---|---|---|
| Government | | | |
| | | | |
| | | | |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| K.7 | 20 | | |
| | | B.103 | 20 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| | | | |
| | | | |

### Closing balance sheet year 2

| A | | L | |
|---|---|---|---|
| Government | | | |
| AF.2 | 100 | AF.8 | 90 |
| | | | |
| | | | |
| | | B.90 | 10 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| AF.2 | 0 | | |
| AF.8 | 90 | | |
| AN.222 | 20 | | |
| | | B.90 | 110 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| AF.2 | 200 | | |
| | | | |
| | | | |
| | | B.90 | 200 |

### Non-financial accounts year 3

| U | | R | |
|---|---|---|---|
| Government | | | |
| | | D.45 | 10 |
| | | | |
| B.9 | 10 | (B.101 | 10) |

| U | | R | |
|---|---|---|---|
| Telecom A | | | |
| D.45 | 2.5 | | |
| NP | –19.5 | | |
| B.9 | 17 | (B.101 | –2.5) |

| U | | R | |
|---|---|---|---|
| Telecom B | | | |
| D.45 | 7.5 | | |
| NP | 19.5 | | |
| B.9 | –27 | (B.101 | –7.5) |

### Financial accounts year 3

| A | | L | |
|---|---|---|---|
| Government | | | |
| | | F.8 | –10 |
| | | B.9f | 10 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| F.2 | 107 | | |
| F.8 | –90 | | |
| | | B.9f | 17 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| F.2 | –107 | | |
| F.8 | 80 | | |
| | | B.9f | –27 |

### Other economic flows year 3

| A | | L | |
|---|---|---|---|
| Government | | | |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| K.2/K.7 | –0.5 | | |
| | | B.102/103 | –0.5 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| K.2/K.7 | –1.5 | | |
| | | B.102/103 | –1.5 |

### Closing balance sheet year 3

| A | | L | |
|---|---|---|---|
| Government | | | |
| AF.2 | 100 | AF.8 | 80 |
| | | B.90 | 20 |

| A | | L | |
|---|---|---|---|
| Telecom A | | | |
| AF.2 | 107 | | |
| | | B.90 | 107 |

| A | | L | |
|---|---|---|---|
| Telecom B | | | |
| AF.2 | 93 | | |
| AF.8 | 80 | | |
| AN.222 | 18 | | |
| | | B.90 | 191 |

# 6.2 Sale and leaseback

## 6.2.1 Background

1. A sale and leaseback transaction involves the sale of an asset and the leasing back of the same asset. The lease payment and the sale price are usually interdependent because they are negotiated as a package. The asset subject to the sale and leaseback transaction is usually a building, but could be another non-financial asset. Government (at any level: local, state or central) may, for various reasons, be involved in such arrangements.
2. The accounting treatment of a sale and leaseback transaction generally depends upon the type of lease involved (financial or operating). However, from a government accounts point of view, the treatment of sale and leaseback transactions could raise two additional, linked questions:
   a) the sector classification of the entity transacting with government; and
   b) what the intention behind the arrangement is: to privatise the management of the asset(s) or to achieve a reorganisation within the public sector?
3. Depending on the answers, the economic substance of the 'sale' may be questioned and lead to different recording options (as sale of assets, government borrowing or even as other flows).
4. To thoroughly analyse the entire arrangement, in order to properly reflect its substance in national accounts, one has to examine separately each of the two legs of the contract: the sale 'leg' and the leaseback (or lease) 'leg'. This chapter discusses the leaseback 'leg' of the sale and leaseback transaction.
5. Concerning the sector classification of the purchasing unit (the buyer-lessor), the principles to be applied are similar to those for special purpose entities (see ESA 2010 paragraph 20.47) set up to acquire securitised assets.

## 6.2.2 Treatment in national accounts

### 6.2.2.1 DIFFERENTIATING BETWEEN FINANCIAL AND OPERATING LEASES IN THE LEASEBACK LEG

6. The classification of leases, in line with ESA 2010 paragraphs 15.04–22, is based on the extent to which risks and rewards related to ownership of a leased asset lie with the lessor or the lessee. Risks include mainly the possibilities of losses from idle capacity or technological obsolescence and of variations in return because of changing economic conditions. Rewards may be represented by the expectation of profitable operations over the asset's economic life and of gain from appreciation in value or realisation of a residual value.
7. A lease is classified as a financial lease if it transfers the risks and rewards related to ownership from lessor to lessee. Otherwise, a lease is classified as an operating lease.
8. In line with ESA 2010 paragraphs 15.08, 15.13 and 20.164, whether a lease is financial or operating depends on the economic substance of the transaction rather than the legal form of the contract. Examples of situations that, individually or in combination, would normally lead to a lease being classified as a financial lease are:
   a) the lease transfers legal ownership of the asset to the lessee by the end of the lease term;
   b) the lessee has the option to purchase the asset at a price that is sufficiently lower than or even close to (e.g. taking into account that removal costs will be avoided) the market value of the asset at the date the option becomes exercisable for the lessee, so that it is reasonably certain, at the inception of the lease, that the option will be exercised;
   c) the lease term is for the major part of the economic life of the asset, even if legal ownership is not transferred[193];

[193] Although ESA 2010, compared to ESA 95, has somehow relativized the importance of the length of the lease in order to determine whether it is a financial or operational lease (and therefore financial leases are possible also for short-term leases), it states that, in practice, it is difficult to

d) at the inception of the lease the present value of the minimum lease payments is very close to the market value of the leased asset;

e) the leased assets are of such a specialised nature that only the lessee can use them without major modifications;

f) when the leased asset is of such a nature that it would normally not be used by the lessor in its productive activity;

g) if the lessee can cancel the lease, the lessor's losses associated with the cancellation are borne by the lessee;

h) gains or losses from the fluctuation in the market value of the leased asset's residual value accrue to the lessee (for example, in the form of a rental rebate equalling most of the sales proceeds at the end of the lease);

i) the lessee has the ability to continue the lease for an additional period at a rental that is substantially lower than market rate.

9. The examples and indicators in the paragraph above are not always conclusive. If it is clear from other features that the lease does not transfer the risks and rewards related to ownership from lessor to lessee, the lease is classified as an operating lease. For example, this may be the case if legal ownership of the asset is transferred at the end of the lease for an amount equal to its market value at that time. It may also be the case if there are contingent rentals, as a result of which the risks and rewards are not transferred to the lessee.

10. Lease classification decisions are made at the inception of the lease. If at any time, the lessee and the lessor agree to change the provisions of the lease, other than by renewing it, in a manner that would have resulted in a different classification, had the changed terms been in effect at the inception of the lease, the revised lease is regarded as the cancellation of the original and the creation of a new lease going forwards. However, changes in estimates of the economic life length or of the residual value of the leased property, or changes in circumstances (for example, default by the lessee), do not give rise to a new lease classification.

### 6.2.2.2 GENERAL ACCOUNTING TREATMENT OF SALE AND LEASEBACK TRANSACTIONS

**Leaseback is a financial lease**

11. If the leaseback is a financial lease, the economic substance of the transaction is that no disposal of the asset has taken place and the transaction is only a means whereby the buyer-lessor provides financing to the seller-lessee, with the asset as security.

12. In this case the asset remains on the seller-lessee's balance sheet and the amount received by it should be recorded as a loan liability (F.4L). The lease payments made by the seller-lessee throughout the lease term are apportioned into loan repayments, interest and service payments, as appropriate.

**Leaseback is an operating lease**

13. If the leaseback is an operating lease, the sale and leaseback transaction should be recorded as a sale of asset(s) followed by an operating lease, in line with ESA 2010 paragraphs 15.08–12 and table 15.2.

### 6.2.2.3 NATURE OF THE UNIT (BUYER–LESSOR)

14. As regards the nature of the purchasing unit (buyer-lessor), if it is considered to be part of the general government sector, there will be no impact on the net lending/net borrowing (B.9) of general government. Only if the unit is classified outside the government sector could there be the possibility of recording a sale of assets impacting government B.9.

15. In general, three cases may be distinguished, depending on the nature of the unit involved in a sale and leaseback arrangement with government:

deviate from the recording in the business accounts, where financial leases are limited to leases covering the major part of the economic life time of the asset (see ESA 2010 paragraph 15.18).

a) the unit is created on purpose by government,

b) the unit is an existing public corporation,

c) the unit is a private operator.

#### 6.2.2.3.1. The unit is created on purpose by government

16. The main issue in this case is the sector classification of the unit. If the unit created on purpose by government is classified in the government sector, the 'sale' will not impact government net lending/net borrowing, the asset transfer should be recorded in the other changes in the volume of assets account.

17. In general, if its only activity is to provide services to government, the unit is considered to be engaged in an ancillary activity (see ESA 2010 paragraphs 2.26 and 20.24) or to be an artificial subsidiary (see ESA 2010 paragraph 2.24) or to be a special purpose entity (see ESA 2010 paragraphs 2.17–2.20). It is thus not considered a separate institutional unit and should be consolidated with its parent (government). No transaction in national accounts has to be considered: neither a transaction on assets, nor later any transactions in goods and services — output and intermediate consumption.

18. If the creation of the unit results from the split of another unit its creation is recorded in the other changes in volume of assets accounts, under changes in classification and structure (K.61). Nevertheless, if the unit actually purchases the asset from its own financial resources — by borrowing in its own right, for instance — the acquisition could be treated as a sale of assets, usually gross fixed capital formation (P.51g) from one part of general government to another. There would thus be no impact on net lending/borrowing (B.9) of general government on a consolidated basis. Any payments made afterwards by government to the unit are recorded as current transfers within general government (D.73).

19. The unit will remain classified in the general government sector as long as most of its activity is devoted to providing services (e.g. ancillary rental facilities) to government. For a possible reclassification outside the general government sector, one has to follow the rules regarding the market/non-market distinction and definitions of control.

20. Even if such a unit fulfils the criteria for being an institutional unit, the payments made by government for the rental services provided by this unit during the lease would not be considered as market output because:

    a) in order for revenue to be classified as the sale of a service, a payment must have a significant influence on supply and/or demand;

    b) in this case, in which government creates a unit which manages public buildings and provides accommodation for government departments, payments made by these departments cannot, in general, be considered revenue from sales, since they are unlikely to have a significant influence on the demand made by government, even if rentals are fixed by reference to market prices.

21. This transaction classification should not be seen as a comment on the efficiency or otherwise of the management of the public buildings. It could lead to a reallocation of public buildings among government departments such that, some public become available for private use. In this latter case, receipts from private users will be recorded as sales. Rearrangement of assets within the government sector does not, however, correspond to a market activity.

22. Being non-market, the unit has to be classified in the general government sector, at least as long as payments made by government departments constitute its main resources.

#### 6.2.2.3.2. The unit is an existing public corporation

23. In the case where an existing public corporation[194] acquires non-financial assets from government at a market price, with no other associated transactions between government and the corporation, this is recorded as a government sale of non-financial assets in the capital account (P.51g), improving government net lending/borrowing (B.9).

24. However, in some cases, there could be other events taking place that may change the nature of the transaction. For example, the transfer of assets can be associated with a major change in the function of the corporation such that it takes on new activities and responsibilities which were previously the

[194] Classified outside the government sector.

function of government. The transfer of assets might not be at the market price; or there might be no payment at all; or the purchase might be financed by a loan or an equity injection from government.

25. In order to record a transfer of fixed assets from government to an existing public corporation[195] as a sale of assets, the following conditions must be met[196]:

    a) the corporation must be a pre-existing one, not set up specifically for this transaction; it must usually be involved in this type of activity (leasing), showing evident competence in the management of such assets; and its size must be adequate for the transaction in the sense that the value of the assets which are transferred should not significantly exceed the current value of the existing assets already owned by the corporation;

    b) the corporation finances the acquisition of the assets from its own resources (for example by borrowing on the market) and not from government.

26. If one of these conditions is not fulfilled, the whole process is considered a restructuring of assets within the public sector, aiming at a more efficient management of the assets (without a B.9 impact). The transfer of assets, like in the context of corporate restructuring, is recorded as other flows in the other changes in the volume of assets accounts (see chapter 3.4 Capital injections in kind and section 3.4.2 Treatment in national accounts).

27. If there is an actual payment to government (for the 'sale' of assets) that was financed by a government loan to the public corporation, the overall operation should be broken down into two parts:

    a) the transfer of assets (the buildings for instance): this increases the equity capital of the unit, to be recorded in the other changes in the volume of assets account,

    b) financial transactions: borrowing (F.4) by the unit from government, and the payment to government would be recorded as an equity withdrawal (F.5).

28. As a result, for these alternative cases, there is no impact on net lending/borrowing (B.9) of general government.

#### 6.2.2.3.3. The unit is a private operator

29. Government might enter into a sale and leaseback operation with a private corporation for a number of reasons, including:

    a) to reduce the risks associated with ownership of the asset;

    b) to obtain the benefits of private sector management;

    c) a one-off cash injection to reduce its debt.

30. The unit would remain classified as a private corporation if there is no change in how it is controlled resulting from the operation.

31. If it is a new unit, it could be classified in the private sector, if it is set up and controlled by other private units who have invested equity in it. Classification as a private corporation should be questioned in cases where, for example:

    a) government has the right to appoint, remove, approve or veto key personnel;

    b) there is no private equity at risk;

    c) government guarantees the debts of the unit;

    d) government exerts control through other means, such as through the sale and leaseback contract.

32. It is not possible to give specific rules here to cover all eventualities. The structure of the unit and its operations must be considered as a whole to determine whether classification as a public or private corporation is appropriate. Chapter 1.2 deals extensively with these issues.

33. A sale and leaseback transaction with a private unit is recorded through transactions and not as a restructuring of assets in other flows. A transaction in sales of fixed assets (P.51g) will usually be

[195] Classified outside the government sector.

[196] Both 'legs' (sale and leaseback) have to be analysed.

recorded, thereby improving the general government net lending/borrowing (B.9), provided that the leaseback is an operating lease. Otherwise, government borrowing should be recorded instead.

#### 6.2.2.3.4. Sale and leaseback transactions with embedded repurchase components

34. Repurchase agreements are contracts in which an entity will sell an asset to a buyer, but it either promises or has the option to repurchase the asset. The repurchased asset does not necessarily need to be the asset originally sold to the buyer; it may be substantially the same or even a component of the original. Repurchase agreements generally take one of three forms of a financial derivative: a forward (obligation of seller to repurchase), a call option (right of seller to repurchase) or a put option (obligation of seller to repurchase at the buyer's request).

35. Sale and leaseback transactions can include repurchase components affecting the leased asset. In such cases, the accounting treatment depends on the type of repurchase component, as follows:

    a) if the seller-lessee has agreed to a forward transaction to repurchase the asset, or has a call option (with a fixed exercise price or satisfying the conditions foreseen under paragraph 8.b) above), or

    b) if the buyer-lessor has a put option and a significant economic incentive[197] to exercise its right (the put option),

    the entire sale and leaseback transaction is deemed to be a borrowing and accounted for as a loan, in line with ESA 2010 paragraphs 5.134–135.

36. Otherwise, the entire sale and leaseback transaction qualifies as a sale and operating lease (provided no other aspects of the risks and rewards analysis lead to a judgement of a financial lease). In such a case, the leaseback leg should be recorded as rent or rental, in line with ESA 2010 paragraphs 15.10–12 and table 15.2 and the sale of the asset should be recorded as a separate transaction.

## 6.2.3 Rationale of the treatment

### 6.2.3.1 THE UNIT IS CREATED ON PURPOSE

37. The same line of reasoning should be applied to the case of providers of ancillary services created by the government for identical purposes (solely providing services to government). Then, all transactions between government and such units should be consolidated when compiling national accounts.

38. If, however, such a unit is considered to be a full institutional unit, payments made by government for rental services provided by this unit would not be considered a market output because:

    - in order to be a sale, a payment must be in a position to have a significant influence on supply and/or demand;
    - in this case, in which government creates a unit which manages public buildings and provides housing services to government departments, payments made by these departments cannot, in general, be considered sales since they are unlikely to have a significant influence on the demand made by government services, even if rentals are fixed by reference to market prices. Moreover, such payments are likely to imply only entries in Treasury bookkeeping records, without any actual flow of funds. The financial counterpart of such a payment is quite a 'notional' financial transaction.

39. Of course, this does not mean that such an arrangement is not efficient for the management of the public buildings. However, it will lead, at best, to a reallocation of public buildings among government departments, and probably to a situation where some public buildings will be left by government departments, being thus available for private use. In this latter case, payments made by private users will of course be treated as sales or rentals. This rearrangement of assets within the government sector does not, however, correspond to a market activity.

40. Being non-market, the unit has thus to be classified in the general government sector, at least as long as payments made by government departments constitute its main resources.

[197] To determine whether the buyer-lessor has a significant economic incentive to exercise its right, one should consider various factors, including the relationship of the repurchase price to the expected market value of the asset at the date of repurchase and the amount of time until the right expires (e.g. if the repurchase price is expected to exceed the market value of the asset, this may indicate that the customer has a significant economic incentive to exercise the put option). Such a determination has to be performed at the inception of the contract.

### 6.2.3.2 THE UNIT IS AN EXISTING PUBLIC CORPORATION

41. In the simple case of an existing public corporation buying non-financial assets from government at market price, with no other associated transactions between government and the corporation, it is appropriate to record the sale of non-financial assets in the capital account (P.51g), improving government net lending/borrowing (B.9).

42. However, in some cases of this type, there are other events taking place. For example, the transfer of assets can be associated with a major change in the function of the corporation such that it takes on new activities and responsibilities previously the function of government. The transfer of assets might not be at the market price; or there might be no payment at all; or the purchase might be financed by a loan or equity injection from government.

43. In these cases, the whole process could be considered a restructuring of assets within the public sector, aiming to a more efficient management of these assets. By difference with a straightforward sale transaction on the market, this type of transfer of assets, like in the context of corporate restructuring, is to be recorded as other flows in the other changes in the volume of assets account (for more details, see chapter 3.4.Capital injections in kind and section 3.4.2 Treatment in national accounts).

### 6.2.3.3 THE UNIT IS AN EXISTING PRIVATE OPERATOR

44. The unit would be classified as a private corporation (in S.11002) if it is an existing private sector unit (or backed on existing corporations) and if there is no change in how it is controlled or in its purpose. If it is a new unit, it would be private if set up and controlled by other private units who have invested equity in it. Classification as a private corporation should be questioned in cases where:

- government appoints some of the directors of the unit;
- there is no private equity at risk;
- government guarantees the debts of the unit.

45. It is not possible to give specific rules here to cover all eventualities since such cases vary greatly. The structure of the unit and its operations must be considered as a whole to determine whether classification as a public or as a private corporation is most credible.

46. Government might enter into a sale and leaseback operation with a private unit for a number of reasons including:

- to reduce the risks associated with ownership of the asset;
- to obtain the benefits of private sector management;
- to one-off reduce its debt.

47. An operation with a private unit must be recorded through transactions and not as a restructuring of assets in other flows. The main question to address is whether the leaseback is a financial lease — in which case the sale of the asset would not be recorded since it would remain on the government balance sheet — or as an operating lease, according to ESA 2010 chapter 15 provisions.

# 6.3 Contracts with non-government units related to fixed assets

## 6.3.1 Background

1. This chapter deals with the recording of contracts with non-government units related to fixed assets in government accounts (excluding private-public partnerships, which are discussed in detail in the following chapter 6.4).

2. Governments' contracts with corporations to finance, design, construct and operate public fixed assets, such as gas, water, electricity and telecommunication networks, roads, railway tracks, waterways, airports and buildings such as hospitals, schools, prisons, etc., may take various forms. The most common types of long-term contracts are described in the following sub-sections.

### 6.3.1.1 PROCUREMENT CONTRACTS FOR CAPITAL ASSETS

3. In this case, the non-government party is only committed to build an asset and deliver it to government, according to the requirements demanded by government (normally checked by a third party). The asset will be used fully by government under its own responsibility. The impact on the government capital expenditure may be 'one-off' only for assets that are built and completed during the same fiscal year. Otherwise, ESA 2010 paragraph 3.55 states that uncompleted structures and buildings under a contract of sale/purchase (which means that government is committed to take over the assets, provided they meet the agreed requirements) are acquired, even in an incomplete state, on a continuous basis, according to the accrual principle. In practice, the value of the gross fixed capital formation may be approximated by stages (milestones) payments and, in their absence, be based on the costs to date. This does not exclude that some services, not directly linked to the assets, could be separately identified and treated adequately in national accounts.

### 6.3.1.2 PROCUREMENT CONTRACTS FOR GOODS AND SERVICES

4. Government only purchases services over a given long-term period but without fixing specific requirements (i.e. different from general regulatory standards) as regards the assets. This contractual link may be important to ensure continuity in services supplies, both in quantitative and qualitative terms. The treatment in national accounts is based only on flows occurring in one fiscal year.

### 6.3.1.3 EQUITY STAKES

5. Such arrangements involve the creation of a new unit (frequently referred as to 'joint-venture') in which both government and non-government partners have equity stakes in a company managing for example a given infrastructure, or a situation where the non-government partner is taking control of an existing public undertaking. ESA 2010 rules supplemented by this Manual, give explicit provisions, notably as regards the treatment of flows between government and this unit. A 'pure' joint-venture market entity with a strict equality in equity stakes is classified as a public corporation when government is judged to exercise a control over the general policy of the unit (see chapter 1.8 Joint ventures).

### 6.3.1.4 LEASES

6. Government is the user, during a given period, of an asset that is legally owned by a non-government unit. According to analysis of the 'risks and rewards' borne by each party (that is the basis of the concept of 'economic ownership'), the lease is considered either an 'operating lease' or a 'financial lease', which result into different treatments in national accounts (see ESA 2010 chapter 15). This concerns also cases of 'cross border leases' (which take the form of a set of interlinked lease agreements commonly referred to as 'head' and 'sub' leases). If government enters into a financial lease agreement, its net lending/borrowing (B.9) and debt would be impacted for the market value of the assets at the time government takes the economic ownership of the assets.

7. Chapter 15 in ESA 2010 explains the distinction between financial leases and operating leases. This is based on whether the lessor (owner of the asset) or the lessee (user of the asset) is exposed to most of the risks and rewards, inherent in the asset, and stresses the economic reality of these arrangements,

rather than their legal features. Different criteria are proposed in national accounts in order to decide on whether the lease must be considered an operating lease or a financial lease. Their relevance must be judged for each particular case.

8. In this context, a close correlation between the duration of the contract and the expected economic life of the asset is a strong indication of a financial lease, as the lessor would not be in a position to lend the asset to another lessee or to use it at the end of the contract, with a similar efficiency (without refurbishment expenditure).

9. Similarly, where government pays directly for most of the maintenance of the asset — and insurance in case of some types of durable goods — and is bearing the risk of variations in such costs, this also suggests a financial lease. It would be also the case if government was committed to repay the corporation's debt in the event of early termination of the contract.

10. On the contrary, an operating lease is considered where the leasing corporation has significant and on-going power on how to implement the contract, makes the key decisions on the design and construction of the asset, and decides how it is to be operated and maintained in order to provide the services required.[198]

11. In addition, the nature of the partner could give an indication on the appropriate classification whenever government enters into a lease contract with units that are clearly specialised either in operating leases or in financial leases. Examples are units providing only operating leases for equipment such as transport equipment, computers or, on the contrary, institutions specialised in financial leasing either in the form of property leasing (offices occupied by government units) or of equipment leasing. In all cases, it is also important to check whether government is entering into a contract according to normal commercial/market conditions (such as the length of the lease, price indexation, contract breaking notice, renewal, dispute settlement, etc.).

12. If the non-government party is the legal owner of the assets (the lessor) and the government user (the lessee) is judged to be the economic owner, then a financial lease is recorded. The asset provided through a financial lease is recorded in the balance sheet of government, and the economic transfer of the asset is recorded as gross fixed capital formation of government (P.51g) and as a non-financial asset in its balance sheet. This also creates a liability in the balance sheet of government, in the form of an imputed loan (AF.4). The regular payments to the lessor are to be treated as the amortisation of the imputed loan and are split into two transactions: a financial one for the reimbursement of the principal (F.4) and a non-financial one for the payment of interest (D.41). There may be a service component (FISIM) when the lessor is classified in the financial sector (see for more detail ESA 2010 chapter 15). After transferring the legal ownership of the asset, the balance sheet of government includes the produced non-financial asset, valued at market price, which is equal to the residual market price of the asset.[199]

### 6.3.1.5 CONCESSIONS

13. This term is used here for government contracts with a corporation (a concessionaire), which may be public or private, generally signed after a competitive procedure, to operate[200] over a long-term period[201] an asset, which may be either existing (and which must be renovated) or to be constructed; and where the corporation charges the final users. For example, a corporation might build a road or a bridge and levy tolls on the users. Usually, the assets are transferred to government at the end of the concession, after which government could exploit them, either directly (charging users, possibly under services contracts) or entering into a new concession arrangement for the assets. One of the main issues here concerns the economic ownership of the assets (based on risks and rewards) during the contract, which can be allocated either to the concessionaire (the most frequent case), or to government.

---

[198] There might be also cases where government acts as the lessor in a lease contract. The rules should be applied symmetrically.

[199] Example: a single payment by government to use a building for 20 years, after which it reverts to government, with government assuming most of the benefits, costs, risks and rewards of ownership during the 20 years: record as a purchase of the building (P.51) at market value. See also chapters 6.2 Sale and leaseback, 6.3 Contracts with non-government units related to fixed assets and 6.4 Public-Private Partnerships (PPPs).

[200] This covers the current management, the maintenance, the collection of fees, etc. Some of these tasks may be sub-contracted to other operators under the responsibility and the control of the concessionaire.

[201] There is no agreed definition of 'long term' for concessions but, in practice, most concession contracts cover at least 20 years, and frequently 30 to 35 years.

14. Under concession contracts, the major part of the concessionaire's revenue comes from a direct sale of goods or services to a variety of units under fully commercial conditions (tolls, fees paid by sub-contractors, etc.). In such arrangements, the concessionaire bears most of the commercial risk, which depends both on external factors (demand from end-users, their 'willingness-to-pay', etc.), and its own performance in managing and maintaining the assets. It is possible that the concessionaire has to operate under specific government requirements and is sometimes compensated by government (e.g. through subsidies).

15. It may also be the case that the price charged to end-users is fixed by the bidding documents rather than freely set by the concessionaire, and only adjusted upon the occurrence of certain events and/or to inflation. The concession may be granted by government for free or may involve payments from the concessionaire to government. These payments must be recorded according to the ESA 2010 classification, initially (recorded as a government permission, tax or service, see ESA 2010 paragraph 15.37) or regularly during the lifetime of the contract (rents, specific taxes, etc.), and on an accrual basis. If government is considered the economic owner of the asset, the asset is recorded within government accounts in national accounts and flows related to the use of this asset must be rerouted (see below).

16. A clear distinction should be drawn between concessions and public-private partnerships (PPPs) in national accounts. In the context of this chapter, the term 'concession' is used solely to describe long-term contracts, where the majority of the partner's (concessionaire's) revenue comes from the final users of the service, i.e. in which government makes no regular payments to the partner or such payments are a minority of the partner's revenue. In contrast, in PPPs contracts, the majority of the partner's revenue under the contractual arrangement comes from government payments (e.g. shadow tolls). In addition, the concession contracts examined in this chapter must be clearly distinguished from contracts (even, labelled 'concessions') where government asks a unit to provide defined services, paid by final users and/or government, but without precise requirement/specifications of government about main features of the assets that the contracting unit will use and the assets are not foreseen to be transferred to government at the end of the contract. This is observed in many areas, such as catering (for instance for schools), collective transportation, etc.

#### 6.3.1.5.1. The key issue in national accounts

17. In a concession-type contract, a corporation (concessionaire) might, for example, build a road or a bridge and levy tolls on vehicles using it. Government may or may not get receipts from the corporation

18. The key questions are as follows:

- which party is the economic owner of the asset (i.e. in which balance sheet is the asset recorded during the period of exploitation),
- how should the transactions linked to the concession contracts be recorded in national accounts.

19. Specific attention should be paid to cases where the concessionaire is a government-controlled entity[202], which is not deemed to have the autonomy of decision in respect to its principal function as required in national accounts (ESA 2010 paragraph 2.12). In this case, the concessionaire should be classified in the general government sector. If such an entity is controlled by different government units (possibly included in different subsectors, i.e. central or state/local), the classification should be in the government subsector of the unit having the majority of voting rights in the corporation (concessionaire) or, in some cases, showing the control on the basis of other criteria, as described in section 1.2.3 of this Manual.

20. As mentioned above, the corporations involved in the concession can be either public or private. If a public enterprise is involved, one of the questions is where such a public corporation should be classified (see Part 1 Delimitation of the general government sector). The economic and financial plans of the concession should be available in order to carry out the assessment on the forecasted costs and sales in future years.

21. Moreover, it is important to examine any amendment, revision or renegotiation during the concession period that could have an impact on the statistical treatment, and notably in case the concessionaire ceases to be considered as a market producer, which would result in a reclassification of the assets into government and the concession as into being considered a management contract. Close consideration

[202] When government controls an entity which has — as a unique activity or as main overwhelming one — only one concession contract with government, the entity should be classified in government sector.

should be given to any provision relating to the early termination of the contract due to a defaulting performance of the corporation (see further explanation in sub-section 6.4.3.5 Termination clauses and change in the nature of the contract).

22. It might also happen that a public concessionaire (recognized as an institutional unit in national accounts) which would have been classified in the government sector due to the market/non-market test (for instance because of significant subsidies on production from government), could regain afterwards a market nature due to its involvement in several concession contracts and meeting the conditions mentioned in paragraph 26 below, if the majority of the revenue would come from market tolls (market production).

#### 6.3.1.5.2. Treatment in national accounts

23. In cases of concessions[203] where government payments in cash or in kind are the minority of the corporation's revenue under the contracts, either directly or indirectly, the asset under concession can be recorded in the corporation's balance sheet during the period of exploitation.

24. However, if the government finances, under various forms (including investment grants), the majority of the construction (or refurbishment) costs, the concession asset should be recorded in the balance sheet of government. Any revenue obtained by the concessionaire during the operating phase (net of management fees) should be rerouted to government, as the concessionaire acts in this case 'on behalf' of government. If the unit is government-controlled, and concessions with government are its main activity, then it should be reclassified in the general government sector, except if there is evidence that the unit has always taken part in free open tendering competitions with private units for the selection of concessionaires. If the concessionaire is a private corporation, the concession contract should be seen as a management/service contract. A similar rule should apply if government has provided an explicit guarantee[204] covering more than 50 % of the debt raised by the concessionaire specifically ear-marked for financing the asset, such that government bears the majority of the risks associated with the asset.[205]

25. Moreover, if in the initial contract or in the course of its lifetime, government provides a minimum revenue guarantee (such as on a minimum volume of traffic) or, in some cases, a minimum level of profitability of the concessionaire (for instance in terms of return on equity), government should be considered to bear the majority of the economic risks and the assets should be recorded on government balance sheet. Under this perspective, the main distinction between concessions and PPPs falls. In this case, the contract should be treated in national accounts similarly to a procurement for the construction of the assets and as a purchase of services for management/ maintenance of the assets after their completion.

26. As far as the reasons admitted to provide support to the concessionaire, an exhaustive list of contingent events considered to result from '*force majeure*' should be established in a contract, thus excluding any responsibility of the partner in the deterioration of its financial situation, by contrast to an 'open' formulation which could lead to an open and possibly debatable interpretation and, *de facto,* to an insufficient transfer of risks.[206] In any case, the economic risk linked to business cycles and endured by producers in their field of activity should be excluded. However, in the context of exceptional and dramatic unfavourable economic conditions, a temporary and limited support provided by government might not lead necessarily to a reclassification of the assets.

27. An exception to this principle would be the case of a public concessionaire which was deemed to have no autonomy of decision in relation to the contract (at least for some major decisions, whereas it could act with some independence in the current day-to-day management). The main activity of the concessionaire would be to be involved in concession contract(s) (including the case of a single one) with government units. Therefore, it is important, in this case, to check the autonomy of the

[203] I.e. implying an asset defined precisely by government and, normally, transferred to government at the end of the contract.

[204] As a reminder, explicit guarantees mean that the holders of the debt have a direct (unconditional and at first demand in most cases) recourse on the guarantor. This is quite different from an implicit guarantee, for instance where there are strong expectations that is very likely, if not certain, that government would provide support to the defaulting corporation, due to the crucial importance of the infrastructure. In this case, the extent of the protection to creditors could be uncertain.

[205] It may happen that the assets are not transferred for free to government at the end of the concession contract, and that instead a payment is made by government. In this case, the calculation of the 50 % criterion should take into account the value of the foreseen payment. In addition, it should be checked whether the payment, when it takes place, corresponds to the market value of the assets when they enter government's balance sheet.

[206] This could mean that, at inception of the contract, the assets would be considered as government assets.

concessionaire in important decisions related to concession features.[207] In this regard, a set of criteria must be considered, as follows:

- whether the concessionaire has the freedom to sign the contract without the approval of the controlling government unit(s);
- whether the concessionaire could enter into other concession contracts without the approval of government;[208]
- whether the concessionaire could exit from this concession contract (for instance by selling the concession to another unit) without government approval;
- whether the concessionaire has total freedom of decision as far as the amount and timing of 'significant repairs' expenditure are concerned;
- whether there is an absence of constraints for the public concessionaire as far as wage and staff policy, suppliers selection, purchase policy and quality of services provided are concerned;[209]
- whether the concessionaire could enter in sub-contracts with other units without the approval of its controlling unit or of the contractual government unit;
- whether the concessionaire could decide on the extension/modernisation of the capacity/quality of the concession assets without the approval of its controlling unit or of the contractual government unit;
- whether there is an absence of obligation for the concessionaire to implement a differentiating pricing to final users under instructions of government (such as special tariff for social purposes) with no specific compensation by government internal cross-subsidy.[210]

If one of the above-mentioned criteria is by evidence not met, the unit is deemed not to have autonomy of decision in the framework of the contract. In case the public concessionaire would be involved in several contracts with government units where the above-mentioned criteria would result in different conclusions, the global assessment should be based on the majority of the value of concession assets.[211]

**Case 1: a new asset is built by the corporation**

When the asset is a new one built by the corporation, it is recorded as GFCF of the corporation with no impact on government accounts.

If at the end of the period of exploitation the asset is sold to government, it enters the government's balance sheet through GFCF at its market value (the value used should be assessed by an independent body, which could even be a government body provided that it would be proof that it would act independently for this task). If the amount paid by government differs from the market value, the difference shall be recorded as a capital transfer (D.99). In cases when the asset is given for free to government, the capital transfer (D.99) has the same value as the GFCF so there is no overall impact on government net lending/borrowing (B.9).

When payments are made by the corporation to the government during the contract, they should be recorded either as rents (D.45) if government makes available to the corporation a non-produced asset (such as land upon which the infrastructure is built) or as rental payments (output P.1) if government provides a produced asset. They should be recorded as other taxes on production (D.29) if government

[207] This is in line with ESA 2010 paragraph 2.12 which refers to *decision-making autonomy in the exercise of its principal function*. For a concessionaire, this means to be active in the context of concessions.

[208] It is assumed here that, as the strategy of the unit is defined by government units (which is a fundamental aspect of the notion of control in national accounts), an extension/diversification of the activity would need a decision of the controlling unit(s).

[209] Frequently, the concessionaire is contractually obliged to set progressively a reserve for sizeable repairs, which have to take place in the course of the contract, for a period defined *ex-ante*. Moreover, concession contracts frequently foresee that government could decide an extension/modernization of the capacity of the concession assets in the course of the contract, which could be prolonged.

[210] Concerning the 'pricing', i.e. the fees/fares charged to the final users, in many concession contracts this is defined (notably with an indexation mechanism) in the contract, rather restrictively.

[211] A specific case could also be considered, where concession contract(s) with government unit(s) is a minor part of the activity of a unit engaged in a market activity (sales at an economic significant price covering at least 50 % of production costs for this activity). If an absence of autonomy of decision was detected for all or some of the concession contracts, in this case, the concession assets should be reclassified in the balance sheet of the contractual or controlling government unit, with an imputed debt as a counterpart.

does not provide anything in return for the payment. If government demands a payment for the right to operate the asset and the corporation can transfer the right to other parties, this must be considered a payment for the acquisition of a non-produced asset (AN.22), if the conditions of ESA 2010 paragraph 15.37 are fulfilled.

**Case 2: an existing produced asset is transferred by government to the corporation**

It may happen that government transfers an existing infrastructure to the corporation at the start of the concession period. If, in exchange, government acquires equity in the corporation of equal value, this is recorded as a capital injection in kind in the other changes in volume of assets account, with no impact on government net lending/borrowing (B.9). It is an exchange of a non-financial asset for a financial one (government's equity (AF.5) in the corporation), to be recorded according to the rules defined in chapter 3.4 of this Manual. If government acquires nothing in exchange, the transfer of the asset is recorded as a negative gross fixed capital formation, compensated by expenditure under the form of an investment grant.

If the infrastructure returns to government at the end of the period of exploitation, for no cash, this is recorded as the acquisition of the asset by government, matched by capital transfer revenue, with no impact on government net lending/borrowing (B.9).

In the case where government holds equity in the corporation, distributions of profits (after tax) to government during the contract should be recorded as dividends (D.421).

### 6.3.1.5.3. Rationale of the treatment

28. The corporation (concessionaire) produces a service by means of an asset. This output is consumed by the users of the asset, through the payments made to the corporation (such as tolls). It is thus relevant to record the asset in the corporation's balance sheet during the period of exploitation, with the exceptions mentioned above.

**Case 1 a: new asset is built by the corporation**

29. Receipts by government from the corporation can arise because:

i) government provides something in exchange:

the classification of the revenue will depend on what government provides. Typically, government will provide the land upon which the asset is built. In this case, the revenue from the corporation should be classified as rent (D.45);

or:

ii) government receives a receipt for allowing the corporation to undertake the operation:

if there is no restriction on transferring the permission license by the corporation, and other conditions in ESA 2010 paragraph 15.37 are met, this is recorded as the disposal of a non-produced asset (AN.223).

However, in many cases, the permission is not transferable or there are strong restrictions (such as government approval). In this case, the payment should be classified as other taxes on production (D.29), as mentioned in ESA 2010 paragraph 4.23. This amount has to be recorded on an accrual basis over the whole concession period, independently of practical cash payment arrangements.

30. If the infrastructure is given for free to government at the end of the period of exploitation, the GFCF recorded in government's accounts at the end of the concession period is balanced by a capital transfer (D.99).

**Case 1 b: an existing produced asset is transferred to the corporation**

31. When government transfers an existing asset to the corporation, this is recorded as a capital injection in kind matched by a disposal of the assets, with no impact on government net lending/borrowing (B.9). However, this may be regarded as an exchange of a non-financial asset for a financial one (government's equity in the corporation, AF.5), depending on the rights acquired by government. If government receives in exchange no right, the transfer of the asset is recorded as a negative gross fixed capital formation, compensated by a capital transfer.

32. Where such government unit has an equity holding in the corporation, it is relevant to classify payments from the corporation to the government as dividends (D.421), even though part of them could be regarded as rents.

33. A reversion of the asset to government without cash is recorded as a government acquisition of the asset (P.51g) matched by capital transfer revenue. If equity has been recognised as an asset of government, the transfer is recorded only in the other changes in volume account.

### 6.3.1.5.4. Accounting examples

Accounting treatments related to the two cases are presented below.

The full sequence of government and corporation's accounts is not provided: only those accounts, which are relevant for the cases involved, are shown.

**Case 1 a: the new asset is built by the corporation**

- The asset is built by the corporation for 250.
- Rents/taxes are paid by the corporation to government (payments are 100 the first year).
- The asset reverts to government at the end of the period of exploitation for no cash (it has a market value of 200).

**Construction and first year of exploitation**

**General government** | **Corporation**

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.45/D.29 | +100 |
| B.9 | +100 | | |

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| D.45/D.29 | 100 | | |
| P.51g | 250 | | |
| B.9 | –350 | | |

**Reversion of the infrastructure at the end of exploitation**

**General government** | **Corporation**

**Capital account**

| ΔA | | | ΔL |
|---|---|---|---|
| P.51g | +200 | B.8n | +100 |
| | | D.99 | +200 |
| B.9 | +100 | | |

| ΔA | | | ΔL |
|---|---|---|---|
| P.51g | –200 | B.8n | –100 |
| | | D.99 | –200 |
| B.9 | –100 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +100 | | |
| | | B.9F | +100 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –100 | | |
| | | B.9F | –100 |

**Closing balance sheet**

| ΔA | | | ΔL |
|---|---|---|---|
| AN.11 | 200 | | |

| ΔA | | | ΔL |
|---|---|---|---|
| AN.11 | 0 | | |

**Case 2: an existing produced asset is transferred to the corporation**

- The asset is transferred by government to the corporation at the beginning of the exploitation (for an amount of 1 000).
- An equity held by government is recognized.
- The asset reverts to government at the end of the period of exploitation (at this time it has a market value of 200).

**Initial transfer of the asset**

| General government | | Corporation | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AN.11 | 1 000 | | |

| A | | L | |
|---|---|---|---|
| | | | |

**Other changes in volume of assets account**

| ΔA | | ΔL | |
|---|---|---|---|
| AN.11 (K.61) | –1 000 | | |
| AF.5 (K.61) | 1 000 | | |

| ΔA | | ΔL | |
|---|---|---|---|
| AN.11 (K.61) | 1 000 | AF.5 (K.61) | 1 000 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AN.11 | 0 | | |
| AF.5 | 1 000 | | |

| A | | L | |
|---|---|---|---|
| AN.11 | 1 000 | AF.5 | 1 000 |

**First year of exploitation of the asset**

K.1 = 40

| General government | | Corporation | |
|---|---|---|---|

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| | | | |

| ΔA | | ΔL | |
|---|---|---|---|
| K.1 | –40 | B.10.1 | –40 |

**Revaluation account**

| ΔA | | ΔL | |
|---|---|---|---|
| AF.5 (K.7) | –40 | | |
| | | B.10.3 | –40 |

| ΔA | | ΔL | |
|---|---|---|---|
| | | AF.5 (K.7) | –40 |
| | | B.10.3 | +40 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.5 | 960 | | |
| | | ΔB.10 | –40 |

| A | | L | |
|---|---|---|---|
| AN.11 | 960 | AF.5 | 960 |
| | | ΔB.10 | 0 |

**Reversion of the asset to government at the end of exploitation**

| **General government** | | **Corporation** | |
|---|---|---|---|

**Other changes in volume of assets account**

| ΔA | | ΔL |
|---|---|---|
| AN.11 (K.61) | +200 | |
| AF.5 (K.61) | –200 | |

| ΔA | | ΔL | |
|---|---|---|---|
| AN.11 (K.61) | –200 | AF.5 (K.61) | –200 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| AN.11 | 200 | |

| A | | L |
|---|---|---|
| | | |

# 6.4 Public-Private Partnerships (PPPs)

## 6.4.1 Overview

1. The term **'Public-Private Partnerships' (PPPs)** is widely used for many different types of long-term contracts between government and corporations for the provision of public assets. In public-private partnerships, government agrees to buy services from a non-government unit (a partner) over a long period of time, resulting from the use of specific 'dedicated assets', which the non-government unit builds to supply the service. The asset is usually used for the provision of public services, such as in the domain of health (hospitals), education (schools and universities), and public security (prisons) or in the context of transport and communication structures. The services might be purchased by government also in order to meet its own needs, e.g. in the case of an office building used to host government officials carrying out general administration or other specialised services.

2. In the context of this chapter, the term 'PPPs' will be exclusively used to describe those long-term contracts in which government pays to a non-government partner all or a majority of the fees under a specific contractual arrangement, thus covering most of the total cost of the service provided (including the amortisation of the assets). In national accounts, this feature distinguishes PPPs from concessions. In a concession contract, government makes no regular payments to the partner, or such payments, if they exist, do not constitute a majority of fees received by the partner (see chapter 6.3 of this Manual). In a PPP contract, as covered by this chapter, the final users do not pay directly (i.e. in a way proportional to the use of the asset and clearly identified only for this use), or only for a minor part (and generally for some specific uses of the asset[212]), for the use of the assets for which a service will be provided.

3. The key statistical issue is the classification of the assets involved in the PPP contract — either as government assets (thereby immediately influencing government net lending/borrowing (B.9) and debt) or as assets of the partner (spreading the impact on government net lending/borrowing (B.9) — and on imputed debt — over the duration of the contract). This is an issue which has some similarities with the one of distinguishing between operating leases and financial leases, as explained in ESA 2010 chapter 15[213].

4. As a result of the methodological framework, the assets involved in a PPP can be considered non-government assets, in national accounts, only if there is strong evidence that the partner bears simultaneously most of the risks and rewards attached to the assets (directly and linked to its use) involved in the specific partnership. Therefore, the analysis of the allocation of risk and rewards between government and the non-government partner must be considered as the core issue[214]. Here, the notion of risk refers to the impact (on revenue or on profit) of explicit actions by one party (related to construction, maintenance operations and provision of services for which it has been given responsibility) and/or the consequences of the behaviour of other economic agents for which the activity is carried out (such as a change in the demand for the service, by a government unit or by an end-user). Bearing the risks implies to be entitled to take actions in order to prevent them or mitigate their impact.

5. In this context, guidance on how to assess the risks is, as a first step, based on three main categories of risk:

---

[212] An example is payments for using sporting facilities in an educational establishment for persons that are not learning in that establishment.

[213] See notably Table 15.1 'The recording of three different types of lease'.

[214] It must be underlined that if IPSAS rules were applied, almost all existing PPPs in the Member States would end up in the balance sheet of government because the main criteria to be taken into account for their classification would be the control of the assets and the allocations of the assets at the end of the period of the contract. However, ESA 2010 stresses the concept of economic ownership and not the one of legal ownership. As a consequence, it is imperative for ESA 2010 that the partner incurs risks and rewards from the use of the assets, as made clear by ESA 2010 paragraph 1.90, in order for the assets to be classified in the balance sheet of the partner. Obviously, if all risks and rewards from the use of the asset would be incurred by the partner, there would be no issue in the classification of PPPs. However, in most contracts, it is seen that government, through various mechanisms (cap on rewards of the partner, partial ownership of the partner, income for government deriving from the use of the assets, debt refinancing clauses, etc.) often takes back some of the rewards of the use of the asset. The situation is analogous when it comes to risk, with government accepting to take back from the partner some of the risks of the project to government. This creates issues on the classification of PPPs as well as non-respect of one of the basic principle of ESA 2010 (namely that risks and rewards must be borne by the economic owner of the asset), in addition of greatly increasing the likelihood that the PPP will be classified on the balance sheet of government.

- **construction risk**: covering events like late delivery, respect of specifications and increased costs;
- **availability risk**: covering the volume and the quality of output (linked to the performance of the partner);
- **demand risk**: covering the variability of demand (the effective use of the asset by end-users).

6. As far as risks are concerned, as a basic rule, the PPP assets are to be classified in the partner's balance sheet and not in the government balance sheet, if the following conditions are met:
   - the partner bears the construction[215] risks;
   - the partner bears at least one of either availability or demand risk, as designed in the contract and in some cases (see below in sub-section 6.4.3.2), at the same time both availability and demand risks. It must be stressed that, in most contracts, only one kind of risk triggers the whole (or almost whole) payment from government to the partner; the payment is based either on availability indicators of the asset, or on use/attendance of the asset. The latter case is only observed when this depends on the final users and not on the government-paying unit;
   - the risks are not incurred by government through other means, such as through (e.g.) government financing, government guarantees and early redemption clauses.
7. If the above conditions are met, it is also important to consider all other mechanisms in place specified in the contract, in order to check whether there could be an allocation of the risks to government via other means. If this would not be the case[216], the accounting treatment of the PPP would be similar to the treatment of an operating lease in national accounts; it would be classified as a purchase of services by government.
8. If the conditions in paragraph 6 are not met, if government assumes the risks through another mechanism, or if government benefits from most of the rewards, then the assets are to be recorded in the government's balance sheet. The treatment would be in this case similar to the treatment of a financial lease in national accounts, requiring the recording of government capital expenditure and of a financial liability.

## 6.4.2 Background

### 6.4.2.1 THE DEVELOPMENT OF PPPS

9. PPPs **imply a long-term relationship** in the framework of specific contracts, where the obligations and rights of each partner are clearly specified. In practice, most PPPs contracts cover at least 20 years. The duration of a PPP contract normally depends on the nature of the assets (on the length of their expected depreciation) but there might be cases with a duration below 15 years or, even, 10 years. In such cases, a specific analysis should be undertaken in order to assess whether such contracts could actually be considered as PPPs in the sense used in this chapter. A contract would not fit the definition of a PPP if the duration of the contract would be longer than the economic life of the asset to be maintained, which would be replaced once or more times during the duration of the contract.
10. In addition to the goal of using the partner skills and competence to improve the quality of public services and reduce their cost, PPPs may also be motivated by budget constraints, which push governments to look for alternative means and external resources for building or developing collectively-used equipment. Usually, such contracts allow spreading the cost of new assets over the time in which they are used, thus avoiding a large initial government capital expenditure and a corresponding cash disbursement that would have occurred if government had used a direct procurement procedure for the building of infrastructure.
11. It **results** from this feature, that the schedule of government payments must be considered. For instance, if the expenditure incurred by the partner for the construction of the asset (a substantial part or all of it), was repaid by government at the start of the exploitation phase, through a single or a small number of sizeable payments (lump sums), the contract could be considered as the provision of procurement services for an asset, to be included in government balance sheet, followed by a service contract for the remaining life time of the contract. In any case, such payments from government should

[215] Obviously, the construction risk cannot be undertaken if there is no asset to be effectively built or renewed.

[216] All the criteria defined in this chapter must be jointly met.

always be considered as government expenditure (if the asset is recorded off government balance sheet) and not as the pre-payments of future availability fee.

12. It is not the role of statisticians to examine the reasons, rationale and efficiency (good value for money) of these partnerships, or to express an opinion about the economic and financial viability of the underlying projects, notably by comparing them with other kinds of investment approaches. The role of statisticians is just to provide clear guidance on the treatment of PPP projects in national accounts and, in the context of the Excessive Deficit Procedure, on their impact on general government net lending/borrowing (B.9) and debt. It is important, therefore, to properly implement the general national accounts principles in this domain in order to ensure the respect of rules and the homogeneity of government statistics in all EU Member States, such that net lending/borrowing (B.9) and debt figures would be fully comparable among countries.[217]

13. In a similar way, it is not up to statisticians to provide a very detailed definition of PPPs, as the expression can be widely used to describe different various arrangements, whereas a definition, which would be too restrictive could also not be appropriate in a context of complexity and innovation. Instead, a set of basic criteria should be properly specified in order to easily allow national accountants to analyse the contracts, making a distinction among different arrangements that may be observed in practice and applying the rules specified in ESA 2010.

### 6.4.2.2 CHARACTERISTICS OF PPPS

14. PPPs refer more specifically to the forms of partnerships designed to provide public services, when government payments constitute a majority of the fees received by the partner under the contract.

15. In practice, PPPs occur in areas of activity where government usually has a strong involvement (e.g. transport, education, health, security, etc.). Government would normally enter into a contract with one or several experienced commercial partners, directly or through a special purpose entity set up for the specific purpose of the PPP, for the delivery of services derived from a specific asset. These services must include by definition the maintenance of buildings and structures (including which major repairs) but cover also other activities, which allow a certain degree of actual functioning for the services (heating, security services, etc.) On one side, some services can be implemented by other agents than the staff of the partner (such as medical or educational staff in hospitals or schools), thus, not under the direct responsibility of the partner. On the other side, the partner may provide itself or sub-contract some services which are undertaken in a building or structure but which do not constitute the core use of the asset.

16. This type of contracts mentions specifically designed assets, which either needs a significant initial capital expenditure or a major renovation or refurbishment, and the delivery of agreed services, requiring the use of these assets, although the contract may also cover services not directly linked to them[218], according to determined quality and volume standards, which are specifically defined in the contract. The service component makes PPP contracts differ from leases.

17. The contract may refer either to a new asset or to a significant refurbishment, modernisation or upgrading of existing assets, previously owned and operated by government. If the contract does not involve the construction of a new asset but the renovation/refurbishment of an asset, which already existed, the work undertaken in this context must represent the major part of the value of the asset after completion. If it does not, (in cases where it would represent less than 50 % of the value of the asset), the contract is not to be considered as a PPP, as defined in this chapter, and, instead, it must be split into an asset procurement contract and a services contract, with the remaining asset recorded in the balance sheet of the government unit.

18. For some assets, there is no observed market price, as transactions do not exist or the assets are too specific to allow a method of valuation based on comparison. In this case, the value must be based on the 're-valued acquisition costs less accumulated write-downs'. In addition, this value must take into account the exact condition of the assets, which can result in a relatively low value if the asset must be substantially renovated. Another problem is that it may happen that the refurbishment/renovation expenditure will increase the value of the whole asset, even for the parts not renovated, above the expenditure incurred. This effect could be difficult to measure. A practical rule would be to check

[217] The guidance below, related to the treatment in national accounts, is based on a risk and rewards approach, which may result in a different classification of the assets under other accounting frameworks (such as IFRS or IPSAS).

[218] For instance, cleaning as part of the maintenance or catering as part of building management.

whether the foreseen capital expenditure exceeds at least the current value of the assets before renovation.

19. As a consequence of the above, if an existing and running PPP contract would be stopped, for various reasons, and a new contract would be later established with a new partner (through a new tendering procedure), the new contract would not be considered anymore as a PPP if signed during the operating phase of the old contract, as the new partner will not incur any construction risk. As a matter of principle, a contract can be considered as a PPP only if there is an asset to be built or renewed and a construction risk is clearly identifiable[219].

20. If the contract is stopped in the construction phase, it must be analysed whether most of the construction has already taken place or not. If a new partner (chosen by tendering procedure) will not have to incur any construction, the contract must simply be considered as a contract for the provision of services linked to an already existing asset, and the asset would be automatically reclassified in the government balance sheet at the moment in which the previous contract will be stopped and the old partner will not be anymore the economic owner of the assets[220]. In some cases, although this could take some time after the formal termination of the previous contract, government may organise a new auction and a new partner may agree to take over the maintenance tasks for the remaining duration of the contract, i.e. the management of the assets with the associated services for an asset already built. In such cases, the payments to government should be recorded as a financial advance to government, which would be progressively amortised by the payment of future regular (unitary) payments to the partner (taking into account its effective performance). However, it may also happen that the initial partner would simply transfer the PPP contract to another partner[221], in general with government's approval, or that there would be some restructuring in the equity holding of the partner, so that a new contract will have to be signed. In this case, it should be closely examined whether the allocation of risks and rewards has changed in the new contract.

21. A key feature of PPPs is that government is the main purchaser of the services from the partner. In this respect, PPPs differ from 'concessions', as defined for national accounts purposes (see chapter 6.3 of this Manual), where the main risk depends on the 'willingness to pay' of final users. In PPPs, government purchases the service by way of making regular payments once the assets are supplied by the partner, irrespective of whether the demand originates directly from government itself or from third party users (as for health and education services, and for some types of transport infrastructures). There is no need to specify a given threshold between government and third party payments on this point. Although it only needs to be just above 50 %, in reality it is usually much higher, generally above 90 %, because most contracts refer to 'typed' economic models. The expression 'shadow tolls' is frequently used, notably in the case of transport infrastructure assets, and refers to remuneration by government for a given volume usage of the asset by third parties[222].

22. The use of the assets would normally be specifically defined in the contract, possibly through a 'dialogue process', and there would be limitations in the way in which the assets could be used by the partner. For example, the partner could not dispose of them at will, and, where applicable, would have to give priority to government users over other possible users. It is to be underlined that many contracts do not rule out payments by 'third parties', when applicable, but these are likely to represent a minor (sometimes even negligible) part of the partner's revenue and frequently result from a secondary activity associated with the dedicated assets (for instance, an ad-hoc 'private' use of some sportive, educational or cultural infrastructure in some circumstances or fees collected for laying telephone cables along or under a motorway).

---

[219] This conclusion is also reinforced by the fact that ESA 2010 paragraph 20.282 explicitly indicates that *…the assets typically have service lives much longer than the contract period, so that government may control the assets, bear the risks and receive the rewards, for a major portion of the asset service lives….*

[220] Obviously, an asset has always to be allocated to an entity. If not economically owned by the old partner anymore (at the moment in which maintenance will not be assured anymore and no availability or demand payments will be received), it will have to be owned by government, at least during the new tendering procedure.

[221] The new partner would pay for the acquisition of the assets, at their remaining value.

[222] It may be the case that third party payments results from a partial use of some assets (for instance sport facilities in a school opened to the public outside school time, concerts in stadiums, etc.) or do not relate to the core use of the assets (for instance a cafeteria in a hospital). It may happen that such third payments are shared by government and the partner. In this case, if purely residual, they have no implications in the analysis of a PPP, but, if non-negligible, these rewards must enter the analysis as far as the sharing of rewards is concerned.

23. In addition, it must be stressed that in this context, 'government' refers to the whole general government sector (S.13) as defined in ESA 2010. Different government units, even classified in different subsectors of government, may take part in the contract according to various degrees.

#### 6.4.2.3 THE KEY ISSUE IN NATIONAL ACCOUNTS

24. In national accounts, long-term contracts such as PPPs raise the issue in which sector's balance sheet the related assets are to be included in. This refers to the initial recording of the assets involved, either in the government's balance sheet or in the partner's balance sheet. A recording in the government's balance sheet may have important consequences for government statistics, both for government net lending/borrowing (B.9) (the capital expenditure is to be recorded as government gross fixed capital formation (GFCF) in the non-financial account (P.51g)), and government debt (the financial account would match the capital expenditure by an imputed government liability, which would increase government gross debt when recorded as an imputed loan (AF.4)).

25. Moreover, according to national accounts rules (see ESA 2010 paragraph 3.148 (b) (3)), when the assets (in the form of buildings or other structures) are considered as government assets, the capital expenditure is recorded on an accrual basis as the works proceed, and not at the end of the construction/refurbishment period. For practical reasons, the existence of phased payments (instalments) received by the constructor or manufacturer, may sometimes be used as a proxy for indicating the appropriate time of recording. This is by definition applicable for GFCF under PPP contracts, (see ESA 2010 paragraph 3.55 related to the case of construction of other structure).

26. There are also consequences as regards the recording of the flows that are observed between government and the partner during the lifetime of the contract. If an imputed loan has been recorded in the government's balance sheet, the redemption of the corresponding principal must be spread over the entire period with no impact on government net lending/borrowing (B.9), while imputed interest must also be calculated and included in government expenditure together with the costs of the services charged to government in the context of the contract, with both expenditure impacting government net lending/borrowing (B.9).

27. It is to be underlined that the criteria developed in the following section, leading to the decision to classify the asset in the balance sheet of government or of the partner, should not be considered in isolation, criteria by criteria, but according to a principle of additivity. For instance, the fact that government would hold a minority share in the equity of the partner[223] would not be enough, by itself, to reclassify the assets in the government balance sheet, but, if at the same time, the rewards for government would go beyond its rights as a shareholder, the assets should be considered as belonging to government. Similarly, if government would hold specific rights (such as a veto right for major decisions), the partner could be reclassified in government (and thus the assets).

28. Moreover, concerning the issue of the amount of risks and rewards taken back by government through different ways, in some cases one single criterion would be enough to reclassify the asset in the balance sheet of government (construction risk, availability/demand risk, financing (including refinancing), early termination, '*force majeure*'). However, in some complex cases, a specific analysis, through an additive global approach, should be used when more features or specific clauses in the contract, as such not individually sufficient, on the basis of the current methodological provisions, to classify the asset in the balance sheet of government, would result in an insufficient transfer of economic ownership to the partner.

### 6.4.3 Treatment in national accounts[224]

#### 6.4.3.1 SECTOR CLASSIFICATION OF THE PARTNER

29. The partners involved in long-term contracts with government can belong either to the public or to the private sector. If it is a public unit, it means that, according to national accounts rules, government or another public unit determines the general corporate policy of this unit.

[223] Or would finance a substantial part of the capital expenditure, but not above 50 % of the total.

[224] PPP issues are treated in ESA 2010 paragraphs 20.276–20.290.

30. The public partner should be classified as a non-financial corporation as long as it acts as a market unit (meeting the 50 % criterion), fulfils the qualitative criteria specified in ESA 2010 and if payments by government may be considered as sales (as a counterpart for the provision of services).

31. However, specific attention should be given to cases of a public corporation (which would meet the qualitative/quantitative criteria for market production and would be classified under normal circumstances outside the government sector), or when government would be a minority shareholder but in a position to exert a significant influence in the contract negotiation and on important decisions to be taken in the course of its implementation[225]. In cases where payments by government under this contract would be a predominant part of the partner's revenue, these payments should be analysed to determine if they can be classified as sales, particularly if this contract alone results in a significant change in the size or nature of the partner activities. Following the application of the rules described in Part 1 Delimitation of general government sector, this corporation could be reclassified as a government unit if payments from government would not be considered as sales.

32. As regards PPP contracts where the partner is a special unit, created on purpose (frequently referred to as 'project company' or a special purpose entity — SPE) for a single PPP contract, it must be considered to what extent it is controlled by government. Even when government holds a minority stake, it can exert a predominant influence in the contract negotiation and on important decisions. Government could, for instance, hold veto rights on final approval for important decisions in the context of the drafting the contract and/or in the course of its execution (for instance, choice of sub-contractors, annexed activities, significant repairs, extension of capacity, etc.). If this is the case, the assets should be reclassified in the balance sheet of government. Moreover, the presence of government in an SPE or the fact that the partner could be a public unit, are factors that have to be taken into account in the context of the final sharing of the rewards between government and the partner.

33. Finally, whenever government deliberately provides support to a partner classified outside the government sector as compensation for events that were not mentioned as clear commitments when the contract was signed, this support must be recorded as a transfer affecting government net lending/borrowing (B.9) at the time the decision to provide the support is taken or implemented, unless it would fall under the restrictive list of events which can be considered '*force majeure*'. Support from government to the partner can also affect the allocation of risks. For instance, government could provide refinancing so that the liability to government would cover a major part of the value of the fixed asset. Another example could be the provision of some subsidies, which would result in a market/non-market test value below 50 %.

34. A reclassification of the assets in the government's balance sheet will result from the reclassification of the public partner in general government. This may occur, for example, if a recurrent support would result in a shift (of a public unit) from a market entity to a non-market entity (i.e. no longer satisfying the criteria as to be considered engaged in market activity) or for other reasons.

#### 6.4.3.2 ASSESSMENT OF THE RISKS AND REWARDS BORNE BY EACH CONTRACTING PARTY

35. In national accounts, the assets involved in a long-term contract between a government unit and a non-government partner can be considered as non-government assets only if the non-government partner bears most of the risks attached to the asset during the whole duration of the contract and is also entitled to receive most of the current benefits from the assets.

36. ESA 2010 paragraph 20.283 states that a majority of the risks and rewards must be transferred and not 'all' of them. As a matter of fact, some sharing of risks between government and the partner is usually observed in partnerships. As mentioned further, it may be seen as acceptable that some risks might be taken by government, for instance in the case of exceptional events (*force majeure*), in the context of a government action which would change the conditions of activity that were contractually agreed, or for specific risks, notably in relation with archaeology, land register, environment, public security, enforcement of legal decisions, etc., for which government behaviour may have a decisive influence. However, normal risks associated to the economic ownership of the asset should be taken by the partner if the asset is going to be classified in its balance sheet, and the risks incurred by the partner must have a significant impact on its profitability (and possibly, in some cases, also on its solvency),

[225] It would not matter whether it would be the contracting government unit the one owning the shares or another government unit, which could even be in another government subsector.

under normal circumstances, where there would be a clear link between the realisation of these risks and the actions (or absence of actions) taken by the partner. Therefore, the analysis of risks borne by the contractual parties is to be considered as a very important element as regards the classification of the assets involved in the contract, to ensure the correct accounting of the impact on the government net lending/borrowing (B.9) and debt of this type of partnerships.

37. It has also to be noted that these arrangements deal with a single asset or with a set of assets that are not contractually divisible. Because of the features of the contracts, PPP assets should not be split in national accounts. The assets should be recorded in the balance sheet of just one of the parties involved (the economic owner), for their total value.

38. For the purpose of classifying PPPs in national accounts, in order to simplify the analysis, three main categories of risks have been selected.

39. The **Construction risk** covers events related to possible difficulties faced during the construction phase and to the state of the involved asset(s) at the moment in which the services start to be provided. In practice, it is related to events such as late delivery, non-respect of specified standards, significant additional costs, legal and environmental issues, technical deficiency and external negative effects (including environmental risk) triggering compensation payments to third parties.

40. The **Availability risk** covers cases where, during the operation of the asset, the responsibility of the partner is called upon, because of faulty management ('bad performance'), resulting in a volume of services lower than the one which was contractually agreed, or in services not meeting the quality standards specified in the contract.

41. The **Demand risk** covers the variability of demand (higher or lower than expected at the moment in which the contract was signed) irrespective of the performance of the partner. In other words, a shift of demand cannot be directly and totally linked to an insufficient quality of the services provided by the partner, although quantitative and qualitative shortfalls in this matter are likely to have an impact on the effective use of the service and, in some cases, exert an eviction effect. Instead, the demand risk may also result from other factors, such as the business cycle, new market trends, a change in final users' preferences or technological obsolescence. This must be seen as part of the usual 'economic risk' borne by private entities in a market economy.

42. Normally, the demand risk would not be applicable for contracts where the final user has no free choice as regards the asset-dependent service provided to them by the partner (thus, excluding 'secondary' services falling under the 'third parties' revenue category). For example, a demand risk should not apply to assets such as prisons. It may also be the case for hospitals or schools under certain conditions and, in some cases, sporting and cultural infrastructure assets. The non-applicability of the demand risk would reinforce the fact that the construction and availability risks should be unquestionably transferred in such cases.

43. In addition, some contracts may be designed in a way so that government payments would be mainly linked to the effective use of the assets (volume indicators), whatever the extent of final user's own initiative and in spite of the fact that the volume would be frequently closely correlated with the performance of the partner related to the availability and the quality of the asset.

44. Some contracts may combine regular (unitary) payments related to the availability of the assets with other regular (unitary) payments linked to the actual use of the assets (demand), both being identifiable. The partner may be seen here as bearing several risks. Where neither of the separate types of payments would exceed two thirds of the total government unitary payments, both availability and demand risks must be assessed separately; they would have to be jointly transferred (in addition to the transfer of the construction risk which is, as such, an imperative condition) in order to classify the asset off government's balance sheet. If it appears that one type of payment is the predominant part, higher than two thirds of the total, the analysis should rather focus in priority on the corresponding risk. However, the other component paid by government should also not be neglected and it should be checked to what extent it could mitigate the impact of the occurrence of the predominant risk on the income/profits of the partner.[226]

[226] For instance, if the 'minor component' foresees some mechanisms that could guarantee in any case a minimum revenue or profit to the partner, even in case of penalties for the 'major component', this should be taken into account in the global assessment of the contract.

45. In all cases, the analysis of the risks borne by each party must assess which party is bearing the majority of the risk in each of the different categories, under the conditions mentioned above, and taking into account the other contractual features mentioned below.

46. However, this assessment does not consider risks that are not closely related to the asset(s) and that can be separated from the main contract, as it is the case when part of the contract might be periodically renegotiated, and where there are performance or penalty payments that do not significantly depend on the actual condition of the main assets or on the quality of the service.[227]

47. The assets involved in such PPPs would be recorded in the partner's balance sheet, and therefore recorded 'off-balance sheet' of government, only if both of the following conditions are met:

- the partner bears the construction risk, and
- the partner bears at least one of either availability or demand risk, as designed in the contract.

48. Therefore, if the construction risk is borne by government, or if the partner bears only the construction risk and no other risks, the assets are to be recorded in the government's balance sheet.

49. A key criterion, which must be taken into account, is the possibility for government to apply penalties in cases when the partner is defaulting on its service obligations. Application of the penalties should be automatic (i.e. clearly stated in the contract and not subject to bargaining or to a decision by government on whether to apply them or not) and should also have a significant effect on the partner's revenue/profit and, therefore, must not be purely symbolic. Should the asset not be available for a non-negligible period of time, the government payments, as determined by the contractual formula, would be expected to fall to zero for that period, according to a fundamental principle 'zero availability — zero payment'.

50. However, it must be stressed that there might also be some lump sum payments due by the partner (for instance as specific penalties related to some events, insufficient quality of the asset, lack of information or insufficient provision of documentation, bad performance, etc.), which should be paid by the partner in any case as a result of other occurrences, independently from the application of the penalties system due to the non-availability of the asset mentioned above. This could result in net payments from the partner to government, which, as a matter of principle, should not be brought back to zero. Conversely, if the partner is in a position to perform its obligations, according to the contractual provisions, better than expected (through higher productivity, lower costs of input, better financial conditions, etc.), it should be entitled to keep the resulting entire and higher than expected profit.

51. Furthermore, any other mechanisms by which government would re-assume the majority of risks of the project (e.g. via termination clauses, government majority financing or the provision of guarantees by government (see below sub-sections 6.4.3.3 to 6.4.3.5)) would determine the recording of the asset on government's balance sheet, independently from the analysis of the risks mentioned above. In other words, the assets will be classified as government assets if one of the provisions below related to guarantees, financing or early termination would not be met.[228]

52. As far as the rewards derived from the project are concerned, if the PPP contract foresees that, at a given level of profitability for the partner, whatever the way in which it would be expressed (monetary terms, ratio of return on equity, etc.), the government unit would be entitled to take any part of the profit, the PPP assets should be considered as government assets, independently from the precise definition and amount of the profits captured by government. All things being equal, the fact that a unit receives the rewards from an asset is an indication that the asset should be classified on its balance sheet, However, in case government would hold a minority stake in the PPP partner, government could still indirectly be entitled to its normal share of profit which could be distributed to the partner, i.e. under the same conditions as the other shareholders, by way of payment of dividend. It is to be underlined, nevertheless, that government can be entitled to receive all or part of the additional previously unforeseen profits realised by the partner if they, by evidence, result from a deliberate action or decision of government with an impact on the use of the specific asset and/or the costs of their availability, such as an increase in demand fees resulting from an explicit government decision/policy, etc. This should not include, however, general measures taken by government with a large impact in the economy.

---

[227] This could be the case for some 'accessory' risks for which a defaulting performance should not necessarily lead to a reclassification of the assets.

[228] As mentioned in ESA 2010 paragraph 20.285, in case of very complex arrangements (type of assets, design of the contractual obligations), if the analysis on the basis of the criteria listed above and below would not be unquestionably conclusive, the degree of involvement of government in the determination of the assets and the services to be produced should be considered as an additional criterion.

### 6.4.3.3 GOVERNMENT FINANCING

53. It is possible that an important aim of government's long-term partnerships with non-government units would be to spread the recording of capital expenditure and related financing over a long period of time.

54. I this framework, it may be the case that government itself takes part in the financing of the partner. Frequently, a partner is not able to borrow at the same rate of interest as government, thus increasing the cost of the project. Therefore, government may offer a certain level of financing to the partner in the context of a PPP project, to attract greater interest by private sector entities in the project, to reduce the total cost of financing, and/or simply to ensure the viability of the project[229].

55. If the majority of the financing of the capital expenditure would be provided by government (in various forms to be jointly considered, e.g. investment grants, loans, guarantees, equity in the partner, etc.), government would be deemed to bear the majority of risks and the asset must be classified on its balance sheet. If this situation is foreseen in the initial contract, any capital expenditure will be recorded as government GFCF. The financing by government may also take place at different points of time. It may be from inception, covering the construction phase, but also at the end of the latter when the debt incurred during the construction phase (financed by partner's own funds and/or short time banking facilities) could need to be 'consolidated' at long term. It may happen that government would pay a significant amount at the end of the construction phase which should be considered as an investment grant (and not as pre-payments of the future unitary availability or demand payments) and, as mentioned above, it should be taken into account in the assessment of the share of government in the total financing. Moreover, if the financing provided by government would be at first a minor part of the total financing needs (with the assets therefore, ceteris paribus, being classified in the balance sheet of the partner) but then would become predominant in the course of the construction phase for various reasons, this would trigger a reclassification of the assets into the government's balance sheet at the time when this would occur.

56. This would apply only to cases of financing from national government units, therefore excluding any financing from international entities resulting from inter-governmental agreements, such as from EU funds (ESIFs, Cohesion Fund) that are granted to non-government units. In this context, it is to be underlined that, for instance, if the EU finances 30 % by way of grants, the private partner 36 % and government 34 % (of the total), the PPP project would be deemed to be financed in majority by the private sector as its funding would be 36/70=51.4 % of the total. The assessment of the contribution of government and of the partner in the financing of the capital cost must exclude the EU grants, which reduce the need to finance the capital expenditure on a domestic basis, possibly with government participation. The assets could be recorded as government assets even if government would not cover more than 50 % of the capital expenditure, depending on the share of EU grants. It would simply depend, in fact, on whether the share of government financing would be above or below the share of the financing provided by the private sector.[230] The external EU financing[231] in the form of grants would be excluded from the analysis and from the assessment of the balance of risks between government and the partner[232]. An assessment will still need to be undertaken on whether government incurs more risk than the partner or whether it would be the other way around.

57. When government would be taking part in the financing of the PPP project for less than 50 % of the total, as mentioned above, it would be important to examine the nature of the debt incurred by the partner vis-à-vis government (which would not necessarily be the same unit involved in the contract). This is because financial instruments may involve different degrees of risks, in the sense that a debtor default would be imputed to creditors according to a given order of priority. In this context, in order to

[229] It may happen, in this respect, that the financing arrangement is not agreed at the time of the signature of the contract between government and the partner. In this case, the compliance of the PPP with the specific rules related to financing and guarantees in this chapter can be assessed only at the time when the financing arrangements will be agreed upon and properly examined.

[230] When it would be agreed that the EU funds would be allocated directly to government in view of covering part of the future payments by government to be made in the context of a PPP contract, the funds should be recorded as a financial advance when transferred from the EU, with no impact on government net lending/borrowing (B.9). When the funds would be used, under regular unitary payments by government, they shall be recorded as government revenue, neutralising the impact of the expenditure on government net lending/borrowing (B.9), until the complete depletion of the EU funds earmarked for the PPP contract.

[231] The financing from the EIB through loans, must not be considered as government financing, but simply as any financing from the private sector for the purpose of the application of these national accounts rules (unless the EIB would benefit from a guarantee of government).

[232] Obviously such grants will simply decrease the capital cost of the project and would not be reflected in the availability or demand unitary payment which government will make to the partner.

implement this rule, it is necessary to make the debt homogeneous in nature. It is however not possible in this respect to use some of the usual tools from financial analysis, such as the 'Probability of Default' or the 'Loss Given Default', etc., which normally would require significant samples. In this context, a simple method should be used under the form of a multiplier equal to 2.5[233] when government holds a higher risky instrument (junior or subordinated debt) than the other creditors.[234] More complex cases (for instance, when there are a set of different classes of instruments and various levels of losses coverage) would nevertheless require a specific analysis.

58. In some contracts, government may take a firm commitment to ensure all or part of the financing of the partner in case this could not be in a position to get the financial resources when needed.

59. For instance, in some cases, which should be rather exceptional, the financial agreement signed at inception would not cover the whole duration of the contract (such as in the case of a long term syndicated bank lending) or problems could be incurred at the end of the construction phase. The latter is generally financed by short term facilities (drawn according to the progress in the works) 'consolidated', when the construction is completed (and accepted by the counterpart), by long term financing means (including the issuance of long-term securities). This could happen, for instance, when some banks or underwriters have no firm obligation to ensure this consolidation and, for various reasons, could decide not to participate. In this case, if government has taken the commitment to finance more than 50 % of the capital expenditure, the assets should be classified as government assets at the start of the implementation of the PPP contract (with the GFCF being progressively recorded following the completion of the works), as the PPP assessment needs to be undertaken over the global financing risk of the partner on both the construction and the exploitation phases, i.e. all along the lifetime of the contract and not only at the moment of its signature. Such a contingent commitment of government would strongly mitigate the risk of the partner.

60. Another case could be when the long term financing would not cover the PPP contract until its final maturity for various reasons (market conditions at the time of the financial, agreement, risk aversion, uncertainties on the arrangement viability, etc.) and there would be uncertainty on the capacity of the partner to get all the needed financial resources as well as on their cost. The assets should be reclassified as government assets at the time government would actually refinance the debt, if its commitment covers more than 50 % of the expected value of the asset at the time of this refinancing, on the basis of the contractual provisions related to the capital expenditure (in some cases the realised expenditure could be however higher). However, in both cases mentioned above, if the government (re)financing would take place in a context of market disruptions (this could be the case, for instance, at the time the financial agreement is signed), such as a credit crunch or inactive financial markets, which could be considered as a case of '*force majeure*', the intervention of government might not result in a reclassification of the asset, provided that the government financing would cover only a small part of the remaining duration of the contract and that the stepping out of government should be envisaged as soon as the market conditions would come back to relatively 'normal' conditions.

61. Finally, a refinancing may be implemented, either because the financial instruments reach their maturity before the end of the PPP contract, or in order to benefit from favourable market trends (such as a general decline in the interest rate) or due to a better appreciation of the partner's risk[235] on the market). The assets should be at inception considered as government assets if government is entitled in the contract to a specific share of the possible refinancing gain. However, there would be an exception, when it may be evidenced that a better appreciation of the partner's risk is due to a specific action of government (for instance due to a lower use of the assets, or a creation due to government of better conditions for their use, etc.) which has increased the partner's profitability. In this case, the refinancing gain could be allocated to government. In some cases, it may be difficult to isolate the predominant cause of the refinancing gain, which, in practice, may result from the conjunction of various factors, not easily and precisely weighted. Under these conditions, if government was entitled to capture no more than one third of the gain, the assets should not be reclassified in government at inception of the PPP

[233] This level has been derived from default probability matrices set up by rating agencies.

[234] For instance if a subordinated debt equal to 30 % of the total is held by government, and the 70 % senior debt is held by other investors. The subordinated debt would be weighted 75 and the share of government in total financing would be 75/145 = 51.7 %. The subordinated debt could also be held by other investors: for instance, government subordinated debt 20 %, other subordinated debt 10 %, senior debt 7 %; the share of government in total financing would be in this case 50/145 = 34.5 %.

[235] This may also be linked to the appreciation of the risks of the 'sponsors' of the partner (for instance in the case of building companies which have set up a specific PPP unit) which could have to support it in case of difficulties (such support would be compulsory if their stake take the form of an unlimited liability).

contract. This proportion would be justified by the fact that, apart from the rewards directly linked to specific actions of the partner or of government, it must be considered that the risks and rewards deriving from the macro-economic setting must be incurred by the economic owner of the asset, exactly as in the case of *force majeure* events or in other similar cases. Government could also receive part of the profits through taxation but this should fall under normal taxation rules and not through a specific tax levied for the specific case of the PPP.

#### 6.4.3.4 GOVERNMENT GUARANTEES

62. Government may also provide directly an explicit guarantee[236], partially or fully covering the project-related borrowing of the partner, whatever the nature of the creditors (including possibly international financial organisations). Generally, this helps the partner to raise funds at a lower cost on markets and to improve its credit rating.

63. In this context, the existence of legal provisions transferring to government all or part of the debt service would trigger a classification of the partner's debt as government debt.

64. Moreover, because guarantees have an impact on the distribution of risks between the parties, guarantees should be used in the analyses of risks in PPPs, especially where the majority of the value of the PPP assets (including any refurbishment cost) would result from a transfer of the assets from government.

65. The scope of a guarantee, (including cases where it covers not only a specific project-related debt instrument[237]), may influence the recording of the PPP assets. It may result in the re-assumption by government of some of the risks analysed above in this chapter.

66. In PPPs, government guarantees can be granted to the partner to cover the repayment of the debt, but they may also ensure a given return on equity, whatever the performance of the partner. This would indicate an insufficient transfer of risks to the partner. Similarly, in some cases where 'shadow-tolls' would be set up depending of the use by end users, government could ensure minimum revenue under the form of a guaranteed level of demand, independently of the actual use of the asset. This would also be considered as an insufficient transfer of risks.

67. If, at inception or during the construction phase, government guarantees cover a majority of the capital expenditure of the PPP project, the asset is normally to be recorded in the government's balance sheet, except in the case of a guarantee very limited in time and applicable only to strict circumstances of market disruption. The same should apply if a given or a minimal rate of return is assured for the partner under all circumstances

68. In addition to the straightforward case of an explicit debt guarantee, the guarantees to consider when analysing the risk distribution between government and the partner would also include those provided to the creditors or to the partner, under various forms (such as through insurance or derivatives), or under any other arrangements with similar effects.

69. For the evaluation of the risk distribution between government and the partner, both tests for majority financing and guarantees in relation to the capital expenditure of the PPP project must be undertaken jointly. It might well be the case, in PPP contracts, that government would provide a minority of the total capital expenditure, but would then guarantee a major part of the remaining project finance (related to the partner loan liabilities directly or indirectly, e.g. through guaranteed availability payments). In this case, if the combined effect of government support would represent more than a majority of capital expenditure, this would lead to the conclusion that a majority of risks would be incurred with government. Additionally, in the cases where a PPP is in majority financed by equity, a special analysis needs to be undertaken assessing the impact on the risk distribution between government and the partner from the contract provisions on the equity stake.

70. Finally, when a guarantee is effectively called, this might result in a change in the economic ownership of the assets and in their reclassification (at their remaining value), whenever this would change the share of risks borne by the parties. This could be the case, for instance, if government would take

[236] It means that it would be directly enforceable, in most cases unconditionally and at first demand, by the debt holders, as soon as a default is observed or, in some cases, following the assessment of some bodies (such as International Swaps and Derivatives Association (ISDA)).

[237] For instance, government might provide a guarantee to a corporation engaged in various activities, and not only in a PPP project, for all the debt issued by the unit. The rule would also be fully applicable in this case.

control of the partner, and/or would pay no longer on the basis of the asset availability and demand, but mainly on the basis of operating costs.

### 6.4.3.5 TERMINATION CLAUSES AND CHANGE IN THE NATURE OF THE CONTRACT

71. PPP contracts include termination clauses in the event that government or the partner cannot fulfil the contract or if they persistently fail to meet their contractual obligations. In addition, government may use its exceptional sovereign rights. There may be different causes for the termination before the maturity of the contract. Special attention must be given to the case where the termination is triggered by a default of the partner (or by an independent decision of the partner to withdraw from the contract), for instance because of recurrent bad performance or because no longer being in a position to provide services at the agreed contractual conditions. This is generally submitted to some conditions and procedures in the contract. When the partner defaults, the assets are generally transferred to government (see the conditions below) at the time of the termination, except in the case where there would be an immediate transfer to a new partner. Any new contract, in this respect, would require a new analysis.

72. Termination clauses will often require the government to acquire the asset and take on board part or all of the partner's PPP-related debt, and pay the partner a compensation. This is because the PPP asset is often a 'dedicated asset' with limited resale value on the market for the partner and because government usually wants to retain a major influence on the conditions in which services are provided from the asset. As a matter of principle, any compensation in the context of an early termination due to a default by the partner must take into account the insufficient performance of the partner and, therefore, must be different to a compensation payment resulting from an early termination at the initiative of government.

- If the termination is due to the partner's default during or at the end of the construction phase, generally the contract should require just a refund by government based on the capital expenditure incurred. In addition, in the absence of penalties charged to the partner for any possible negative consequences of the default (delays, cost overruns), the construction risk is deemed to be borne by government.
- If the default takes place during the operating phase, the contract should explicitly mention that the compensation owed to the partner, if any, at the time government takes over the asset from the partner, should not exceed the current market value (as indicated in ESA 2010, chapter 7 Balance sheets) of the asset (taking into account the likely cost required to bring the asset to an adequate condition), as determined by a retendering process or reliably estimated by independent experts[238]. If the conditions are not met (first and foremost whenever the compensation is only based on the present value of future flows for the partner as foreseen in the contract, without taking into account the exact state of the asset), or on some other amount not reflecting the current value of the asset), the transfer of (availability or demand) risks to the partner is deemed to be insufficient[239].

73. When assets are reclassified in the government's balance sheet at the time of the termination of the contract, the GFCF of government is recorded at that time, at the exact market value of the assets. Government should usually take over an equivalent amount of debt but it may also happen that government would assume a higher amount of debt than the value of the assets. Any excess is to be recorded as a capital transfer, with an impact on government net lending/ borrowing (B.9).

74. Significant amendments to contracts or renegotiations have been observed in the course of the life of many PPP contracts. In most cases, they should be considered as the cancellation of a previous contract and the creation of a new one, when changes introduced in the contract are not negligible and whenever they alter the distribution of risks and rewards between government and the partner. Notably, a compensation clause may be added in order to maintain the economic equilibrium of the contract (the profitability of the partner) when it appears that the outcome is diverging from the initial expectations. Thus, the reasons for the revision to the contract must be closely considered by statisticians. Only if such revision results from a change in the environment of the contract clearly beyond the responsibility of the partner, (and only in the case when government takes specific actions or decisions affecting the contract implementation) the revision might be considered as being neutral on the analysis of the

[238] For instance, if the retendering process would be inconclusive with no participant or a single participant.

[239] The market value of the asset as determined by independent experts should be assessed based on its construction cost, properly amortized throughout the duration of the contract, taking also into account the previous partner's defaults in maintenance and repair which would, as a result, need new GFCF expenditure.

transfer of risks. As a matter of principle, however, in such cases, the compensation to the partner should be strictly in proportion to the impact of the action of government on the partner's revenue.

75. As a specific case of contract amendments, it may be foreseen that the final users will start paying directly or indirectly government for the use of the asset (such as in the case of road tolls), whereas government will continue to pay regular fees to the partner. Even if these contracts are still in current terminology referred to as PPPs contracts, they should no longer be considered as PPPs in national accounts if the final users would pay for the use of the assets and this would become the major source of revenue. In this context, the assets should be reclassified as government assets if these payments (recorded on a gross basis, i.e. including any collection fees kept by the partner) by final users are higher than 50 % of the total cost for the use of the assets (consumption of fixed capital, expenditure for maintenance and repair, etc.) which are mainly covered by the unitary payments made by government to the partner.

76. If the amended contract foresees that the 50 % ratio of payments by final users on the cost of use of the assets should be reached in a relatively short period (defined as less than two years), the transfer of the assets must take place at the time the new contract enters into force.

77. If the amended contract foresees a progressive change in the relative amount of payments between government and final users (for instance, involving successive stretches of transportation infrastructure), the transfer should take place as soon as the 50 % threshold will be reached. Similar clauses related to payments by final users could also be envisaged in contracts at inception for new projects but, in this case, the assets should be classified as government assets at the start of the construction phase in any case, independently of the progressing towards the 50 % threshold.

### 6.4.3.6 FORCE MAJEURE

78. In the course of the implementation of the contract, after the partner has started carrying out the capital expenditure or during the exploitation phase, it is important to make a clear distinction between different types of events or trends having an impact on the PPP arrangement. Some are unquestionably under the responsibility of the partner as they depend on the 'quality' of its performance, related to the asset or linked to the services performed by using the asset. This must be reflected by a downward adjustment of the unitary payments, notably when they involve 'availability fees' (see above) but also when these payments are linked to the effective use which would likely be affected. On the contrary, there are some government decisions which have a direct impact on the implementation of the contract and for which the partner should be entitled to receive compensation if they deviate from the original contractual clauses and government obligations. However, this should exclude any general policy decision (in various areas, such as economy, social, environment, public order, etc.) which does not specifically refer to the individual PPP contract.

79. There is, however, a third category of events for which there is no clear responsibility from one side or the other. These exceptional 'external' events are generally referred to as '*force majeure*' events in the contract. They may have a significant impact on the availability of the services and/or on the level of the demand. Such risks could be retained by government without necessarily requiring the classification of the asset on its balance sheet. They may also be referred in contracts to as 'relief events' or using another terminology, which exempt the partner to bear the financial consequences. However, they must be considered under restrictive conditions, with an exhaustive and precise list.[240] Notably, the absence of responsibility of the partner in the event must be absolutely unquestionable, meaning that the partner could not reasonably have foreseen the occurrence or consequences of the event and could not reasonably have avoided its occurrence.[241] In addition, any 'macro-economic' risk, borne by any economic agents in their activity (for instance, the impact of business cycle on costs and demands, contagion and spill over effects) cannot be taken over by government. Normally, the partner should take measures to protect itself against the negative effect on such events, notably through insurance policies when available on the market at a reasonable price (although the protection would be generally limited to a fixed amount or a maximum claim which could be out of proportion with the potential real costs of the damages). On the contrary, in the case of events which would normally be impossible to ensure (such as riots, wars, natural disasters, etc.) government could take over their risk, in totality or partially, without that this would necessarily result in an *ex-ante* classification of the assets in the balance sheet of

[240] If not exhaustive, it must specify the type of events, such as 'natural disasters', wars and riots, etc.

[241] For instance, a strike may be 'general' or specific to the staff employed by the partner. A school may be closed for epidemiological reasons but the hygienic conditions in the school may have a part in the contamination.

the government. However, in case of occurrence of such events, a new analysis of the allocation of risks and rewards should be carried out.

### 6.4.3.7 ALLOCATION OF THE ASSETS AT THE END OF THE CONTRACT

80. An analysis of the clauses relating to the disposal of the PPP assets described at the end of the contract should be used as a supplementary criterion for determining the overall risk transfer, notably where the risk analysis mentioned above, should not give unequivocal conclusions (for instance if the risk distribution would be estimated as balanced or would be based on fragile hypotheses). The conditions in which the final allocation of the assets would be carried out might give, additional important insight into risks among the contract partners as such clauses might help to assess whether a significant risk remains with the partner. In the context of very long-term contracts, the economic value of assets at the end of the contract may be quite uncertain (due notably to unpredictable obsolescence), while any payment from government at this stage would be a minor part of the total payments made by government over the lifetime of the contract. As a result, this issue cannot by itself be considered as the unique and decisive criterion in deciding on the classification of the assets.

81. If the assets remain the property of the partner at the end of the project, whatever their economic value at that time (although frequently their future economic life remains quite significant, notably in cases of infrastructure that only slightly depreciates over time), then recording the assets in the partner's balance sheet would have an additional strong justification.

82. In some contracts, government holds an option to buy the asset at one or several points of time. If this option is to be exercised at the market value of the asset, properly assessed at the time of the purchase, the partner would bear the risks associated with the continued demand for the asset and its physical condition during the contract period. This would also reinforce the recording of the assets in the partner's balance sheet during the contract period.

83. In some contracts, government has the firm obligation to acquire the assets at the end of the contract at a pre-determined price, usually set where the contract is signed.

84. The following cases would strongly reinforce the analysis of other characteristics of the contract and would point to a recording of the assets as government assets:

- the pre-determined price is fixed as a remaining part of the initial cost of capital, without any reference to the asset's expected market value at the end of the contract;
- the pre-determined price is obviously higher than the expected market value of the assets at the end of the contract;
- the pre-determined price is lower than an expected market value at time of the transfer or the assets revert back to government at no cost, but government effectively prepays for the acquisition of the assets throughout the contract by making regular payments that reached a total amount very close to the full market value of the assets;
- if it is not specified in the contract that there should be a thorough check by an independent body of the exact condition of the assets ('rendezvous' clauses) a few years before final termination, such that government is entitled to ask for supplementary expenditure and/or reducing the pre-determined price where necessary.

85. In some cases, at the end of the contract, the partner is wound up or absorbed by government. In such cases, the assets would enter the government's balance sheet at the end of the contract through other changes in volume (changes in sector classification and institutional unit structure (K.61)).

### 6.4.3.8 CLASSIFICATION OF SOME TRANSACTIONS BETWEEN A CORPORATION AND GOVERNMENT

86. When government makes regular payments to the partner, the treatment of these transactions would depend on whether the asset is recorded in the balance sheet of government or of the partner.

87. If the asset is included in the partner's balance sheet, the corporation provides a service to government that constitutes government intermediate consumption expenditure, valued by the payments done to the corporation.

88. If the asset is included in the government balance sheet, the service to the community is provided using government asset. The acquisition of the asset by government is recorded as in a 'standard' financial

leasing contract. Government payments to the partner over the whole life of the contract are split between redemption of principal (F.4), payment of interest (D.41) and, possibly, purchase of services for the tasks performed by the corporation and purchased by government (P.2).

## 6.4.4 Rationale of the treatment

### 6.4.4.1 SECTOR CLASSIFICATION OF THE PARTNER

89. The special case of a PPP between government and a public corporation should fulfil certain conditions.

90. The public corporation should show the usual required competence in the area of activity covered by the PPP (directly or, in the case of creation, by the unit(s) controlling it), and the PPP contract with government should be one among several commercial activities of the public corporation.

91. In the case of a public entity in which the contracts with government are almost exclusively the source of its revenue, a reclassification as government unit is not necessarily required if there is evidence that market-oriented payments (meaning of a similar kind to those observed between other market units) are made to the corporation, and if government bears only risks that a commercial entity would not normally be expected to bear (very high political or security risks, for instance). Otherwise, this will indicate an ancillary activity of the public entity to government.

92. In some contracts, the execution of the contract takes place under the legal umbrella of a special purpose entity (SPE). Normally, such a legal entity has a pre-defined life limited to the length of the PPP contract, or just to the construction period. It can be expected to have been created solely for legal purposes.

93. If one or several partners that are the operational contracting parties collectively control this unit, it should be classified as a non-government unit. This may be observed in the case of the construction of innovative and complex assets that need the close cooperation of firms specialised in different technical areas. The SPE would be the organisation created to represent them as a consortium. The SPE may also take the form of a pooling of banks where the financing requirements are quite significant. Therefore, an SPE generally does not play an operational part in the execution of the contract, neither as a project manager, nor as the builder or operator of the PPP asset.

94. Complications arise when such a special unit partner is created by government or by a public corporation. In this case, it must be closely checked whether the unit can be considered an independent institutional unit according to national accounts, and whether the unit is a true market producer. The unit must, amongst other things, have the capacity to acquire assets and incur liabilities in its own right and to enter into contracts with non-government units. In some cases, the unit should be reclassified within the government sector (possibly as an unit undertaking ancillary activities (ESA 2010 paragraph 2.26) or according to rules for special purpose entities of general government (ESA 2010 paragraphs 2.27–28)), so that the fees paid by government would not be considered as the revenue of a 'real partner', but, instead, as transfers within the general government sector.

### 6.4.4.2 ASSESSMENT OF THE RISK

95. The core issue is the share of the risks which are inherent in the contract and which are directly related to the state of the assets involved or depend on some management tasks that must be carried out by the partner in the framework of its contractual obligations. This refers to the concept of 'economic ownership', which is clearly distinguished in national accounts from the one of 'legal ownership' and which is used in most accounting standards (both in national accounts and for business accounting purposes). The analysis of risk sharing must rely both on the potential effect on profits of the partner (lower income and/or higher costs) and on the probability (even roughly estimated) of occurrence of the risk, by analogy to the 'mathematical expectancy' concept (or the notions of 'probability of default' and 'loss given default' in financial risk models). Thus, it would not be acceptable that the partner would bear only risks with potentially high damageable effects but with a very low reasonable likelihood to occur.

96. As regards the **construction risk**, an obligation for government to start making regular payments to a partner without taking into account the effective condition of the assets that are delivered would be evidence that government bears the majority of the construction risk and is acting as the *de facto* owner of the assets since inception. This is also true where payments are made by government to cover systematically any additional cost, whatever their justification.

97. The magnitude of the different components of this risk can be estimated by the amount that each partner would be obliged to pay if a specific deficiency was to occur. This risk might be quite significant where the assets involve major research and development or technical innovation, whereas it could be more limited for conventional structures. An important point is that government should not be obliged to pay for any event resulting from a default in the performance of the construction phase by the partner, either as a direct supplier or only as a coordinator/ supervisor.

98. The partner would not need to take the risks for unexpected exogenous events not normally covered by insurance companies, or that it was not reasonably possible to estimate before the beginning of the works.[242] This risk must not be confused with the appropriateness of the 'design' of the assets, where the degree of initiative of the partner may be very limited. The main point here is that a partner would not normally agree to bear risks related to the construction, if government's requirements would be unusual, and would alter the commercial viability of the asset. In addition, the partner should not be held responsible in case of an explicit government action, such as modifying the specifications in the course of the construction or modifying some standards requirements. A specific case to be considered is when the partner receives an existing government asset as a necessary part of the project (either as an element of the whole or in the context of a significant refurbishment). The construction risk applies only to the new capital expenditure under the responsibility of the partner, whatever the conditions in which the asset has been transferred. The partner may also not be held responsible for over-costs and delays that could result from legal risks or assimilated risk (such as the expropriation risk), resulting explicitly from an inadequate regulation/legislation decided by government.

99. As regards the **availability risk**, government is assumed not to bear such a risk if it is entitled to reduce significantly its periodic payments, like any 'normal customer' would be entitled to, if certain performance criteria were not met. Under these conditions, government payments must depend on the effective degree of availability ensured by the partner during a given period of time. This would mainly apply when the partner does not meet the required quality standards, resulting from an insufficient performance and reflected in the non-availability of the service, in a low level of effective demand by final users, or a low level of user satisfaction. This would be reflected in the performance indicators mentioned in the contract, for instance, concerning the available number of beds in a hospital, of classrooms, of cells in a prison, of lanes of a highway opened to traffic, etc. Normally, the partner is assumed to be in a position to avoid the occurrence of the availability risk. In some cases, the partner could invoke an 'external cause', such as a major policy change of government, additional specifications requested by government, or '*force majeure*' events. However, such exceptions should be accepted only under very restrictive conditions, be explicitly stated in the contract and cover a large number of factors having an impact on the costs incurred by the partner and/or on its ability to meet the contractual requirements.

100. The application of the penalties when the partner is defaulting on its service obligations must be automatic and must also have a significant effect on the revenue/profit of the partner. They must affect significantly the operating margin of the partner and could even exceed it in some cases, so that the partner would be financially strongly penalised for its inadequate performance. It may also take the form of an automatic renegotiation of the contract and even in the cancellation of the contract.

101. It is important to make sure that penalties for inadequate performance are not purely 'cosmetic' or symbolic. The existence of inadequate penalties would be evidenced by a reduction in government payment far less than proportional to the amount of services not provided, and this event would be contrary to the basic concept that risk must be significantly transferred to the partner. Furthermore, the existence of a maximum ceiling or percentage of penalties that could be applicable in the event of defaulting performance, would also suggest that this risk has not been significantly transferred to the partner. In the case of no availability of the asset during a certain period, it would be expected that the government's payments would fall to zero.

102. As regards the **demand risk**, government is assumed to bear this risk where it would be contractually obliged to ensure a given level of payment to the partner independently of the effective level of demand expressed by the final users, making irrelevant the fluctuations in the level of demand on the partner's profitability. The variability of demand however would not be due to the performance of the partner, which is already covered by the provisions above (in other words, the availability standards stated in the contract would be fulfilled). Therefore, the demand risk would cover a direct change in final users' behaviour due to factors such as the business cycle, new market trends, direct competition or

[242] Such as for environmental and archaeological risks.

technological obsolescence. In other words, the bearing of such economic risks would be a normal feature of the partner's activity.

103. For the asset to be recorded in the partner's balance sheet, when there is an unexpected decrease in the partner's revenue, the partner must be able to manage the situation through various actions under its own responsibility, such as increasing promotion, diversification, redesign, etc. In this respect, the partner would be carrying out its activity according to a commercial manner. Thus, the existence of contractual clauses allowing the partner to use the assets for purposes other than those that have been agreed with government would frequently be an indication that the partner would effectively be bearing the demand risk, as defined here.

104. Where the shift in demand results from an obvious government action, such as decisions by government (and thus not necessarily only by the government unit(s) directly involved in the contract) which would represent a significant policy change, or such as the development of directly competing infrastructure built under government mandate, an adjustment in the regular payments or even a compensation payment to the partner would not imply the recording (or the reclassification) of the assets in the government's balance sheet if it would be recognised that a decrease in the profitability of the partner was the direct result of a deliberate government action.

105. As regards other mechanisms by which government may assume the risk of the project, the presence of government financing and guarantees in the private sector financing should be analysed. It could be argued that this 'financing risk' would be an integral part of 'construction risk', since the absence of suitable financing could mean that the asset either cannot be built, or cannot be built according to required standards. In addition, as the financing risk would depend on the performance of the partner, which could result in some circumstances in less revenue from government, such guarantees would finally decrease the risks borne by the partner.

106. In those cases where government would finance a part of the PPP and would also guarantee all or part of the partner's equity and/or debts, these actions should be seen as cumulative from the point of view of risk analysis. This analysis should be made in relation to the capital expenditure of the project, to see if government would be covering a majority of the capital expenditure through such mechanisms.

## 6.4.5 Accounting examples

**The PPP asset is recorded in the partner's balance sheet**

- The asset, of value 1 000, is constructed by the partner in year 1.
- Government makes regular payments to the corporation during the period of exploitation according to availability (payment is 100 in year 1)
- The infrastructure is purchased by government at the end of the period of exploitation (for an amount of 200).

**Year 1**

| General government | | | | Partner | | | |
|---|---|---|---|---|---|---|---|
| **Current account** | | | | | | | |
| U | | | R | U | | | R |
| P.2 | 100 | | | | | P.11 | 100 |
| B.8 | –100 | | | B.8 | 100 | | |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | B.8 | -100 | P.51g | 1 000 | B.8 | 100 |
| B.9 | –100 | | | B.9 | –900 | | |

**Year t: Purchase by government at the end of exploitation**

| General government | | | | Partner | | | |
|---|---|---|---|---|---|---|---|
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| P.51g | 200 | | | P.51g | –200 | | |
| B.9 | –200 | | | B.9 | +200 | | |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AN.11 | 200 | | | | | | |

**The PPP asset is recorded in the government's balance sheet**

- The asset, of value 1 000, is fully constructed in year 1 by the partner.
- Government makes regular payments to the corporation during the period of exploitation (payment is 100: 50 interest D.41, 30 service fees P.2, 20 amortisation of imputed loan F.4).
- The asset is worth 950 at the end of the year.

**Year 1 Capital expenditure (recorded as financial lease)**

| General government | | | | Partner | | | |
|---|---|---|---|---|---|---|---|
| **Capital account** | | | | | | | |
| A | | | ΔL | ΔA | | | ΔL |
| P.51 | 1 000 | | | | | | |
| B.9 | –1 000 | | | | | | |

| General government | | | | Partner | | | |
|---|---|---|---|---|---|---|---|
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | F.4 | +1 000 | F.2 | –1 000 | | |
| | | B.9F | –1 000 | F.4 | +1 000 | B.9F | 0 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AN.11 | 1 000 | AF.4 | 1 000 | AF.4 | 1 000 | | |

**Year 2**

| General government | | | | Partner | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U | | | R | U | | | R |
| | | | | | | P.11 | 30 |
| D.41 | 50 | | | | | D.41 | 50 |
| P.2 | 30 | | | | | | |
| B.9 | –80 | | | B.9 | +80 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | –100 | F.4 | –20 | F.2 | 100 | | |
| | | B.9F | –80 | F.4 | –20 | B.9F | +80 |
| **Closing balance sheet** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| AN.11 | 960 | AF.4 | 980 | AF.4 | 980 | | |

# 6.5 Emission trading allowances

## 6.5.1 Background

1. Governments issue emission allowances (also referred to as 'permits' in this chapter) as a means of controlling total emissions of polluting materials into the environment and as an alternative to direct taxation of pollution.

2. Such emission permit schemes may operate in different ways, and may be either domestic or multi-country schemes. In the case of greenhouse gas emissions, the worldwide framework for control of such emissions was established in the United Nations Framework Convention on Climate Change, and notably in the setting of emission targets for participating countries in the Kyoto Protocol, adopted in 1997. This established binding national emission targets for participating countries (including the European Union) for the period 2008–2012. The cap system was renewed, with some significant changes, for the period 2013–2020.

3. The Kyoto Protocol established three market-based mechanisms through which countries may reach their targets. The main mechanism allows trading between countries of 'Assigned Amount Units' (AAUs)[243], which were originally allocated based on 2008–2012 commitments. The other mechanisms (Clean Development Mechanism and Joint Implementation) allow the creation of new types of instruments — interchangeable with AAUs — that reflect emission-reducing projects in developing and eligible countries respectively.

4. In the European Union, the principal scheme for emission allowances is the Emission Trading System (ETS). Launched in 2005, the ETS works on the 'cap and trade' principle. This means that there is a 'cap', or limit, on the total amount of certain greenhouse gases that can be emitted by the factories, power plants and other installations included in the system (although a significant number of polluting activities are not covered by the scheme). Within this cap, companies receive emission allowances, which they can sell to or buy from one another as needed. Over the above-mentioned period, there is a limited number of permits (in terms of carbon tons) to be issued by the countries, currently mostly under the form of auctions.[244] The limit on the total number of allowances available ensures that they have a value, and the number of allowances is reduced over time so that total emissions decline. This system is a substitute to a direct taxation mechanism but is deemed to have the same effect, i.e. to encourage the producers to shift to less carbon issuing equipment.

5. At the beginning of each year (April in the EU), each company must surrender enough allowances to cover all its past emissions, otherwise heavy fines are imposed. If a company reduces its emissions, it can keep the spare allowances to cover its future needs or otherwise sell them to another company that is short of allowances.

6. The huge volume of emission allowances issued and traded in the European Union, and the increasing number of auctions of allowances by EU governments, have led to the need for clarity on the statistical recording of such allowances.[245]

## 6.5.2 Treatment in national accounts

7. The payments related to emission allowances, issued by governments under cap and trade schemes, should be recorded as other taxes on production (D.29) only in the year of surrender of the allowances, and not when the allowances are sold to the domestic economic agents. In theory, the tax should be recorded at the time the actual emissions take place but it has been agreed that the emission would be

[243] An Assigned Amount Unit (AAU) represents an allowance to emit greenhouse gases comprising one metric ton of carbon dioxide equivalents.

[244] In a tax-based system, the amount of carbon issuance is not set up in advance whereas the permits cap system is in line with the EU commitments to reduce the volume of pollution, by setting a global cap over a period of time.

[245] It must, however, be stressed that the new period (referred to as the '3rd phase') has started in 2013 with a particular 'legacy' from the previous period in the form of a considerable amount of permits (essentially granted for free) which for different reasons could not be used, and notably for an unexpected decrease in the production of heavy polluting enterprises and which were transferred to the 3rd phase. For this reason, the current (2015) carbon ton price is still low at present and still far from the level that most experts consider as able to have a sizeable impact on production processes.

cumulated on a yearly basis, declared and checked at the beginning of the following year. In general, allowances issued for free do not give rise to entries in government accounts.

8. The timing difference between the cash payments received by government for the allowances, through auctions in its own territory, and the time of recording of the tax revenue in national accounts gives rise to a financial liability — accounts payable (AF.89) for government and to a financial asset — accounts receivable (AF.89) for the holder.

9. In the absence of precise information on individual allowances (including their original sale price which may vary from an auction to another), the level of tax revenue to be recorded in any particular year shall be determined by a model as follows:

   *Tax revenue = [Number of 'auctioned' allowances surrendered] X [Associated average auction price of stock of allowances]*

10. The average auction price of stock of allowances, calculated using data (on total relevant stock of payables (AF.89) and number of 'live' domestically issued allowances) as close as possible to (but before) the surrender date for allowances, is determined as follows:

    *Average auction price = [Total stock of payables (AF.89) relating to sales of allowances]*

    *divided by*

    *[Total number of 'auctioned' domestically issued allowances, which have not yet been surrendered]*

11. As an alternative, when it is not possible for compilers to identify, within the surrendered permits, between those which have been allocated for free and those allocated through auctions, the market price could be still calculated on the basis of the permits issued through auctions, which is in any case an information which is available.[246] This would not make a difference, provided that it would be possible to identify in the surrendering process only the total 'domestically- issued permits', i.e. excluding those which could be purchased by domestic polluters from non-resident holders or acquired in auctions taking place elsewhere in the EU.[247]

12. In this context, as a proxy, compilers could use a kind of '*first-in first-out*' method in the sense that all the permits, which are surrendered at first would be considered as acquired in domestic auctions[248]. This would reduce the time lag between the cash proceeds from the auctions and the recording as tax revenue for government.

13. The sum of the tax revenues recorded over time in the accounts must be equal to the sum of auction proceeds received by government (ensuring that emission allowances issued for free do not have an impact on the government accounts). If it becomes obvious that the number of allowances surrendered is significantly below the number of allowances issued through auctions (leading to a rapidly growing stock of payables (AF.89) for government)[249], entries should be made in other changes in volume of assets to reduce the stock of payables (AF.89) to bring the model back into balance. This re-assessment should take place at the end of each phase of the ETS.[250] Conversely, it might also be observed that the remaining stock of payables (AF.89) falls below zero. In this case, the stock should be readjusted at the level of the effectively observed number of surrendered permits (on the basis of the market price and excluding permits granted for free in the country) in order to record tax revenue for government corresponding to the level of actual carbon issuances in the country. The effect on government net lending/borrowing (B.9) of this imputed tax should be neutralised by recording a transfer from government.

14. The difference between the pre-paid tax value of the permit and the market value of the permit represents a marketable contract (non-produced non-financial asset) for the holder, and has no implications for government accounts. The trading of allowances between non-government parties has

[246] For instance, government has issued in auction 100 permits, which are valued 5 when 50 permits are surrendered. Tax is equal to 250 and the value of the remaining stock (AF.89) is 250. Permits for free are considered with a nil value.

[247] Beyond 'domestically issued permits', the economic agents may also purchase them from non-resident holders or acquire them in auctions taking place elsewhere in the EU. There should not be taken into account in the formula above.

[248] Including the auctions, which could take place in the first quarter of the year the permits are surrendered.

[249] This would mean that one part of the domestically issued permits in the country is surrendered in another country (sold to non-residents or exchanged within groups with production units in different EU countries).

[250] It should, however, be taken into account the number of permits, which could be used in a following phase, after 2020. As the system should be considerably revised, there is at present no existing information on this possibility.

no implication for the government accounts beyond helping establishing market values for government auctions.

15. Transactions between economic agents with permits (Assigned Amount Units, AAUs), should be recorded as purchases and sales of non-produced non-financial assets (AN.22, transaction code NP) at the time at which they take place. Some governments may sell a number of permits directly in another EU country on some exchange platforms, for various reasons (excessive national allocation, procedure that is more efficient, etc.). In this case, the government revenue is recorded at the time the ownership of the permits is transferred to the acquirers abroad. It may happen that such permits are purchased by residents and surrender to the initial government seller but they are in this case considered as granted for free.

## 6.5.3 Rationale of the treatment

16. The 2008 SNA paragraph 17.363 mentions the issue as follows:

> *Governments are increasingly turning to the issuing of emission allowances as a means of controlling total emissions. These allowances do not involve the use of a natural asset (there is no value placed on the atmosphere so it cannot be considered to be an economic asset) and are therefore classified as taxes even though the permitted 'activity' is one of creating an externality. It is inherent in the concept that the allowances will be tradable and that there will be an active market in them. The allowances therefore constitute assets and should be valued at the market price for which they can be sold.*

17. Following a Eurostat/OECD Task Force in 2009–2010, the ISWGNA made recommendations, which were subsequently endorsed — after a consultation of the Advisory Expert Group on national accounts — by the United Nations Statistical Commission and published in SNA News numbers 30/31[(251)] and 32/33[(252)]. This section is based on the agreed worldwide recording for emission allowances under cap and trade schemes.

18. The starting principle for the worldwide agreement was that payments for emission allowances issued under cap and trade schemes should be recorded as taxes recorded at the time that the emission took place. More specifically, it is considered that such payments should be recorded as other taxes on production.

19. The detailed treatment, as described in the SNA News and Notes, is as follows:

> *The payments for emission allowances, issued by governments under cap and trade schemes, should be recorded at the time the emissions occur as taxes, specifically other taxes on production (D.29), on an accrual basis. The timing difference between the payments received by government for the allowances and the time the emission occurs gives rise to a financial liability (accounts payable) for government and a financial asset (accounts receivable) for the holder. The difference between the pre-paid tax value of the permit and the market value of the permit represents a marketable contract (non-produced non-financial asset) for the holder. The creation and disappearance of the non-produced non-financial asset are recorded as another change in volume of assets.*

20. Whilst the time of recording to be applied to the tax revenue — respecting the accrual principle — should be when the economic activity generating the pollution takes place, the worldwide agreement allows for a simplification, which prevents the potential complications associated of revenue flows when there is a delay between time of pollution and time of surrender:

> *In practice, however, it can be assumed, for simplicity, that the time the permit is surrendered is the same as the time that emissions occur, as long as there is no significant lag between the two events and the lag is constant.*

21. Within the EU Emission Trading System, allowances are surrendered within around four months of the end of the year to which they relate, and therefore the time lag is relatively short. At the same time — in the absence of a ground-breaking pollution reduction technology — the difference between emissions in one year and the next may not be so significant, and therefore surrendered allowances in any year could under normal circumstances (i.e. no considerable impact of business cycle) be taken as a reasonable

(251) Available at: February 2011: Clarification by the ISWGNA.

(252) Available at: March 2012: Update to SNA News and Notes, Number 30/31 (February 2011).

proxy for emissions in that year. For the purposes of harmonised recording across countries, this Manual therefore proposes to use the surrender date time of recording.

22. In theory, the recording should be applied at the level of the individual permit. Nevertheless, it is clear that the required information for such a treatment is rarely, if ever, available, particularly in a multinational scheme where allowances may be freely traded across national borders, and surrendered in another country from where they were issued.[253] At the same time, there are potential complications with measuring cross-border flows. The international agreement, as described in SNA News and Notes, therefore introduced two practical simplifications:

    *The approach to accruing payments for emission allowances should be based on the underlying assumption that allowances issued by a particular country are more likely than not to be surrendered in that country.*

    *In the simple case of a pure national scheme, the taxes should be accrued in the following way. The tax recorded for any single permit surrendered in relation to emissions that occurred in period t is equivalent to the total stock of relevant other accounts payable divided by the total number of active allowances issued (and remaining in circulation) at time t. The relevant other accounts payable should in theory exclude any allowances that were surrendered after time t in respect of emissions that occurred before time t. Equally, the total number of active allowances (and remaining in circulation) at time t, should also exclude these allowances.*

23. The approach in this chapter, as described above, is therefore based on these simplifications. There are in principle no cross-border flows to be recorded for taxes on production in relation to emission allowances. It is as if they were issued for free in the country where they are surrendered, as the government has not received the auction proceeds which have been kept in the issuing country. There is at this stage no envisaged mechanism to reallocate the proceeds.[254] It is also consistent with the principle described in chapter 2.2 Recording of taxes and social contributions, that the impact on general government net lending/borrowing of taxes shall be equivalent over a reasonable period of time to the corresponding amounts actually received in cash.

24. As SNA News and Notes acknowledges, in a multinational scheme it is possible that over time the number of allowances issued and surrendered in any country may deviate. Two approaches are suggested to deal with this:

    - in countries that issue more allowances than are surrendered, in practice it is easier to ignore these flows and instead write-off the allowances (at the end of the permit's lifetime) in the issuing country's accounts as other changes in volume of assets, (K.5), as if they were unused;
    - for those countries where more allowances are surrendered than issued, the payments received exceed the taxes recorded. Setting aside the issue of recording flows of taxes on production from the rest of the world, the scope for payments received to exceed taxes recorded remains, as not all allowances will necessarily be surrendered, especially those purchased by environmental groups. Moreover, for countries that issue significantly more allowances than are expected to be surrendered in that country, a strong case can be made for considering the difference between the payments received and the taxes recorded as a windfall of sorts, akin to other changes in volume of assets, even if theoretically they should be recorded as a tax on production from the rest of the world.

25. In order that this re-assessment is made in an orderly manner, it is appropriate to undertake it at the end of the last year of each 'phase' of the EU Emissions Trading Scheme, which is the point at which new allocations are established for emission allowances and new rules may also enter into force. If the stock of other accounts payable (AF.89) falls below zero in any year, it will also be necessary to address the model to ensure that tax revenues would be close over time with auction proceeds. With regard to the quarterly recording of the revenues arising from emission allowances, it is recommended that an investigation is made on the availability of data on quarterly emission, which can then provide a quarterly path for the annual calculation described above. Where these data are not available, it is possible to use a suitable proxy for the quarterly path, such as quarterly gross value added for the economy, where it can be considered to have some relationship to emissions.

---

[253] Globally, the cross-border transactions seem to be a minor part of the total existing permits, although this may be not negligible in some EU Member States for various reasons (among which purchases by mother companies and redistribution to affiliates in other countries where the permits would be surrendered.

[254] It has been considered to centralize at the EU level all auctions and, then, redistribute the proceeds on the basis of actual emissions in the EU Member States. There was no agreement in 2009.

26. The statistical recording of Assigned Amount Units is complicated by the fact that they were initially assigned for free to countries, are not subject to surrender as emissions are made, and cover a multi-year period. Nevertheless, some governments (and some non-government units) are prepared to purchase AAUs from other governments, and therefore there are transactions to be recorded. By considering AAUs as non-produced non-financial assets, and by analogy with the treatment for market price changes of emission allowances described above, such transactions are to be recorded as purchases and sales of non-produced non-financial assets. At the end of the life of such AAUs, when a Treaty target date is reached, they are to be removed from national accounts balance sheets through other changes in volume of assets.

## 6.5.3 Accounting examples

**1. The impact of auctioned emission allowances**

- **Government auctions emission allowances which are then surrendered over the following two years**
  - The prevailing market price of allowances in the whole of year t is one unit per permit.
  - By simplification, there are no 'granted for free' or imported permits held by the enterprises.
  - Government also auctions 1 000 allowances in year *t* for 1 000 currency units.
  - Enterprises surrender 500 allowances in year t+1

**Year t**

| General government | | | | Enterprises | | | |
|---|---|---|---|---|---|---|---|
| **Opening Balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.2 | 0 | | | AF.2 | 0 | | |
| | | AF.8 | 0 | AF.8 | 0 | | |
| **Current account** | | | | | | | |
| U | | | R | U | | | R |
| | | D.29 | 0 | D.29 | 0 | | |
| B.9 | 0 | | | B.9 | 0 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | 1 000 | | | F.2 | –1 000 | | |
| | | F.8 | 1 000 | F.8 | | | |
| | | | | 1000 | | | |
| | | B.9F | 0 | | | B.9F | 0 |
| **Closing Balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.2 | 1 000 | | | AF.2 | 0 | | |
| | | AF.8 | 1 000 | AF.8 | 1 000 | | |

**Explanatory text**: The auction of allowances for 1 000 in cash is recorded as a financial transaction (with counterpart F.8) as the relevant revenues will only be recorded in future years when the allowances are surrendered.

**Year t+1**

| General government | | | | Enterprises | | | |
|---|---|---|---|---|---|---|---|
| **Opening Balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.2 | 1 000 | AF.8 | 1 000 | AF.2 | 0 | | |
| | | | | AF.8 | 1 000 | | |
| **Current account** | | | | | | | |
| U | | | R | U | | | R |
| | | D.29 | 500 | D.29 | 500 | | |
| B.9 | 500 | | | B.9 | –500 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | 0 | | | F.2 | 0 | | |
| | | F.8 | –500 | F.8 | –500 | | |
| | | B.9F | 500 | | | B.9F | –500 |
| **Closing Balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.2 | 1 000 | | | AF.2 | 0 | | |
| | | AF.8 | 500 | AF.8 | 500 | | |

**Explanatory text**: The average auction price of a permit at the start of year t+1 is the total auction proceeds from allowances (1 000) divided by the number of allowances resulting from domestic auctions (1 000), which is 1 unit. Since 500 allowances are surrendered in year t+1 the value of other taxes on production to be recorded in 500*1 = 500 units. The counterpart of these revenues for government is a reduction in other accounts payable and of receivable for the units. If the units had held 'free' or imported permits, the latter would have been recorded as AN.2 (by other change in volume in the first case, by a transaction in the second one). These permits must be valued at market price (possibly with revaluation). However, in the example, the 'auctioned' permits are considered used in priority and the other permits would be surrendered only when the stock on 'auctioned' permits is depleted.

**2. The impact of the sale of Assigned Amount Units (or permits)**

- **Government A sells Assigned Amount Units to government B for 200 in year *t***

**Year t**

| General government A | | | | General government B | | | |
|---|---|---|---|---|---|---|---|
| **Opening Balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AN.22 | X | | | AN.22 | Y | | |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| NP.2 | –200 | | | NP.2 | 200 | | |

**Financial account**

| ΔA | | ΔL | ΔA | | ΔL |
|---|---|---|---|---|---|
| F.2 | 200 | | F.2 | –200 | |

**Closing balance sheet**

| A | | L | A | | L |
|---|---|---|---|---|---|
| AN.22 | X–200 | | AN.22 | Y+200 | |

**Explanatory text**: Assigned amount units are considered non-financial non-produced assets (see explanation above). They are therefore to be included in the stock of such assets (AN.22) and their sale (purchase) for government A represents a disposal of (acquisition of) non-financial non-produced assets (NP.2). Government B should record a symmetric purchase (acquisition) of non-produced non-financial assets.

# 6.6 Keywords and accounting references

| | |
|---|---|
| Economic asset | ESA 2010, 7.15-7.18 |
| Economic disappearance of non-produced assets (K.2) | ESA 2010, 6.07 |
| Financial leases/operating leases | ESA 2010, 15.04 and following |
| Non-financial non-produced assets | ESA 2010, 7.24 and annex 7.1 |
| Other current taxes | ESA 2010, 4.79-4.80 |
| Other taxes on production | ESA 2010, 4.23 |
| Output | ESA 2010, 3.14 and following |
| Property income | ESA 2010, 4.41 |
| Rent | ESA 2010, 4.72-4.76 |
| Time of recording flows | ESA 2010, 1.101 |
| Transaction in non-produced assets | ESA 2010, 3.184 and following |

# 7 Debt related transactions and guarantees

## 7.1 Overview

1. This part deals with the treatment of debts owed to government (government assets) rather than debt as a liability of government (see Part 8 Measurement of general government debt). Sometimes governments, because of policies to do with social and economic development or international relations, relieve some economic agents from all or part of their debt obligations. This has an impact on government net lending/borrowing since it is a voluntary transfer of wealth (thus to be recorded as a capital transfer).
2. Government might cancel the debts of a corporation it owns in order to secure a higher price when selling the corporation immediately after. In this case, the debt cancellation may be recorded as a financial transaction. The debts might also be cancelled because the debtor no longer exists, not only on paper but also in practice. In this case, under some conditions, the debt cancellation may be recorded as another flow. In principle, neither recording affects net lending/borrowing directly.
3. In some cases, for example sovereign debt rescheduling through the Paris Club rather than debts being cancelled, the profile of required repayments is changed. Guidance is given here on the treatment of these cases.
4. Chapter 7.4 Government guarantees looks at how to record guarantees given by government. This is notably where government pledges to repay certain debts of a non-government unit in the event of that unit not being able to pay (so called 'one-off guarantees').
5. Even though the debt operations examined here concern mainly corporations or foreign governments, the basic principles apply to the relationship of general government with all institutional sectors (including households and non-profit institutions serving households).

# 7.2 Debt assumption and debt cancellation

## 7.2.1 Background

1. Debt assumptions and redemptions by general government of liabilities of public and possibly private corporations, are important issues. It is worthwhile to first clarify the terminology.

   - Debt assumption (see ESA 2010 paragraph 20.222) is a trilateral agreement between a creditor, a former debtor and a new debtor, under which the new debtor assumes the former debtor's outstanding liability to the creditor. The new debtor — here the government — becomes liable for repayment of the assumed liability. The old debtor no longer has a liability to the creditor. This happens notably when the debt of the former debtor was guaranteed by the new debtor and the guarantee is called (see chapter 7.4 Government guarantees).[255]
   - In some cases (see ESA 2010 paragraph 20.232), a debt assumption includes a transfer of non-financial assets from the unit benefitting from the debt assumption — for instance a public corporation managing public infrastructure, public transportation, etc. — to the government entity taking over the debt.
   - Debt cancellation or forgiveness (see ESA 2010 paragraph 20.225) is a bilateral agreement between a creditor and a debtor to cancel (or to 'forgive') part or all of a liability owed by the debtor to the creditor. As a consequence of the debt cancellation, the liability of the debtor and the related asset of the creditor no longer exist.
   - Write-downs and write-offs do not require a bilateral agreement and are observed when a creditor recognises, unilaterally and normally without any notification to the debtor, that a claim can no longer be collected, mainly because of bankruptcy of the debtor. In such a scenario, the creditor removes the claim from the asset side of its balance sheet.

## 7.2.2 Treatment in national accounts

### 7.2.2.1 MUTUAL AGREEMENT

2. The counterpart transaction of a debt assumption or a debt cancellation is a capital transfer.
3. Thus, when government assumes a debt of a corporation or cancels a claim it has against a corporation, the counterpart transaction to the financial flows recorded in the financial accounts is a capital transfer (D.99), an expenditure which has a negative impact on government net lending/ borrowing (B.9).
4. In many cases, general government takes the initiative to cancel or assume debt. The acceptance of this action by the corporation, which is unlikely to refuse the 'gift' and continues operating, is deemed to result from mutual agreement.

### 7.2.2.2 OTHER CASES

5. There are three exceptions to the mutual agreement treatment. In these cases, the debt assumption/cancellation has no impact on government net lending/borrowing (B.9) and there is no non-financial transaction.

#### 7.2.2.2.1. Debt of a quasi-corporation

6. ESA 2010 paragraph 5.39 mentions that if the owner of a profitable quasi-corporation (by definition public in the case of government), assumes or cancels its debt, a capital transfer is not recorded. The counterpart transaction has to be recorded as a financial transaction in equity (F.51).
7. However, this is relevant to the extent that the quasi-corporation is profitable in the sense that it has not accumulated losses or does not show an exceptionally large loss, which would be covered by the above-mentioned transactions, a capital transfer should be recorded up to the limit of the losses.

[255] ESA 2010 paragraph 20.223 makes mentions also the case of 'debt payments on behalf of others' where not all the debt is assumed. This must treated similarly to assumptions.

#### 7.2.2.2.2. Operations in the context of a privatisation process

8. ESA 2010 paragraph 5.39 points out that when government cancels or assumes debts from a public corporation 'as part of a process of privatisation to be achieved in a short-term perspective', the counterpart transaction is not a capital transfer but a transaction in equity (F.51).

9. Privatisation means giving up control over the corporation through the disposal of equity that reduces government's voting rights.

10. This rule should only be applied when there is evidence that the privatisation process has been effectively launched (for instance the appointment of an advisory bank and/or the opinion of a special committee/commissions), so that there is strong expectation that the privatisation will be completed in no more than one year. The existence of a privatisation plan or the expression of such an intention by government, is not in itself sufficient to consider the debt assumption/ cancellation 'as part of an on-going process of privatisation to be achieved in a short-term perspective'.

11. Moreover, the flow of debt assumed or cancelled is to be recorded as a financial transaction only up to the limit of the privatisation proceeds. Amounts assumed or cancelled by the government in excess of this limit are to be recorded as a capital transfer expenditure of government

#### 7.2.2.2.3. Write-offs

12. There may be write-offs of claims held by government against a corporation being liquidated. The liquidation should be assessed from an economic point of view rather than from a legal point of view, as the corporation will continue to exist legally until the very end of the liquidation process even though it has lost its financial substance and its main economic function. [256]

13. The write-off of such a claim is normally recorded under ESA 2010 as other changes in the volume of assets (K.5), with no impact on net lending/borrowing (B.9), but a capital transfer might be recorded in some specific cases.

#### 7.2.2.2.4. Debt assumption including a transfer of non-financial assets

14. There may be two ways to describe and to record the economic event, both having the same impact on the net lending/borrowing (B.9) of general government.

**'Gross recording' of the debt assumption:**

15. The gross recording consists of two simultaneous but separate transactions:

- The debt assumption, whereby government assumes the debt, which requires the recording of a capital transfer (D.99) expenditure of government for the same amount of the liability assumed (F.3 and/or F.4), similar to the typical case of a debt assumption.
- The transfer of assets, whereby government receives a non-financial asset, which is recorded as an acquisition of that asset in the appropriate category — e.g. as gross fixed capital formation (GFCF, P.51g) for fixed assets or NP.1 for land. As this transfer is a grant/a gift, it is counterbalanced by a capital transfer in kind (D.9) revenue, making the impact of the two transactions neutral on the net lending/borrowing (B.9).

16. The 'gross capital transfer', equal to the whole liability assumed, has a negative impact on the net lending/borrowing (B.9) of general government.

**'Net recording' of the debt assumption:**

17. One can also consider that what impacts the net lending/borrowing (B.9) of government is the difference between the liability assumed and the value of the assets transferred: this is the 'net capital transfer'. However, since there is a simultaneous increase of the gross fixed capital formation (GFCF, P.51g) or acquisition less disposals of natural resources (NP.1), the final impact on the net lending/borrowing (B.9) of general government — net capital transfer plus GFCF or NP.1 — is exactly the same as in the 'gross' recording.

[256] It is important to check whether part of the business is not taken over by third parties, which, in this case, could benefit from the cancellation of the debt, which would be recorded as a capital transfer.

#### 7.2.2.2.5. Time of recording, amounts to be recorded

18. Debt assumption and debt cancellation are recorded when the liability is actually removed from the debtor's balance sheet, and the corresponding entries made in government's balance sheet. This timing applies to both financial transactions and any counterpart capital transfers. The assumption/cancellation of accrued interest should in addition be consistent with this time of recording.

19. This means that debt assumption/cancellation is not recorded according to the original schedule of debt repayments funded by future imputed capital transfers.

20. The amount to be recorded — for both the financial transaction and any counterpart capital transfer expenditure — is the full amount of the outstanding debt that is assumed or cancelled.

## 7.2.3 Rationale of the treatment

### 7.2.3.1 MUTUAL AGREEMENT

21. Such transactions, made by mutual agreement, are recorded as capital transfers. This stems from the definition of other capital transfers in ESA 2010 paragraph 4.164): *other capital transfers (D.99) cover transfers [...] which do not themselves redistribute income but redistribute saving or wealth among the different sectors or subsectors of the economy or the rest of the world*.

22. By assuming or cancelling a debt of a public corporation, the general government is transferring to the corporation, not income, but a part of its own wealth. As the change in government liabilities (debt assumption) or the change of government financial assets (debt cancellation) is a one-way transaction — representing a deliberate and voluntary transfer of wealth — the counterpart transaction is a capital transfer.

### 7.2.3.2 OTHER CASES

23. **Quasi-corporation**: a quasi-corporation is a market producer which may not be legally independent from its owner, especially from the point of view of assets and liabilities, but is regarded as fulfilling sufficient criteria to be considered an institutional unit in the system of accounts. There is a kind of unity of wealth between a quasi-corporation and its owner, so that a transfer of wealth between a quasi-corporation and its owner may be considered as something questionable and in any case should not change their combined wealth. This results in the convention that the net worth of a quasi-corporation is equal to zero. As a consequence, a transfer of assets between a quasi-corporation and its owner may be directly reflected in the value of the owner's equity. However, in the case where a public quasi-corporation is regularly making losses, in coherence with the ESA 2010 paragraphs 4.35 (c) and 4.38 (f) payments to cover persistent losses are to be recorded as subsidies; and MGDD chapter 3.3 on capital injections into public quasi-corporations requires the recording of debt assumption or cancellation as a capital transfer.

24. **Privatisation**: the exception that is made for transactions occurring as part of a privatisation process to be achieved in a short-term perspective is an ESA 2010 convention based on the assumption that the cost of the debt forgiveness will be fully recovered in the sale price achieved in the privatisation. It is therefore recorded as an injection of equity (F.5) — the same instrument as the receipts from the privatisation. However, this treatment would not apply if the value of the debt cancellation exceeds the expected privatisation receipts.

25. **Write-off**: The general definition of transactions (ESA 2010 paragraph 1.66) gives the rule for determining whether a capital transfer or other changes in the volume of assets is recorded. This rule is based on the assumption of mutual agreement between the parties involved (see above sub-section 7.2.2.1). When a write-off cannot be considered a transaction, in particular in the case of an actual disappearance of the public corporation, the write-off of debt may be recorded as other changes in the volume of assets.

### 7.2.3.3 DEBT ASSUMPTION WITH TRANSFER OF NON-FINANCIAL ASSETS

#### 7.2.3.3.1. The acquisition of non-financial assets as expenditure

26. Acquisition of non-financial assets has a negative impact on the net lending/borrowing (B.9) of the government entity since it has to be recorded as gross fixed capital formation (GFCF, P.51g) on the

expenditure side of government accounts. In the case of a transfer/acquisition made on a free basis, as a gift, there is no impact on B.9 (see below).

27. Whilst the immediate impact of GFCF expenditure on the net lending/borrowing (B.9) is negative, it may have a positive impact in the future, to the extent that the acquired assets have a real market value, have 'service potential' and can be regarded as a source of future revenue. If the acquisition of assets is funded by a grant without future financial obligations for the beneficiary, the GFCF may be counterparted by a capital transfer in kind making it neutral on the net lending/borrowing (B.9) (gross recording). Alternatively, where the acquisition takes place in the context of a debt assumption/cancellation, its value may be deducted from the capital transfer representing the 'cost' of the debt assumption (choice of the net recording, see below). But in all cases, the GFCF (assessed on the basis of usual business methods), as such is recorded for its full value as expenditure for the acquirer of the assets.

#### 7.2.3.3.2. The final impact on government net lending/borrowing (B.9)

28. Gross recording: a way to analyse the economic event as if two distinct transactions occur in the same accounting period:

- the transfer for free of fixed assets, which is neutral on government net lending/borrowing (B.9), as described above;
- the debt assumption which negatively affects government net lending/borrowing (B.9) for the amount of the capital transfer, exactly like in the general case.

29. Net recording: the debt assumption can alternatively be viewed as a means of payment by government to acquire the fixed assets. In this case, the 'gift' component — recorded as capital transfer — would be the difference between the liability assumed and the value of the assets. However, the final impact on government net lending/borrowing (B.9) is the same as in the gross recording pattern, due to the full recording of GFCF (P.51g) or NP.1.

30. **NB**: A debt assumption organised by the government in favour of public corporations is not recorded through other changes in the volume of assets (either K.5 or K.62). The direct involvement of government, having as a major objective to ease public corporations' debt burden, implies that the debt assumption is recognised as a transaction, made by mutual agreement. This treatment applies even though there might have been a restructuring or reorganisation of the public corporations at the same time.

## 7.2.4 Accounting examples

**Recording a capital transfer**

In the following examples, capital transfers are assumed to result, in a first step, in an increase of the public corporation net worth. In a second step, it would be possible to assume that this increase of net worth is 'absorbed' by an equivalent increase of the equity of government in the public corporation, via the revaluation account: this second step is not described here. Moreover, in the closing balance sheets, only the changes in net worth are shown.

**Debt assumption**

Assume that a financial corporation has made a long-term loan (F.42) to a public non-financial corporation. Before maturity, general government assumes the long-term loan outstanding from the public non-financial corporation.

| General government | | | | Public corporation | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AF.5 | 100 | | | | | AF.42/S.12 | 30 |
| | | | | | | AF.5 | 100 |

**Capital account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| | | D.99 | –30 | | | D.99 | +30 |
| B.9 | –30 | B.10.1 | –30 | B.9 | +30 | B.10.1 | +30 |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| | | F.42 | +30 | | | F.42 | –30 |
| | | B.9F | –30 | | | B.9F | +30 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.5 | 100 | AF.42/S.12 | 30 | | | AF.42/S.12 | 0 |
| | | | | | | AF.5 | 100 |
| | | ΔB.90 | –30 | | | ΔB.90 | +30 |

**Debt cancellation**

Assume that the general government has made a long-term loan (F.42) to a public non-financial corporation. Before maturity, general government cancels its claim (the long-term loan outstanding).

| General government | Public corporation |
|---|---|

**Opening balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.42/S.11 | 30 | | | | | AF.42/S.13 | 30 |
| AF.5 | 100 | | | | | AF.5 | 100 |

**Capital account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| | | D.99 | –30 | | | D.99 | +30 |
| B.9 | –30 | B.10.1 | –30 | B.9 | +30 | B.10.1 | +30 |

**Financial account**

| ΔA | | | ΔL | ΔA | | | ΔL |
|---|---|---|---|---|---|---|---|
| F.42 | –30 | | | | | F.42 | –30 |
| | | B.9F | –30 | | | B.9F | +30 |

**Closing balance sheet**

| A | | | L | A | | | L |
|---|---|---|---|---|---|---|---|
| AF.42/S.11 | 0 | | | | | AF.42/S.13 | 0 |
| AF.5 | 100 | | | | | AF.5 | 100 |
| | | ΔB.90 | –30 | | | ΔB.90 | +30 |

**Recording a financial transaction**

This recording applies for the case of quasi-corporations not making losses and of a debt assumption/cancellation occurring in an on-going process of privatisation to be achieved in a short-term perspective. Recordings are the same in both cases: they imply transactions in shares and other equity (F.5).

**Debt assumption**

| General government | | Public corporation | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.5 | 100 | | |

| A | | L | |
|---|---|---|---|
| | | AF.42/S.12 | 30 |
| | | AF.5 | 100 |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| | | F.42 | +30 |
| F.5 | +30 | | |
| | | B.9F | 0 |

| ΔA | | ΔL | |
|---|---|---|---|
| | | F.42 | –30 |
| | | F.5 | +30 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.5 | 100+30 | AF.42/S.12 | 30 |
| | | ΔB.90 | 0 |

| A | | L | |
|---|---|---|---|
| | | AF.42/S.12 | 0 |
| | | AF.5 | 100+30 |
| | | ΔB.90 | 0 |

**Debt cancellation**

| General government | | Public corporation | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.42/S.11 | 30 | | |
| AF.5 | 100 | | |

| A | | L | |
|---|---|---|---|
| | | AF.42/S.13 | 30 |
| | | AF.5 | 100 |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| F.42 | –30 | | |
| F.5 | +30 | | |
| | | B.9F | 0 |

| ΔA | | ΔL | |
|---|---|---|---|
| | | F.42 | –30 |
| | | F.5 | +30 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.42/S.11 | 0 | | |
| AF.5 | 100+30 | | |
| | | ΔB.90 | 0 |

| A | | L | |
|---|---|---|---|
| | | AF.42/S.13 | 0 |
| | | AF.5 | 100+30 |
| | | ΔB.90 | 0 |

**Recording other changes in the volume of assets**

This recording applies for debts of public corporations towards government, which are written-off by the latter (the debtor is bankrupt or liquidated).

| General government | | Public corporation | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| AF.42/S.11 | 30 | | |
| AF.5 | 100 | | |

| A | | L | |
|---|---|---|---|
| | | AF.42/S.13 | 30 |
| | | AF.5 | 100 |

**Other changes in volume of assets account**

| ΔA | | ΔL | |
|---|---|---|---|
| K.5 on AF.42 | –30 | | |
| | | B.10.2 | –30 |

| ΔA | | ΔL | |
|---|---|---|---|
| | | K.15 on AF.42 | –30 |
| | | B.10.2 | +30 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AF.42/S.11 | 0 | | |
| AF.5 | 100 | | |
| | | ΔB.90 | –30 |

| A | | L | |
|---|---|---|---|
| | | AF.42/S.13 | 0 |
| | | AF.5 | 100 |
| | | ΔB.90 | +30 |

**Special case: debt assumption including a transfer of non-financial assets**

**Gross recording of the debt assumption with assets**

| General government | | Public corporation | |
|---|---|---|---|

**Opening balance sheet**

| A | | L | |
|---|---|---|---|
| | | | |
| AF.5 | 100 | | |

| A | | L | |
|---|---|---|---|
| AN.11 | 20 | | |
| | | AF.42/S.12 | 30 |
| | | AF.5 | 100 |

**Capital account**

| ΔA | | ΔL | |
|---|---|---|---|
| GFCF(P.51) | +20 | D.92 | +20 |
| | | D.99 | –30 |
| B.9 | –30 | B.10.1 | –10 |

| ΔA | | ΔL | |
|---|---|---|---|
| P.51 | –20 | D.92 | –20 |
| | | D.99 | +30 |
| B.9 | +30 | B.10.1 | +10 |

**Financial account**

| ΔA | | ΔL | |
|---|---|---|---|
| | | F.42 | +30 |
| | | B.9F | –30 |

| ΔA | | ΔL | |
|---|---|---|---|
| | | F.42 | –30 |
| | | B.9F | +30 |

**Closing balance sheet**

| A | | L | |
|---|---|---|---|
| AN.11 | 20 | | |
| | | AF.42/S.12 | 30 |
| AF.5 | 100 | | |
| | | ΔB.90 | –10 |

| A | | L | |
|---|---|---|---|
| AN.11 | 0 | | |
| | | AF.42/S.12 | 0 |
| | | AF.5 | 100 |
| | | ΔB.90 | +10 |

**Net recording of the debt assumption with assets**

| General government | | | | Public corporation | | | |
|---|---|---|---|---|---|---|---|
| **Opening balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| | | | | AN.11 | 20 | | |
| | | | | | | AF.42/S.12 | 30 |
| AF.5 | 100 | | | | | AF.5 | 100 |
| **Capital account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| GFCF (P.51) | +20 | D.99 | –30+20 | P.51 | –20 | D.99 | +30–20 |
| B.9 | –30 | B.10.1 | –10 | B.9 | +30 | B.10.1 | +10 |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| | | F.42 | –30 | | | F.42 | –30 |
| | | B.9F | –30 | | | B.9F | +30 |
| **Closing balance sheet** | | | | | | | |
| A | | | L | A | | | L |
| AN.11 | 20 | | | AN.11 | 0 | | |
| | | AF.42/S.12 | 30 | | | AF.42/S.12 | 0 |
| AF.5 | 100 | | | | | AF.5 | 100 |
| | | ΔB.90 | –10 | | | ΔB.90 | +10 |

# 7.3 Debt rescheduling

## 7.3.1 Background

1. Debt rescheduling may be an alternative arrangement to debt cancellation or a step in a process leading to debt cancellation.
2. This transaction is often set up by government with foreign transactors, in particular from developing countries, but may also concern domestic public corporations, notably in the financial area. Foreign debtors may be government units themselves or non-government units, such as public corporations. The Paris Club is dedicated to public debt negotiations. The London Club is dedicated to private (banking) debt negotiations but is practically no longer active. In the following, 'government' is only used to describe the creditor government (Treasury or special agencies, excluding specialised financial institutions classified in sector S.12).
3. The issue is how to record the rescheduling of claims and liabilities. What amount has to be recorded on the asset side of the government balance sheet when the terms of the debt contract have changed following a rescheduling arrangement, and at what time?
4. The case under review here is when government has directly extended a loan to the government of a foreign country, and the debtor is defaulting and suspending all or part of its committed payments. As a first step, there is a negotiation to reschedule the debt. As a second step, the debt may be cancelled, or even sold. Only loans are considered. The case of credit insurance is not dealt with.

## 7.3.2 Treatment in national accounts

5. A capital transfer is recorded in favour of the defaulting debtor if the outstanding principal amount of the claim (generally loans), recorded at its nominal value, is diminished. The capital transfer is for the amount of the claim which is cancelled. This sort of debt cancellation is described in chapter 7.2 Debt assumption and debt cancellation.
6. Recording a capital transfer is not necessary in some other cases, in particular:
   1) if the payment of the claim is only delayed or rescheduled;
   2) if only the amount of interest is renegotiated.

### 7.3.2.1 RECORDING OF A LOAN

7. The amount of the debtor's liability to the creditor at any point in time is the principal outstanding: it is the amount that the debtor must repay to discharge the liability and thereby extinguish the creditor's claim over the debtor. It is the principal outstanding that has to be recorded in balance sheets of both creditor and debtor.
8. Loans may take various types (see Box 1 in sub-section 7.3.2.4). Nevertheless, whatever their type the total annual payments, principal and interest, is contractually agreed and can only be changed by contract. In national accounts the future series of interest flows is not recorded as a financial asset of the creditor nor as a liability of the debtor.
9. The interest rate may be fixed or it may be revised in the cases of floating rates, revised rates, and step-up rates. The loan contract gives provisions for the application of the reference.
10. If, at some point in time, some previous interest payments have been in default, the corresponding amounts are added to the present principal outstanding. These amounts also include interest that has been accrued and added to the principal in the national accounts balance sheet but has not been paid when due for payment (usually referred as to interest arrears).
11. In any case, possible provisions (estimates of expected losses) made by the creditor in its own accounts are not recorded in national accounts.

### 7.3.2.2 RESCHEDULING OF THE LOAN: ORDINARY CASES

12. In 'ordinary cases' the outstanding claim is not changed in the rescheduling arrangement: the payment of the claim is only delayed, rescheduled, and/or the amount of interest is renegotiated.

13. There are three main ways for rescheduling a loan:

1) One way is to change the date of the maturity of the principal. In general the aim is to lighten the annual burden of repayments, the duration is likely to be lengthened. However, even though the interest rate is unchanged, the total interest charge will be increased because interest is paid over a longer time (see example).

   This does not change the nominal value of the outstanding principal but has an impact on the 'market value' of the debt instrument observed when there are transactions on a secondary market. The consequence of the rescheduling is a new schedule of annual repayments different from the original one.

2) Another way is to change the interest rate of the contract. This will have an impact only on the series of interest payments. The initial principal outstanding does not change. If the accruing interest rate does change, it is likely that the required regular payments will also change.

   A particular arrangement of this type may include the cancellation, by the creditor, of the future stream of interest payments, with various alternatives for the repayment of the principal. There is no change to the amount of principal outstanding in balance sheets: it is similar to a revision of the interest rate of the loan, with the new interest rate being nil.

3) A third way is to delay payments of a principal during a grace period. There is generally a corresponding increase to the loan's redemption date. The original outstanding amount is unchanged. Interest accruing during the grace period may be paid every year, or capitalised and added to the principal that will be amortised after the grace period (see chapter 2.4 Recording of Interest).

### 7.3.2.3 DETERMINING THE NEW AMOUNT OUTSTANDING

14. In order to determine whether it is necessary to record a capital transfer, and calculate its value, the difference between the outstanding amount of the claim before and after the rescheduling must be known. Normally, the new amount outstanding would be mentioned in the rescheduling agreement. But in some rare cases it might not be. In these cases, it should be calculated from the stream of future annuities and interest rate quoted in the new agreement (see formula in Box 1 in sub-section 7.3.2.4). If the rate of interest is not given, the value of the outstanding amount should be calculated as the net present value of the future annuities using a discount rate equal to the interest rate that applied to the initial agreement.

15. In other words:

- if, at any point in time, the principal outstanding of a loan has a given value V,
- and if a rescheduling arrangement, implemented at this point in time, leads to a situation in which the present value of the annuities — calculated with the interest rate after arrangement — after rescheduling, is different from the above principal outstanding V,
- this means that, in fact, there is a change in the principal outstanding value to be recorded under AF.4 in the balance sheets of both creditor and debtor,

16. As, in this case, it is likely that the new principal outstanding is lower than the previous one, a

capital transfer in kind (D.99) has to be recorded from the creditor to the debtor, since there is a *de facto* partial debt cancellation.

### 7.3.2.4 CANCELLATION OF A DEBT FOLLOWING A RESCHEDULING ARRANGEMENT

17. It may happen that, despite a rescheduling arrangement having been implemented, the creditor government cancels the remaining claim. A capital transfer has thus to be recorded from government to the debtor, at the time of the cancellation agreement. The amount of the capital transfer (normal treatment of debt cancellation in ESA 2010) is equal to the principal outstanding of the loan after rescheduling.

**Sale of a loan**

18. It may happen that after a rescheduling arrangement government sells the loan, to a financial institution for instance. It may also happen that, because of the difference between the contractual rate of interest prevailing on the loan and the corresponding market rate for the same kind of loan, the sale takes place for an amount of principal far below the principal outstanding as contained in the rescheduling arrangement.

19. In this case, the difference between the principal outstanding after rescheduling and the principal outstanding as traded in the sale has to be recorded as a holding loss in government revaluation account (ESA 2010 paragraph 6.58).

20. **NB**: If the debtor continued to make loan repayments to the first creditor, which it would do if its obligations had not changed as a result of the loan 'sale', the transaction between the two creditors would not be regarded as the sale of a claim (the loan) by the first creditor to the second but as a new loan granted by the new creditor to the former one.

## Box 1 – Recording of loans (principal and interest): technical note

1. At inception, the principal outstanding is equal to the amount lent. It is also equal to the present value of all the annuities, using the interest rate of the loan contract as the discounting rate: see formula (1) in the box below.

2. At any point in time, the outstanding amount of principal is equal to the present value of the remaining annuities using the interest rate of the loan contract as the discounting rate: see formula (2) in the box below for the case when all previous annuities have been paid.

3. The amortisation table of a loan may be shown as follows:

   - $V_0$ being the amount of the loan at inception
   - $r$ the interest rate of the contract
   - $n$ the length of the loan

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation period | Annuity (total annual payment) |
|---|---|---|---|---|
| $1$ | $V_0$ | $F_1$ | $D_1$ | $A_1$ |
| … | … | … | … | … |
| $p$ | $V_{p-1}$ | $F_p$ | $D_p$ | $A_p$ |
| … | … | … | … | … |
| $n$ | $V_{n-1}$ | $F_n$ | $D_n$ | $A_n$ |

The following numerical relations may be observed for a given period p:

$$A_p = D_p + F_p$$
$$F_p = r \ V_{p-1}$$
$$D_p = V_{p-1} - V_p$$
$$V_n = 0$$

4. Three main kinds of conventional loans — excluding index-linked ones, for instance — exist in practice:

a) Loans with a final repayment:

$$D_p = 0, \forall p \neq n$$
$$D_n = V_0$$
$$F_p = F = r \ V_0, \forall p$$

b) Loans with constant amortisation:

$$D_p = D = \frac{1}{n} V_0, \forall p$$

c) Loans with constant annuities:

$A_p = A, \forall p$, A being calculated using the formula given below.

**Basic formulae:**

5. Whatever the type of loan could be, the various components may be calculated using the following basic formula – $V_0$, $n$, and $r$ being given:

$$V_0 = \sum_{p=1}^{p=n} A_p \frac{1}{(1+r)^p} \qquad (1)$$

This means that the present value — using the interest rate of the loan contract as discounting rate — of all the annuities is equal to the amount which is lent, whatever these annuities could be.

6. Moreover, at any point of time, the outstanding amount of principal is equal to the present value of the remaining annuities. Thus, after the p-1 annuities have been paid, the following formula holds:

$$V_p = \sum_{m=1}^{m=n-p} A_{p+m} \frac{1}{(1+r)^m} \qquad (2)$$

7. If no payment occurs from the beginning until p (p being included), $V_0$ is recorded under AF.4 at the end of period p. Moreover, there is a liability corresponding to the unpaid amounts of interest, equal to:

$$\sum_{m=1}^{m=p} F_m \quad (3)$$

## 7.3.3 Rationale of the treatment

### 7.3.3.1 RECORDING OF A LOAN

21. The values to be recorded under AF.4 in the balance sheets of both creditors and debtors are the amounts of principal that the debtors are contractually obliged to repay the creditors, even in cases where the loan was traded at a discount or premium (ESA 2010 paragraph 7.70).

### 7.3.3.2 RESCHEDULING OF A LOAN

22. There is no detailed guideline for treating such a case in ESA 2010. Mention is only made of debt restructuring in ESA 2010 paragraph 20.236 which states the same principle (as for debt cancellation) related to the difference in value (without specifying that it is in nominal terms). It is mentioned in the 2008 SNA, but in a rather descriptive way, indicating only in paragraph 20.107 (b) that, it 'may or may not result in a reduction in present value terms', whereas there is no mention of a possible capital transfer. Therefore, this Manual brings a necessary clarification and a useful practical guidance for national accountants.

23. A loan is a contractual arrangement. The split between repayment of the principal and repayment of interest is determined in the loan contract, even for loans with floating rates, and can only be changed by amending the contract.

24. A loan has no market price: see ESA 2010 paragraph 6.58. The interest rate changes, which may occur on financial markets for similar loans have thus no impact on the outstanding principal of existing loans with fixed interest rates. Such changes have no influence on the future amounts of interest, and thus no influence on the split between principal and interest.

#### 7.3.3.3 DEBT CANCELLATION

25. See in chapter 2.4 Recording of interest, section 2.4.1 Background to the issue.

#### 7.3.3.4 SALE OF A LOAN

26. ESA 2010 discusses the case of a loan that is traded (ESA 2010 paragraph 5.122). The difference between the redemption price and the transaction price is recorded in the revaluation account (ESA 2010 paragraph 6.58).

## 7.3.4 Accounting examples

**Common features**

**Case a: recording a loan**

A loan of 10 000 has a remaining duration of 5 years when rescheduled at the start of year 1. The original interest rate is 6 %.

**1. Loan with a final repayment**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 600 | 0 | 600 |
| 2 | 10 000 | 600 | 0 | 600 |
| 3 | 10 000 | 600 | 0 | 600 |
| 4 | 10 000 | 600 | 0 | 600 |
| 5 | 10 000 | 600 | 10 000 | 10 600 |
| Total | | 3 000 | 10 000 | 13 000 |

**2. Loan with constant amortisation**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 600 | 2 000 | 2 600 |
| 2 | 8 000 | 480 | 2 000 | 2 480 |
| 3 | 6 000 | 360 | 2 000 | 2 360 |
| 4 | 4 000 | 240 | 2 000 | 2 240 |
| 5 | 2 000 | 120 | 2 000 | 2 120 |
| Total | | 1 800 | 10 000 | 11 800 |

### 3. Loan with constant annuities

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 600 | 1 774 | 2 374 |
| 2 | 8 226 | 494 | 1 880 | 2 374 |
| 3 | 6 346 | 381 | 1 993 | 2 374 |
| 4 | 4 353 | 261 | 2 113 | 2 374 |
| 5 | 2 240 | 134 | 2 240 | 2 374 |
| Total | | 1 870 | 10 000 | 11 870 |

**Numerical example of rescheduling**

**Case b1: maturity is lengthened**

The loan is extended so that time to redemption is now 8 years; the rate of interest is unchanged.

### 1. Loan with a final repayment

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 600 | 0 | 600 |
| 2 | 10 000 | 600 | 0 | 600 |
| 3 | 10 000 | 600 | 0 | 600 |
| 4 | 10 000 | 600 | 0 | 600 |
| 5 | 10 000 | 600 | 0 | 600 |
| 6 | 10 000 | 600 | 0 | 600 |
| 7 | 10 000 | 600 | 0 | 600 |
| 8 | 10 000 | 600 | 10 000 | 10 600 |
| Total | | 4 800 | 10 000 | 14 800 |

### 2. Loan with constant amortisation

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 600 | 1 250 | 1 850 |
| 2 | 8 750 | 525 | 1 250 | 1 775 |
| 3 | 7 500 | 450 | 1 250 | 1 700 |
| 4 | 6 250 | 375 | 1 250 | 1 625 |
| 5 | 5 000 | 300 | 1 250 | 1 550 |
| 6 | 3 750 | 225 | 1 250 | 1 475 |
| 7 | 2 500 | 150 | 1 250 | 1 400 |
| 8 | 1 250 | 75 | 1 250 | 1 325 |
| Total | | 2 700 | 10 000 | 12 700 |

### 3. Loan with constant annuities

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 600 | 1 010 | 1610 |
| 2 | 8 990 | 539 | 1 071 | 1610 |
| 3 | 7 919 | 475 | 1 135 | 1610 |
| 4 | 6 783 | 407 | 1 203 | 1610 |
| 5 | 5 580 | 335 | 1 276 | 1610 |
| 6 | 4 305 | 258 | 1352 | 1610 |
| 7 | 2 952 | 177 | 1433 | 1610 |
| 8 | 1 519 | 91 | 1 519 | 1 610 |
| Total | | 2 883 | 10 000 | 12 883 |

**Case b2: change in rate of interest**

The interest rate on the loan is reduced from 6 % to 4 %.

**1. Loan with a final repayment**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 400 | 0 | 400 |
| 2 | 10 000 | 400 | 0 | 400 |
| 3 | 10 000 | 400 | 0 | 400 |
| 4 | 10 000 | 400 | 0 | 400 |
| 5 | 10 000 | 400 | 10 000 | 10 400 |
| Total | | 2 000 | 10 000 | 12 000 |

**2. Loan with constant amortisation**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 400 | 2 000 | 2 400 |
| 2 | 8 000 | 320 | 2 000 | 2 320 |
| 3 | 6 000 | 240 | 2 000 | 2 240 |
| 4 | 4 000 | 160 | 2 000 | 2 160 |
| 5 | 2 000 | 80 | 2 000 | 2 080 |
| Total | | 1 200 | 10 000 | 11 200 |

**3. Loan with constant annuities**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | 400 | 1 846 | 2 246 |
| 2 | 8 154 | 326 | 1 920 | 2 246 |
| 3 | 6 234 | 249 | 1 997 | 2 246 |
| 4 | 4 237 | 169 | 2 077 | 2 246 |
| 5 | 2 160 | 86 | 2 160 | 2 246 |
| Total | | 1 231 | 10 000 | 11 231 |

**Case b3: Grace period**

Three years of grace period are agreed for the principal (with interest capitalised).

**1. Loan with a final repayment**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | (600) | 0 | 0 |
| 2 | 10 600 | (636) | 0 | 0 |
| 3 | 11 236 | (674) | 0 | 0 |
| 4 | 11 910 | 714 | 0 | 714 |
| 5 | 11 910 | 714 | 0 | 714 |
| 6 | 11 910 | 714 | 0 | 714 |
| 7 | 11 910 | 714 | 0 | 714 |
| 8 | 11 910 | 714 | 11 910 | 12 624 |
| Total | | 3 570 | 11 910 | 15 480 |

**2. Loan with constant amortisation**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | *600* | 0 | 0 |
| 2 | 10 600 | *636* | 0 | 0 |
| 3 | 11 236 | *674* | 0 | 0 |
| 4 | 11 910 | 715 | 2 382 | 3 097 |
| 5 | 9 528 | 572 | 2 382 | 2 954 |
| 6 | 7 146 | 429 | 2 382 | 2 811 |
| 7 | 4 764 | 286 | 2 382 | 2 668 |
| 8 | 2 382 | 143 | 2 382 | 2 525 |
| Total | | 2 144 | 11 910 | 14 054 |

**3. Loan with constant annuities**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 10 000 | *600* | 0 | 0 |
| 2 | 10 636 | *636* | 0 | 0 |
| 3 | 11 236 | *674* | 0 | 0 |
| 4 | 11 910 | 715 | 2 113 | 2 827 |
| 5 | 9 797 | 588 | 2 240 | 2 827 |
| 6 | 7 558 | 453 | 2 374 | 2 827 |
| 7 | 5 184 | 311 | 2 516 | 2 827 |
| 8 | 2 667 | 160 | 2 667 | 2 827 |
| Total | | 2 227 | 11 910 | 14 137 |

**Case c1**

The new interest rate is reduced from 6 % to 4 %. A new schedule of annuities is agreed. We derive the new principal that is unknown.

**1. Loan with a final repayment (four first annuities of 300)**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | **7 500** | 300 | 0 | 300 |
| 2 | 7 500 | 300 | 0 | 300 |
| 3 | 7 500 | 300 | 0 | 300 |
| 4 | 7 500 | 300 | 0 | 300 |
| 5 | 7 500 | 300 | 7 500 | 7 800 |
| Total | | 1 500 | 7 500 | 9 000 |

Capital transfer for debt cancellation recorded at the time of new agreement: 10 000 – 7 500 = 2 500

**2. Loan with constant amortisation (total annuities = 9 000)**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 8 036 | 321 | 1 607 | 1 929 |
| 2 | 6 429 | 257 | 1 607 | 1 864 |
| 3 | 4 822 | 193 | 1 607 | 1 800 |
| 4 | 3 214 | 129 | 1 607 | 1 736 |
| 5 | 1 607 | 64 | 1 607 | 1 671 |
| Total | | 964 | 8036 | 9000 |

Capital transfer recorded at the time of the new agreement: 10 000 – 8 036 = 1 964

**3. Loan with constant annuities (total annuities = 9 000)**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 8 013 | 321 | 1 479 | 1 800 |
| 2 | 6 534 | 261 | 1 539 | 1 800 |
| 3 | 4 995 | 200 | 1 600 | 1 800 |
| 4 | 3 395 | 136 | 1 664 | 1 800 |
| 5 | 1 731 | 69 | 1 731 | 1 800 |
| Total | | 987 | 8 013 | 9 000 |

Capital transfer recorded at the time of the new agreement: 10 000 – 8 013 = 1 987

**Case c2: new interest rate unknown**

The new interest rate is unknown but the new schedule of annuities is available. We derive the new principal, which was unknown by using the original rate of 6 %.

**1. Loan with a final repayment (four first annuities of 415)**

| Time period | Principal at the beginning of the period | Interest of the period 6 % | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | 6 923 | 415 | 0 | 415 |
| 2 | 6 923 | 415 | 0 | 415 |
| 3 | 6 923 | 415 | 0 | 415 |
| 4 | 6 923 | 415 | 0 | 415 |
| 5 | 6 923 | 415 | 6 923 | 7 338 |
| Total | | 2077 | 6 923 | 9 000 |

Capital transfer recorded at the time of the new agreement: 10 000 – 6 923 = 3 067

**2. Loan with constant amortisation (total annuities = 9 000)**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | **7 627** | 458 | 1 525 | 1 983 |
| 2 | 6 102 | 366 | 1 525 | 1 891 |
| 3 | 4 576 | 275 | 1 525 | 1 800 |
| 4 | 3 051 | 183 | 1 525 | 1 708 |
| 5 | 1 525 | 92 | 1 525 | 1 617 |
| Total | | 1 373 | 7 627 | 9 000 |

Capital transfer recorded at the time of the new agreement: 10 000 – 7 627 = 2 363

**3. Loan with constant annuities (total annuities = 9 000)**

| Time period | Principal at the beginning of the period | Interest of the period | Amortisation of the period | Annuity (total annual payment) |
|---|---|---|---|---|
| 1 | **7 582** | 455 | 1 345 | 1 800 |
| 2 | 6 237 | 374 | 1 426 | 1 800 |
| 3 | 4 811 | 28 | 1 511 | 1 800 |
| 4 | 3 300 | 198 | 1 602 | 1 800 |
| 5 | 1 698 | 102 | 1 698 | 1 800 |
| Total | | 1 418 | 7 582 | 9 000 |

Capital transfer recorded at the time of the new agreement: 10 000 – 7 582 = 2 418

# 7.4 Government guarantees

## 7.4.1 Background

1. In many EU Member States, government, usually at central government level but also at state or local level, provides guarantees on the borrowing of certain corporations or other entities both in the public and in the private sector. The guarantee can be unconditional or conditional and government can act alone or jointly with other units. Generally this allows the beneficiary unit to borrow at a lower interest rate[257], and even in some cases this support is needed in order to have access to borrowing markets. There are different ways in which a guarantee may be exercised (realisation of guarantor's obligations). The most frequent case is generally when the guarantee call is activated by the creditor, for example a bank, often at first demand. Usually three parties are involved in such guarantee calls: the debtor, for example a public corporation, the creditor and the guarantor (in this chapter a government unit).
2. Government may also provide guarantees on assets held by some entities as part of their normal business or in the context of government policies. In this case, government takes the commitment to cover losses related to a decrease in the value of the assets or shortfalls in the recovery, with various ways of activating the guarantor's obligations. For guarantees on significant problematic assets, see chapter 4.5 Financial defeasance.
3. This chapter does not consider the following types of guarantees:
   - implicit government guarantees, as opposed to formal guarantees that are generally laid down in legal contracts (for instance in the case of guaranteed issuance of securities). Implicit guarantees may come from government's role as shareholder, or controller of the units, where it is considered that government will intervene in any case if problems are observed. Implicit guarantees may also relate to economic activity considered to be integral to the economy, where it is assumed that government will intervene to prevent a failure;
   - formal guarantee commitments, which are rather close to insurance schemes. For instance, government may 'guarantee' some payments by households (e.g. housing rentals) or grant guarantee for some specific events (e.g. art exhibitions).
4. Government may provide three kinds of guarantees:
   - in the form of derivatives (such as Credit Derivative Swaps), which fall under the normal treatment of derivatives and do not require specific provisions for such government transactions;
   - in the form of standardised guarantees (introduced in 2008 SNA and ESA 2010), see section 7.4.4 of this Manual;
   - in the form of 'one-off' guarantees, see section 7.4.2.
5. ESA 2010 paragraph 5.190 provides a definition of standardised guarantees which *…are issued in large number, usually for fairly small amount, among identical lines*…. Their main features are:
   - issued for the benefit of several financial institutions granting credits under a precise framework;
   - related to the assets of the benefiting financial institutions (the trigger of the guarantee due to the call does not come from a default of the lending unit on its own debt);
   - granted in the context of public interest policy.
6. Examples of standardised guarantees include those on student loans (notably where university tuition fees are high), real estate loans to households (generally for low-income borrowers) and export credit.[258]

[257] This guarantee may result in a credit enhancement as rating agencies generally attribute to the debt of the borrowing unit the rating of the guarantor if higher.

[258] The term 'export credit' is used here in a narrow sense: guarantees on loans/credits to foreign purchasers, or loans to domestic suppliers, but excluding any form of insurance (such as prospection insurance, political risk, etc.). In other words, only a credit risk incurred by lending institutions is covered by the guarantee. Although listed in ESA 2010 and 2008 SNA as an example of standardised guarantees, within the EU, most export credit guarantees are instead considered as insurance. The operations referred to in this chapter are covered by the OECD 'Arrangement on Officially Supported Export Credits' (last update from July 2015).

7. In contrast to standardised guarantees, one-off guarantees are provided on a case-by-case approach, generally for rather significant amounts and under individual contractual arrangements. They are not offered under a general framework and imply a close follow-up by government on an individual basis and not globally. Frequently, they are subject to an examination of their impact by competition authorities.

8. ESA 2010 highlights another difference between standardised guarantees and one-off guarantees. In the first case guarantors should be in a position, when they offer a standardised guarantee, to estimate the average loss based on available statistics by using a probability-weighted risk of call. In the case of one-off guarantees, guarantors generally would not be able to make, at inception, a reliable estimate of the risk of calls as it is not predictable due to the uniqueness of the case.

9. In general, fees for one-off guarantees, received by government in its role of guarantor are classified as service fees, i.e., payments for non-market output (P.131). According to the accrual principle, this revenue should be spread over the life of the guarantee. Fees received by government in relation to standardised guarantees are equivalent to insurance premiums, notably under export credit schemes, and must therefore be treated similarly to the rules stated in ESA 2010 for non-life insurance (see ESA 2010, chapter 16).

10. However, in the case of specific one-off guarantees, the amount of fees received by government might be considered well out of proportion to the cost for government of providing the guarantee. In this case, the fee will have the nature of a compulsory payment (being out of proportion) and should be considered as unrequited. This means that in such cases a tax (D.29) would need to be recorded in accordance with ESA 2010 paragraph 4.23.

## 7.4.2 One-off guarantees

### 7.4.2.1 TREATMENT IN NATIONAL ACCOUNTS

#### 7.4.2.1.1. General case

11. Generally, a government-guaranteed debt is recorded solely as the borrowing of the borrower and an asset for the lender, whether or not the guarantee concerns specific borrowing (e.g. one particular loan) or the whole corporate debt. For government, it is a contingent liability which is not recorded in ESA balance-sheets (but may be shown as memorandum item or a footnote).

12. If the guarantee is called, whether for the full amount or for part of it, government takes over that part of the borrower's debt which was called, through a 'debt assumption' (see chapter 7.2), which is recorded as a capital transfer (D.99) from government to the borrower for the amount called. This has an impact on government net lending/borrowing (B.9). The capital transfer is matched by a financial transaction: the financial liability transferred from borrower to government. Government may, either immediately or subsequently, enter into a separate financial transaction when it repays the outstanding debt to the lender. This financial transaction has no impact on net lending/borrowing (B.9). This may also cover the interest accrued but not paid at the time of the assumption and which should have normally been added to the instrument.

13. In the public accounts balance sheet, the guaranteed debt may not be recorded until the guarantee is called (activated). However, it is expected that information on government

    guarantees is made publicly available. It is usually the case that Parliament approves a cap on the amount of guarantees government can grant over a fiscal year.

**Partial calls**

14. A 'partial call' of the guarantee (sometimes referred to as a 'cash call') occurs when government pays one instalment. The actual payment by government is recorded as a debt assumption: capital transfer (D.99) expenditure, balanced by a decrease in currency and deposit (F.2) (see sub-section 7.4.2.2.1 of the Manual and the decision tree at the end of this chapter). Conceptually, this is analysed as a debt assumption with government taking over part of the liability and as if there was a transfer of the financial liability to government that is followed by an immediate settlement of this amount in order to extinguish the liability. However, it may be the case that government is legally obliged to automatically assume all

the remaining debt (guarantees at first demand) as the result of an initial case. For cases of 'repeated calls', see the sub-section 7.4.2.1.3 of this Manual.

#### 7.4.2.1.2. Case where government will repay the debt with certainty

15. In some cases, it is known with certainty that, despite the borrowing being legally carried out by the corporation, it will be government that repays the borrowing. This may occur for newly issued debt or for existing debt which government had started to guarantee.

16. In straightforward cases evidence is provided in legal documents or a government liability is recognised in the public accounts or in similar documents, e.g. the budgetary documentation. In such cases the debt is considered to be first issued by the corporation and then assumed by government. This assumption may happen immediately where it is obvious at inception that the debt will be assumed by government (i.e., it is imputed to government, in national accounts, from inception).

#### 7.4.2.1.3. Case where it is judged that government repays or will repay the debt

17. In other cases, documented evidence may not be available to show that government has legally assumed the debt but other indicators might point to the fact that government has *de facto* assumed it. Evidence of such cases may include:

- repeated calls: it is observed that government is repaying the debt each year[259], either directly (by calls, see below) or indirectly, through recurrent payments to the borrower, which allows the corporation to repay all or part of its debt obligations. Such payments[260] result in the provision to the unit of the means necessary to repay its creditors without formally activating the guarantee or avoiding a rollover of the debt (including by way of a financial advance from government). If such support becomes a common occurrence, it is considered a 'disguised' or indirect call,[261] which would trigger government assumption of the debt.
- a provision has been recorded in public accounts or similar documents that show that the probability that government will repay the debt is very high and that it has already been recognised by government, beyond the usual prudential practice.

18. In these cases the outstanding amount of debt, or a relevant part of it, is treated in national accounts as assumed by government in the time period it is judged to have *de facto* assumed it.

19. Specific examples include e.g. situations when there are repeated calls on the guarantee (or where equivalent payments — like repeated capital injections — are made to the borrower to prevent a call being necessary). In the latter case, government effectively repays the debt even though it has no legal requirement to do so and does not formally record it as such in public accounts. In such specific cases, a case-by-case analysis is required.

20. As practical guidance, if government repayments of the debt occur over three consecutive calls what is referred to as the 'three calls rule' (see indirect calls above), then the debt is to be considered as having been automatically assumed by government. The debt would normally be assumed in its entirety; although this could be reduced to only the proportion government is expected to repay, if there is evidence of that. The debt assumption should be recorded at the time of the event triggering statistical decision to recognize the debt assumption, for example, the time of the third annual payment. The debt assumption is to be recorded as described in sub-section 7.4.2.1.1. When government has provided guarantees on several debt instruments issued by a single entity, the rule should apply on the basis of calls on any of the guaranteed liabilities during a given year (and is equivalent of a single call for that year). Therefore, in the event that a judgement is made that a debt will be assumed in its entirety, all government-guaranteed debt of that entity is assumed at the same time.

21. An exception is made when there are strong indications that the situation (i.e. defaulting) will not continue. This would mean that a fundamental restructuring of the borrowing unit benefiting from the

[259] In some cases, several calls could be observed during the same year under the same guarantee arrangement. They are accounted for a single call in the implementation of the rule.

[260] Any transfer from government would be counted in this regard, except subsidies on products (D.31), but including other subsidies on product (D.319).

[261] In practice, it may be difficult to assess such indirect call because of the multiple sources of profits of the corporation and the possible variety of government support. Therefore, this provision would apply only if such situation would be observed continuously over several exercises and not exceptionally. The cases where government would systematically provide funds to the corporation for the payment of a large part of the interest burden should also be closely examined, as it might be an indication that the corporation would not be in able to redeem the principal of its debt. Anyway, on an individual approach, this should give rise to specific examination by national statisticians, in cooperation with Eurostat.

guarantee (hereby referred to as the borrower) has been decided and it can be assessed, from the business plan to be provided, that the entity would in the future be in a position to face its debt obligations.

#### 7.4.2.1.4. Case where a claim on a third-party asset [262] is transferred to government

22. A guarantee on liability may be called, possibly at the initiative of the creditors, where the borrower cannot meet its debt obligations on time and not because of its problems with the underlying solvency. An example of this could be temporary liquidity difficulties. In some cases, such as export credit guarantees, a debt assumption may imply an automatic transfer of a claim on a third-party asset[263]. This may be also the case when the guaranteed borrowing is secured by specific assets (e.g. covered bonds[264]). In this case the market value of the asset transferred to government as foreseen in the guarantee arrangements[265] should be deducted from the capital transfer, provided that it is very likely that government will realise the value of the asset in the short term. If a market value is not available, a fair value may be estimated on the basis of usual business estimation methods/models carried out by an independent body. The part which is recognised as claim should follow the same treatment as in the next paragraph.

23. In the case of guarantees on financial assets, any call must be recorded as capital transfer expenditure of government. It may happen that the arrangement between the unit benefiting from the guarantee and government foresees that, under some conditions, the guaranteed assets could be transferred to government. This should be recorded in government accounts as reduction to a capital transfer expenditure for the full amount of the assets transferred, at the time of the transfer. When no recoveries are expected, the claim is not entered into government's balance sheet. Any unexpected recoveries are recorded as a capital transfer revenue of government. When there is a reliable estimate of the recoverable value, following normal business valuation methods by an independent body, the recoverable value should be deducted from the capital transfer and treated as the acquisition of a financial asset. The asset should enter government balance sheet and repayments by the debtors to government should be treated as financial transactions.[266]

24. Another possibility is that the asset acquired by government could be a non-financial asset rather than a financial claim, such as a real estate property. Here, in case of default, government assumes the guaranteed debt of the borrower and also takes the ownership of a given non-financial asset. The recording would be similar to the case mentioned in the paragraph 22 and the value of the transferred asset should be deducted from the capital transfer, and entirely off-set it, if the value of the asset is equal to the value of the debt assumption. There would be an impact on government net lending/borrowing (B.9) due to the capital formation recorded, but this would just substitute the impact on B.9 that the capital transfer would have had. When government immediately disposes of the asset, the final impact on government net lending/borrowing (B.9) will be neutral if government resells the asset for the value recorded at the time of the debt assumption.

#### 7.4.2.1.5. Case where the assumption of a liability includes a claim on the guaranteed unit

25. When government assumes debt through a guarantee call it may also at the same time acquire a financial asset that is a claim on the guaranteed corporation, such as a claim — recognised in the public accounts — on any recoveries that it can subsequently make.

26. In most cases where government is judged to assume debt from a public corporation facing a difficult situation, it is considered that any new claim of government on the corporation, possibly recorded in public accounts, would be of uncertain value. In this case, the claim would not be recorded in

[262] The case of guarantees on assets held by financial institutions in distress is covered in chapter 4.5 Financial defeasance.

[263] Third party means that the asset is not a claim of the guaranteed unit but on another unit, which is not part of the guarantee arrangement. In the cases of financial claims held by the guaranteed unit, such asset could be transferred (possibly due to contractual obligations) by the debtor to this unit (its default may have triggered the activation of the guarantee) and then retransferred to government. It would be de facto a claim on a 'fourth party'.

[264] Normally, the creditors have a direct right on these kinds of collaterals, which must be clearly identified (segregated) in the balance sheet of the borrower. However, this would not exclude that the creditors activate their guarantee right if the borrowing is also sublet to an explicit government guarantee.

[265] If such value is not observed, a fair value may be estimated by independent bodies, on the basis of usual business estimation methods/models.

[266] Under some conditions, part of the claim would not be recovered and should be treated as either capital transfer or other changes in the volume.

government's balance sheet. In case of later repayments from the public corporation, these would be recorded as capital transfer revenue of government to be super-dividend tested (see also below in sub-section 7.4.2.1.6). In the case the borrower would be fully private, it could be considered that government is holding a claim. However, in case the borrower shows accumulated or regular losses, and more particularly, a negative net equity, no claim on the unit should be recorded in national accounts.

#### 7.4.2.1.6. Change of circumstances after a debt assumption

27. After government has been economically judged to assume debt it guaranteed (see sub-section 7.4.2.1.3), it may happen that the financial performance of the defaulting borrower improves to the extent that it resumes making regular debt repayments and can resume its legal obligations for the liability. Here, the previous economic assessment is no longer appropriate and the corporation is deemed to assume the debt back from government. This is recorded as a capital transfer from the corporation to government, offset by a financial transaction where the liability is transferred from government to the corporation[(267)].

28. When the recovering entity is a public corporation, the transaction recorded in favour of the government should be subject to the super-dividend test, part of the payment being partitioned as an equity withdrawal (F.5) for the amount in the excess of the distributable income, net of any dividend paid.

29. To avoid instability in government debt statistics, any debt imputed to government should remain as a liability of government until payments from the defaulting entity to government or to the creditor actually occur, and there is strong evidence that they will continue in the future. In other words, the improvement in the financial situation of the defaulting borrower must be viewed as permanent and not due to temporary factors.

#### 7.4.2.1.7. On-lending

30. If government borrows on the market in its own name, but with the explicit purpose to specifically allocate the funds to corporations that are contractually obliged to repay government for both principal and interest, the debt is recorded as government debt at issuance and a corresponding loan is recorded to the corporation. The loan is analysed according to rules on capital injections in public corporations (see chapter 3.2. Capital injections into public corporations). Therefore, it may or may not have an impact on the government net lending/borrowing (B.9) according to the capital injection test.

31. Government may guarantee the borrowing of an entity, which then, under instructions from government, would finance corporations engaged in public sector infrastructure or other projects. If the entity is recognised as a separate institutional unit (see ESA 2010 paragraph 2.12), the borrowing should be rerouted, so that government is recording borrowing from and lending to this unit. However, more frequently, the entity would not be recognised as an institutional unit (e.g. when it appears to be just undertaking the role of a 'passing-through' entity), so the borrowing would be recorded in national accounts as direct government borrowing and lending to the infrastructure or other public projects.

### 7.4.2.2 RATIONALE OF THE TREATMENT

#### 7.4.2.2.1. General case

32. The general principle is that guarantees are considered contingent assets/liabilities.

33. ESA 2010 paragraph 5.08 states *…as they do not give rise to unconditional obligations, contingent assets and liabilities are not financial assets and liabilities*.

34. As a result, contingent liabilities are not recorded in the ESA balance sheet and are excluded from government debt. Similarly, the granting of guarantees is not normally considered a transaction in national accounts. In the general case, the action of granting a guarantee would only lead to the recording of transactions for the fees and when the guarantee is activated, i.e., when the guarantor replaces an original borrower (or in some cases compensates the holder of some identified assets) due to a default that triggers the exercise of the guarantee. In some cases, a judgment must be made that the guarantee has effectively been activated despite not legally being fully activated. The exercise of the guarantee can lead to debt assumption and, in most cases, to capital transfers. In a debt assumption the

[(267)] In the case of guarantees on assets, except if there is a transfer of the assets to government, when the original beneficiary of the guaranteed unit can repay to government the amounts which have been already called and paid by government to the unit holding the assets, these payments are recorded in government accounts as a capital transfer receivable.

amount of capital transfer recorded is the payment obligation taken on the guarantor on behalf of the original borrower.

35. Any call of a guarantee, whether full or partial, is thus equivalent to a debt assumption by government.

#### 7.4.2.2.2. Case where government will repay the debt with certainty

36. Government guaranteeing new debt where it is certain that government, as guarantor, will repay it, is economically equivalent to government borrowing directly from the creditor, as it has taken on the obligation to service the debt. In this case, the proceeds of government borrowing would then be used to fund the corporation but, as government would not expect to receive anything in return from the borrowing unit, this transaction would not be a loan and should be recorded as a distributive transaction, a capital transfer with an impact on government net lending/borrowing (B.9).

37. When government guarantees an existing debt and it is known with certainty that government will repay it, the treatment is similar to a debt assumption that benefits the guaranteed unit.

#### 7.4.2.2.3. Case where it is judged that government repays or will repay the debt

38. This case is equivalent to an informal call of the guarantee. The recording reflects the concept of economic substance being recorded rather than legal features or administrative form (see ESA 2010 paragraph 1.25). In such cases, government is viewed as having assumed the debt from the corporation.

39. Cases where government makes debt repayments every year instead of the corporation, without any formal call of a guarantee, have been observed and must be carefully analysed to judge whether they are in effect a call on the guarantee. These payments are indications that, in practice, government is expected to assume the debt. Recording the liability as government debt is the result of judging the economic reality to be that government will continue to assume the liability on a regular basis, in which case the liability is economically considered to belong to government (and thus rerouted).

40. For the purpose of national accounts, economic reality must always prevail over legal form. An ambiguous situation where a further reclassification of the debt could occur in the future should be avoided.

#### 7.4.2.2.4. Case where a claim on a third-party asset is transferred to government

41. When a guarantee is called, government may receive from the guaranteed unit an asset, e.g. in the form of equity or a loan. An assessment is needed whether this claim could be recognised in national accounts.

42. For example, if government receives a claim on a loss-making public corporation, what government receives would be considered as worthless as the corporation will not be able to pay it and hence no claim is recorded in national accounts.

43. If the claim (received by government) has been recorded in the public accounts as a loan to a private corporation[(268)], then the case needs to be analysed. Whenever the private corporation faces financial difficulties (accumulated losses, negative equity, no access to market), so that its real value should be zero or close to zero, such a claim would not be recognized in national accounts. Here, the option to record an equity injection (F.5) from government would generally be inappropriate[(269).] The claim is not recognized and the transaction related to the activation of the guarantee would be recorded as a capital transfer.

#### 7.4.2.2.5. Case where an assumption of a liability includes a claim on the guaranteed unit

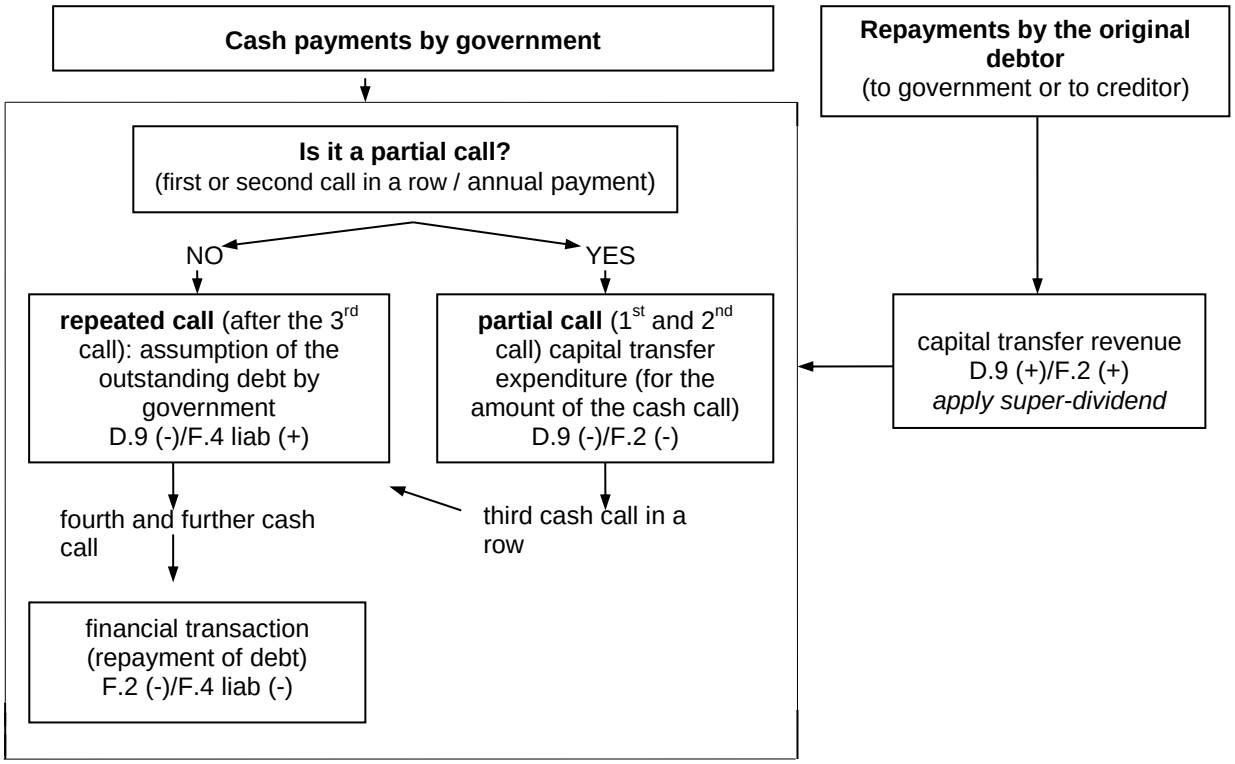
44. An issue also arises when a government guarantee is called and, in return, government records a claim towards the guaranteed unit. This claim is to be recorded in national accounts, off-setting the amount of capital transfer, only if it has a positive and certain value, i.e., when it may really be recognised as a claim in national accounts. The notion of 'recognized claim' is referred to in several commercial accounting texts (notably in IPSAS 19). If the value of the claim is uncertain and held towards a corporation that is in financial difficulties or loss-making, a capital transfer for the full amount called must

(268) For public corporations, the paragraph 25 above states that in any case no claim is recognised.

(269) It could be possible only if there would be a strong expectation to receive some amounts, the guarantor having access to the liquidation value of the company.

be recorded. Any amount later reimbursed by the guaranteed unit to government is recorded as a capital transfer revenue of government at the moment of reimbursement.

**Decision tree for guarantee cash calls**




## 7.4.3 Standardised guarantees

### 7.4.3.1 TREATMENT IN NATIONAL ACCOUNTS

#### 7.4.3.1.1. General principle

45. In national accounts the treatment of standardised guarantees is based on the analogy with non-life insurance. The treatment is described in ESA 2010, chapter 16 Insurance (and in 2008 SNA chapter 17 Cross-cutting and other special issues).

46. The treatment of non-life insurance in national accounts is based on the assumption that the unit providing such standardised guarantees will be acting commercially, i.e., with the aim to make a profit. However, it might happen that the size of the premiums and/or the investment income would not cover an exceptionally high level of claims. In the EU, insurance activity is closely regulated by Supervision Authorities in order to prevent such situations[270]. However, granting only standardised guarantees is not as such considered a core insurance activity subject to the EU regulation and supervision.

47. Therefore it would not be totally unlikely that an EU government could grant standardised guarantees for commercial purposes, even if it is doubtful that it will compete with non-government units in this activity. As a matter of principle, if such guarantee activity may be profitable, it would rather be carried out only by non-government units. However, from a theoretical point of view, if this was observed, i.e., government charging fees deemed to be 'economically significant' covering most of the expected calls

[270] See Directive 2009/138/EC (Solvency II).

plus the administrative costs,[271] it would result in a treatment in national accounts similar to non-life insurance as mentioned above.

48. When government grants standardised guarantees an AF.66 liability is recorded in its balance sheet. It is equal to the present value of the expected calls under the guarantees, net of any recoveries that the guarantor could expect to receive from the defaulting borrowers[272]. In setting up such a liability there is some analogy with recording a provision in a business accounting framework (including IPSAS), which requires making reliable but prudent estimates on the basis of evidence such as past experience, or forecasts in case of a new activity.[273] As such, these expectations are not necessarily linked to the market (profitable) or non-market nature of this specific guarantee activity. If government charges fees under the conditions mentioned in previous paragraph (to cover for government of providing the guarantees), there will be an entry in the financial accounts equal to the fees received less the calls of existing guarantees. Therefore the counterpart of the liability is a cash payment (part of the fees retained to build up reserves and part of the revenue of investments not used to pay claims).[274]

49. If government charges no fees or at a level far from covering the total costs of the scheme for government[275], the counterpart of the incurrence of this liability is not a flow of cash but is a non-financial transaction, i.e., a transfer from government..

#### 7.4.3.1.2. Recording a special liability in the case of non-commercial activity

50. From a practical point of view, each time a principal amount of loans (covering multiple debtors) granted by financial institutions and covered by a government standardised guarantee scheme during a given period, a certain percentage would be recorded as an AF.66 liability in government's balance sheet, with a capital transfer as counterpart for the AF.66 liability amount net of any fees collected.[276] In national accounts this capital transfer benefits the policy holders (thus holders of the AF.66 asset), i.e., the financial institutions which grant the loans and have a contractual recourse to the guarantor government, rather than the borrowers. Of course borrowers benefit from the existence of the guarantee scheme organised by government for them but they are not the main economic beneficiaries. The capital transfer may be analysed as an anticipation of the net cost of the expected calls. Because of their assumed likelihood, there is conceptually an impact at inception in government accounts as, by definition, government is expected to lose money in the scheme.

51. When a call on a guarantee is made and paid, there is no impact on government net lending/ borrowing (B.9). The provision AF.66 could be equal to the full amount of a loan (such a 100 % risked loan would never be granted) and may be re-adjusted. It seems useful to keep the information on the total amount of loans (or other assets) that are covered by a government standardised guarantee, similarly to the case of one-off guarantees.

52. The recording of the liability AF.66 is, in 2008 SNA paragraph 17.223, conditional on recognition of a provision in the own accounts of the government units (based on an accounting framework different from national accounts). National accountants should record this liability on the basis of the estimates made by government. As a principle, national accountants should not diverge from this estimate, as it is doubtful that they could themselves be in a better position to make reliable estimates of expected losses. It must also be pointed out that, under public accounting rules such as IPSAS or equivalent, which are increasingly being adopted by government units, the setting up of adequate provisions for any

[271] Note that, in this case, the government unit engaged in this activity could be considered a financial quasi-corporation (under the conditions set up in ESA 2010 chapter 2 (Units and grouping of units) and in Part 1 of this Manual (Delimitation of the general government sector), and thus classified outside government sector, so that only flows between this unit and government would appear in government accounts.

[272] This refers to the possible late repayments that a debtor could make after the guarantee had been called. The debtor may be still legally committed but, in many cases, for various reasons, its debt may be irremediably considered fully unrecoverable after the activation of the guarantee.

[273] Note that in 2008 SNA and ESA 2010 it is called 'provisions for calls under standardised guarantees' but it must be stressed that it is not similar to provisions in Business accounting which are recorded only in the accounts of the unit setting up the provisions whereas, in national accounts, it is considered a financial instrument and thus recorded both as liability (in guarantor accounts) and reciprocally as asset (in the accounts of policy holders).

[274] It may be 're-adjusted' by other change in the volume when the expectations of claims (calls) on the entire risk portfolio are re-estimated upwards or downwards.

[275] This situation is considered in 2008 SNA (see paragraph 17.223) rather than in ESA 2010.

[276] It is recorded as a capital transfer, and not a current transfer, because the AF.66 provision is built up for the future defaults (and not defaults observed during the current year) and represents the anticipation of call of guarantees following debtors' defaults, which, under ESA 2010, are recorded as capital transfer (see ESA 2010 paragraph 4.165 (f)).

risky activity is a strong requirement, provided that it is possible to make reliable estimates of the impact of the risk.[277]

53. However, not all governments have adopted in their public accounts (and this is specifically relevant if one considers all sub-levels of the general government sector) accounting framework which impose to record provision for future risks. One could expect that EU Member States where central government would directly grant standardised guarantees would have such framework. Where it is not the case, for comparability reasons, national accountants should consider whether they have sufficient elements, such as similar schemes in other Member States, in order to estimate the AF.66 liability, after discussing with Eurostat. However, totally new schemes, with very specific features, might raise some difficulties.

54. The liability could be revised upward in case the risk of default would be further estimated higher and, by consistency with the treatment at inception, a new capital transfer would be recorded under similar conditions, if it assumed that this would be observed for all existing loans portfolio and not only for the new loans which could show a specific default rate. Under another case, the risk could be lower than expected and the liability could be downward adjusted, first by an imputation on the capital transfer related to new operations in the year and, for any excess, by a reverse capital transfer. However, Eurostat recommends that the downward adjustment should take place only when the improvement in the recovery of the claim is observed over a rather long period and is considered to be quite irreversible. It might also happen that government would have to face guarantee calls higher than the 'provisions' set in advance at the time the loans were granted. This should be recorded as a new capital transfer. Government will have also in this case to reconstitute the provision for the remaining portfolio of loans under a new capital transfer.

#### 7.4.3.2 RATIONALE OF THE TREATMENT

55. The reasons why such guarantees should be treated in national accounts similarly to non-life insurance are given in ESA 2010 (see ESA 2010 paragraph 5.190 and following) and in 2008 SNA (chapter 17 Cross-cutting and other special issues, Part 3: The treatment of standardizes guarantees in the SNA). The small individual amounts covered by the guarantees and the repetition of similar features a large number of times, explains the focus on the global treatment of the total guaranteed amount rather than the individual level, which is not managed directly by the guarantor. The purpose of such government standardised guarantees is generally to implement a public interest policy for a large number of potential beneficiaries, while, generally, one-off guarantees are linked to the specific situation of individual entities or small groups of units.

56. ESA 2010 paragraph 5.192 explains that standardised guarantees are usually provided by financial corporations in S.12 but can also be granted by government. The former are provided on a commercial basis. The methodology was created to work similarly to non-life insurance. Government involvement will be for public policy reasons rather than on a commercial basis. The ESA category is adopted for all sectors of the economy, with some adaptation of the recording for government due to its non-market nature.

57. In the case of government's standardised guarantees, fees paid by the beneficiaries are often not fixed in order to cover all or almost all costs of the scheme, as mentioned in 2008 SNA paragraph 17.223. Government does not aim for a neutral impact on its income statement by fixing the fees at a level where, on a time-equivalence perspective, they should cover most, if not all, the expected defaults on the underlying assets by its own resources. Government intervention through standardised guarantees schemes takes place in the context of policies of which the objective is to improve market access for some specific categories of economic agents. In this regard, one can expect an unrequited transaction element behind such arrangements.

## 7.4.4 Accounting examples

**One-off guarantees: rule of 3 successive calls**

Government grants a guarantee of 100 to a public corporation for a debt under the form of loan AF.4 (no fee charged by government).

[277] Usually this depends on two parameters: 'Probability of default' and 'Loss given default'. However, it may happen that auditors would not request for provisioning, in case the impact is deemed rather negligible for the unit and if the uncertain time of the possible future impact would rather take place in a distant future.

1) At inception, there is no reason to consider that the guarantee will be automatically called. There is thus no record in government accounts. The guarantee is a contingent asset (by simplification, interests on the debt are not shown in the example).

**General government**

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| | | |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | | |

**Public corporation**

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +100 | F.4 | +100 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 100 | AF.4 | 100 |

2) In year *t*, there is a call of the guarantee for 10. It is similar in year t+2 (while in t+1 no guarantee is called).

**General government**

**Opening balance sheet**

| A | | L |
|---|---|---|
| | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | -10 |
| B.9 | –10 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +10–10 | F.3 | +10 |
| | | B.9 | –10 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.3 | 10 |

**Public corporation**

**Opening balance sheet**

| A | | L |
|---|---|---|
| | AF.4 | 100 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | 10 |
| B.9 | +10 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +10-10 | F.4 | –10 |
| | | B.9F | +10 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | AF.4 | 90 |

3) In year t+3, there is a third call of guarantee for the remaining part 80. Government issues debt securities of 10 and a loan of 70 to cover this call.

**General government**

**Opening balance sheet**

| A | | L |
|---|---|---|
| | AF.3 | 20 |

**Public corporation**

**Opening balance sheet**

| A | | L |
|---|---|---|
| | AF.4 | 80 |

**General government**

**Non-financial account**

| U/ΔA | | R/ΔL |
|---|---|---|
| | D.9 | –80 |
| B.9 | –80 | |

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| F.2 | +80–80 | F.3 +10 |
| | | F.4 +70 |
| | | B.9F –80 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | AF.3 | 30 |
| | AF.4 | 70 |

**Public corporation**

**Non-financial account**

| U/ΔA | | R/ΔL |
|---|---|---|
| | D.9 | 80 |
| B.9 | +80 | |

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| F.2 | +80-80 | F.4 –80 |
| | | B.9F +80 |

**Closing balance sheet**

| A | | L |
|---|---|---|
| | | |

**Reclassification as government debt at inception**

Government grants a guarantee of 100 to a public corporation for a debt under the form of bullet bonds (AF.3), no fee charged by government.

1) At inception, there is strong evidence (corporation with negative own funds, repayment commitment taken by government, etc.) that the debt would be repaid by government. The debt is thus considered at inception as government debt (by simplification, interest on the debt are not shown in the example).

**General government**

**Non-financial account**

| U/ΔA | | R/ΔL |
|---|---|---|
| | D.9 | –100 |
| B.9 | –100 | |

**Public corporation**

**Non-financial account**

| U/ΔA | | R/ΔL |
|---|---|---|
| | D.9 | 100 |
| B.9 | +100 | |

**General government**

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| | F.3 | +100 |
| | B.9F | –100 |

**Public corporation**

**Financial account**

| ΔA | | ΔL |
|---|---|---|
| F.2 | +100 | F.3 +100–100 |
| | | B.9F +100 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.3 | 100 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 100 | | |

2) At final maturity, the public corporation is in a position to repay by itself 10 out of a principal repayment of 100.

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 90 | AF.3 | 100 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | 10 |
| B.9 | +10 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +10–100 | F.3 | –100 |
| | | B.9F | +10 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.3 | 0 |

**Public corporation**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 10 | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | –10 |
| B.9 | –10 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –10 | | |
| | | B.9F | –10 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | | |

**Government guarantee on losses related to problematic assets**[278]

1) In year *t*, for a nominal value of problematic assets of 100, losses on these assets are reliably estimated at 70. The guaranteed amount is recorded as government expenditure (D.9) and a liability (F.8) of government. Problematic assets remain in the accounts of the financial institution.

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | -70 |
| B.9 | –70 | | |

**Financial institution**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.3 | 100 | AF.3 | 100 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | 70 |
| B.9 | +70 | | |

[278] See chapter 4.5 Financial defeasance for the definition of the problematic assets.

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.8 | +70 |
| | | B.9F | –70 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.8 | +70 | | |
| | | B.9F | +70 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.3 | –70 | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.8 | 70 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.3 | 30 | AF.3 | 100 |
| AF.8 | 70 | | |

2) In year t+1, government transfers cash to the financial institution, which has to repay 70 on its debt. Government needs to borrow on markets.

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.8 | 70 |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | (+70-70) | F.8 | –70 |
| | | F.3 | +70 |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.3 | 70 |

**Financial institution**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.3 | 30 | AF.3 | 100 |
| AF.8 | 70 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | (+70–70) | F.3 | –70 |
| F.8 | –70 | | |
| | | B.9F | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.3 | 30 | AF.3 | 30 |

3) Alternative: in year t+1: the financial institution has to redeem its debt for 70. The problematic assets are sold for 40, so the realised loss on the assets is 60 (instead of the earlier estimate of 70). Cash amount is transferred by government (from borrowing on markets).

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.8 | 70 |

**Financial institution**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 0 | AF.3 | 100 |
| AF.3 | 30 | | |
| AF.8 | 70 | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | +10 |
| B.9 | +10 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | (+60–60) | F.8 | –60–10 |
| | | F.3 | +60 |
| | | B.9F | +10 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.3 | 60 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | –10 |
| B.9 | –10 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +60+40–70 | F.3 | –70 |
| F.8 | –60–10 | | |
| F.3 | –40 | | |
| | | B.9F | –10 |

**Revaluation account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.3 | +10 | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 30 | | |
| AF.3 | 0 | AF.3 | 30 |

**Standardised guarantees: case with no fees charges by government**

Government grants a guarantee to loans granted by some financial institutions (no fee charged by government — government is not acting on a commercial basis and, should fees be perceived, they would at best cover only administrative costs).

At inception of the loans, government set up a liability (provisions for calls under standardised guarantees (AF.66)) on the basis of an estimated expectation that 20 % of the loans will result in a cost of 20 for government for any granted amount of 100 (for simplification, the costs of production of such guarantee are here considered nil).

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | D.9 | –20 |
| B.9 | –20 | | |

**Financial institution**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 100 | | |

**Non-financial account**

| UΔ/A | | | R/ΔL |
|---|---|---|---|
| | | D.9 | 20 |
| B.9 | +20 | | |

**General government**

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | F.66 | +20 |
| | | B.9F | –20 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.66 | 20 |

**Financial institution**

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –100 | | |
| F.4 | +100 | | |
| F.66 | +20 | | |
| | | B.9F | +20 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.66 | 20 | | |
| AF.4 | 100 | | |

In year *t*, there is a call of guarantee due to debtor default (here of 20); government issues bond for the needed cash

**General government**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| | | AF.66 | 20 |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +20–20 | F.66 | –20 |
| | | F.3 | +20 |
| | | B.9F | 0 |

**Other changes in volume of assets account**

| ΔA | | | ΔL |
|---|---|---|---|
| | | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| | | F.3 | 20 |

**Financial institution**

**Opening balance sheet**

| A | | | L |
|---|---|---|---|
| AF.66 | 20 | | |
| AF.4 | 100 | | |
| AF.2 | 0 | | |

**Non-financial account**

| U/ΔA | | | R/ΔL |
|---|---|---|---|
| | | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | +20 | | |
| F.66 | –20 | | |
| | | B.9F | 0 |

**Other changes in volume of assets account**

| ΔA | | | ΔL |
|---|---|---|---|
| AF.4 | –20 | | |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.4 | 80 | | |
| AF.2 | 20 | | |

## 7.5 Keywords and accounting references

| | |
|---|---|
| Debt assumption, debt cancellation, write-off | ESA 2010, 5.36-5.39, 6.14 |
| Other capital transfer | ESA 2010, 4.164-4.167 |
| Contingent asset/liability | ESA 2010, 5.08-5.11 |

# 8 Measurement of general government debt

## 8.1 Overview

1. The 2012 consolidated Treaty on the Functioning of the European Union (TFEU) provides a specific definition of government debt for the Excessive Deficit Procedure (EDP). It is fully coherent with ESA 2010 concerning the definition of the government sector and the definition of the liabilities covered. However, EDP government debt valuation differs from ESA 2010 valuation rules because it is measured at face value.
2. For EDP purposes (see Council Regulation (EC) No 479/2009), the nominal value is considered equivalent to the face value of liabilities (also referred to as 'value at par'). The valuation in ESA 2010 balance sheets is the market value for most categories but also nominal value, where appropriate.
3. However, confusingly, the nominal value referred to in ESA has a different definition to that in the Regulation mentioned above. ESA 2010 paragraph 7.39 specifies: *nominal valuation reflects the sum of funds originally advanced, plus any subsequent advances, less any repayments, plus any accrued interest. Nominal value is not the same as face value*.
4. In simple terms, for a debt security, the ESA 2010 nominal value is equal to the issue price (above or below par, any premium or discount being spread over the lifetime of the instrument) plus any interest that has accrued but not yet been paid (interest is typically paid regularly — annually or every six months — or only at time of redemption, as is the case for short-term debt instruments).[279]
5. Government debt is also referred to as EDP or Maastricht debt. The debt is measured gross, in the sense that financial assets are not netted-off. It is consolidated, both at the level of the sector and at the level of the subsectors, so that any liability of general government units that is an asset of another general government unit does not add to the general government total.
6. Chapter 8.3 discusses swaps and the treatment of currency swaps, as they have an impact on the measurement of government debt. This chapter also covers the case of 'off-market swaps', which do not have a nil market value at inception, so that a loan component must be identified.
7. Finally, chapter 8.4 covers financial transactions named 'repurchase agreements' and 'securities lending', which, under certain circumstances, may have an impact on government debt.

[279] For instance, a 2-year debt instrument with a face value of 100 but issued with a discount of 4 will be recorded for 96 at inception, then 98 after one year. Similarly, a 2-year debt issued with a premium of 4 will be recorded for 104 at inception, then 102 after one year.

# 8.2 The calculation of general government debt

## 8.2.1 Measurement of liabilities in ESA 2010

1. There is no definition of government debt in ESA 2010. In ESA 2010, the core equivalent concept is total financial liabilities, which involve a wider list of financial instruments than included in government debt.

2. The relevant paragraphs on valuation of government liabilities are:

   ESA 2010 paragraph 1.94: *Flows and stocks shall be measured according to their exchange value, i.e. the value at which flows and stocks are in fact, or could be exchanged for cash. Market prices are ESA's basic reference for valuation*.

   ESA 2010 paragraph 7.33: *Assets and liabilities are valued at the market prices on the date to which the balance sheet relates*.

   The stock of liabilities in the closing balance sheet of the general government sector (S.13) should be recorded in national accounts at their market value at the end of the accounting period.

3. This stock of government liabilities under ESA 2010 includes all liabilities in the following financial instruments: monetary gold and special drawing rights (F.1)[280], currency and deposits (AF.2), debt securities (AF.3), loans (AF.4), insurance, pensions and standardised guarantee schemes (AF.6), financial derivatives (AF.7) and other accounts payable (AF.8). For some specific types of units classified in the government sector it could also include equity (AF.5).

   Stock of government liabilities under ESA 2010 (at the end of the year) =

   = AF.1 + AF.2 + AF.3 + AF.4[281] + AF.6 + AF.7 + AF.8 + AF.5 (if any)[282]

4. Trade credits liabilities of the general government with long-term original maturity (more than one year according to ESA 2010 paragraph 5.A1.14 definition) are classified as loans in application of ESA 2010 paragraph 20.132.

## 8.2.2 Government debt for EDP purposes

### 8.2.2.1 COVERAGE OF GOVERNMENT DEBT FOR EDP PURPOSES

5. For the purpose of the Excessive Deficit Procedure in the Economic and Monetary Union (EMU), as well as for the Growth and Stability Pact, the current Protocol 12, annexed to the 2012 consolidated version of the Treaty on the Functioning of the European Union, provides a complete definition of government debt: *debt means total gross debt at nominal value*[283] *outstanding at the end of the year and consolidated between and within the sectors of general government*.

   This definition is supplemented by Council Regulation (EC) No 479/2009, as amended by the Commission Regulation (EU) No 220/2014 (which only updated references to ESA 2010 instruments) specifying the components of government debt with reference to the definitions of financial liabilities in ESA 2010.

   In this context the stock of government debt in the Excessive Deficit Procedure (EDP debt) is equal to the sum of liabilities at the end of the year in the following categories of all units classified within the general government sector (S.13):

   AF.2 (currency and deposits) + AF.3 (debt securities) + AF.4 (loans))

---

[280] In ESA 2010, F.12 (included in this item) — special drawing rights — are recognised as both assets and liabilities. For EU Member States, F.12 usually appears in central bank's balance sheet but SDRs may also be allocated to government.

[281] According to the Eurostat decision of 31 July 2012, all trade credits granted to a government unit refinanced by financial institutions without recourse (notably under factoring operations) or restructured (renegotiated with some new features) are reclassified as loans.

[282] AF.5 could occur usually in the case of the classification of non-market public enterprises within the government sector (see Part 1 Delimitation of the general government sector).

[283] The nominal value is to be assimilated to the face value in Council Regulation (EC) No 479/2009.

## Box 1 – Coins issued by government

As stated in Box 5.2 *Currency issued by the Euro system* in ESA 2010, by convention for the Members States of the euro area, these currencies are treated as liabilities of the central bank (S.121), financial instrument currency (AF.21), although coins issued are in most cases liabilities of central government (S.1311).

As a counterpart, the central bank holds an asset, and the central government incurs a liability, which is recorded, by convention, as another deposit (AF.29).

EU Member States, which have not joined the euro area, may record coins issued by government as liabilities (AF.21) of central government if they are effectively issued by this subsector. However, if coins issued by government are recorded in national accounts for some reasons as liabilities of the central bank, then for the consistency with the euro area Member States, it is recommended to record the financial instrument between the central bank and the central government as other deposit (AF.29).

6. It should be noted that long-term trade credits and advances[(284)] contracted (granted to) or provided by entities classified inside government, independently of the goods or services concerned[(285)], should be recorded as long-term loans AF.42 and not as trade credits AF.81 following ESA 2010 paragraph 20.132.[(286)],[(287)]

   Indeed, according to ESA 2010 paragraph 20.132 *financing presented as long-term trade credits or accounts receivable/payable arrangements are to be classified as loans, because these involve the provision of long-term financing to the benefit of the borrowing party that is distinguished from a treasury facility that sellers commonly provide buyers with short-term trade-credit. In extending the maturity of the payment obligation considerably, the constructor assumes a financial role that is separate from its other activity of producer*.

7. Note that in ESA 2010, the time classification is based on the maturity agreed at inception by parties. This must be distinguished from the common meaning of 'arrears' which correspond to trade credits which have not been repaid at the initial agreed maturity.

8. The existing amounts of such long-term trade credits is not expected to be considerable, notably in the context of Directive[(288)] 2011/7/EU of the European Parliament and of the Council of 16 February 2011 on combating late payment in commercial transactions, which states that public units, in their commercial relations, should pay in a maximum period of 60 calendar days, and that interest should be charged if the payment does not occur within the limit period.

9. While ESA 2010 paragraph 5.239 indicates that the trade credits and advances can be short-term or long-term[(289)], this is not applicable when government is the counterpart following ESA 2010 paragraph 20.132. It should be noted that Directive 2011/7/EU makes the same or similar distinction between 'public authorities' and 'undertakings'[(290)].

### 8.2.2.2 VALUATION OF GOVERNMENT DEBT FOR EDP PURPOSES. THE NOMINAL VERSUS FACE VALUE

10. In Council Regulation (EC) No 479/2009 (EDP Regulation), the nominal value is considered equivalent to the face value of liabilities (article 1). The face value is commonly defined (e.g. in statistical manuals, for instance ESA 2010 paragraph 5.90(d)) as the amount, contractually agreed, that the government will have to refund to creditors at maturity. It is also generally on this amount (the principal) that the interest is calculated.

11. This definition of nominal value retained by Council Regulation (EC) No 479/2009 deviates from the ESA

(284) At original maturity.
(285) Including military goods and services.
(286) It should be noted that this concerns only long-term trade credits and not other long-term accounts payable, which in general are not to be treated as AF.42.
(287) Consistent recording should be applied in the counterpart sector of those transactions involving government when compiling financial accounts of the whole economy.
(288) The Directive foresees that public authorities have to pay for the goods and services that they procure within 30 calendar days or, in very exceptional circumstances, within 60 calendar days. Businesses have to pay their invoices within 60 days, but can choose a longer payment term as long as it is expressly agreed in the contract and provided that it is not 'grossly unfair to the creditor'.
(289) According to ESA 2010 paragraph 5.239 Trade credits and advances may be divided by original maturity into short-term and long-term trade credits and advances.
(290) The Directive 2011/7/UE term 'undertakings' is synonymous of the word 'corporations' used in ESA 2010.

2010 nominal value definition. In contrast to ESA 1995, which did not define nominal value in statistical terms, ESA 2010 defines nominal value in paragraph 7.39 the following way:

*Nominal valuation reflects the sum of funds originally advanced, plus any subsequent advances, less any repayments, plus any accrued interest. Nominal value is not the same as face value….*

12. With respect to face value, it should be furthermore specified for:

- deposits (or assimilated instruments classified in AF.2, such as non-negotiable notes): the face value includes interest accrued when it is deemed 'capitalised'. Capitalisation can be presumed when interest[291]:
  - is undistinguishable from the principal;
  - is actually credited to the holder (e.g. appearing in the bank statement or equivalent);
  - is legally acquired;
  - is added to the principal, or
  - is bearing interest[292].

  When interest accrued is available for withdrawal at any time by the creditor, the part of interest that can be cashable is deemed capitalised, because the creditor is considered to have made a deliberate reinvestment decision, and, accordingly, the face value is then equal to this encashment value;
- index-linked bonds: the face value corresponds to the (initial) face value adjusted by the index-related capital uplift accrued to the end of the year (with often a guaranteed minimum redemption value), as foreseen by Council Regulation (EC) No 479/2009, article 1. This applies to bonds that are indexed on either a 'general price index' or a 'narrow index'.[293] Bonds that pay a unique lump-sum (at termination) indexed on an indicator and that are advertised as 'capitalised interest bonds' are to be treated as index-linked bonds;
- zero-coupon bonds (treasury bills, for example): the face value is the redemption value. Bonds that pay a unique pre-fixed lump-sum (at termination) and that are advertised as 'capitalised interest bonds' are to be treated as zero-coupon bonds;
- bonds with capitalised interest, which are instruments that pay a unique lump-sum (at termination date) that is neither pre-fixed nor indexed: the face value is the issue value plus the capitalised interest, similarly to the recording of indexed-linked bonds, to be capitalised period by period according to the formula included in the contract. This value will differ, during the lifetime of the bond, from the redemption value, given that the latter is not known until redemption;
- stripped bonds: stripping of coupon and principal does not modify the face value of the original bond.[294] The reverse of stripping ('restriping') is also possible;

[291] It is thus likely that in many cases the face value on deposits or assimilated instruments will coincide with the ESA 2010 definition of nominal value, as interest accrued will often meet the criteria for being considered capitalized.

[292] In some cases, the encashment value of Treasury certificates is steeply curved towards maturity — so to encourage holding to maturity. In such case, the distinction of whether interest bears interest or not is not applicable and the encashment value is, for such instruments, the face value. Following chapter 2.4 paragraph 72, compilers may decide to record within D.41 the change in encashment value so that, face value and ESA nominal value would coincide. On the contrary, when they decide to spread (linearly or, more correctly, exponentially) the expected D.41 over the lifetime of the bond, the face value would be somewhat lower than the ESA nominal value during the life of the instrument.

[293] ESA 2010 paragraph 4.46 (c) states that the change in the value of the principal outstanding between the beginning and the end of a particular accounting period due to the movement in the relevant index is treated as interest accruing in that period, in addition to any interest due for payment in that period. This should apply only for linkage to a general price index ('broad index') and not for an index referring instrument or commodity ('narrow index'). In the latter case, holding gains might be recorded, for a part of the change (see chapter 2.4 of this Manual), i.e., theoretically the change in the index which was not anticipated at inception. This distinction is not mentioned in the EDP Regulation. However, ESA 2010 paragraph 5.94 indicates that debt securities with both principal and coupon linked to a foreign currency are classified as denominated in that foreign currency. In other words, the change in the value of national currency of the instrument denominated in foreign currencies is treated as nominal holding gains. Thus, the issue on narrow index would concern reference to a commodity (such as gold) or a given financial instrument (such as a given share).

[294] When a government unit intervenes on the secondary market and buys separately a stripped coupon or a stripped principal (from a bond issued by government), the consolidation process requires a specific valuation of these strips. The valuation is to be based, in principle, on the face value of the original bond appropriately apportioned amongst the remaining strips in circulation (i.e., the elements of strips that still have to be repaid). A pro-rata of the observed ESA nominal value, or alternatively the observed market value, of each strip existing at that time (see also sub-section II.4.3.8 Stripped bonds) could be used. It is not appropriate if face value of each element of strip to be used for consolidation purposes is equal to the redemption value (like in a normal zero-coupon bond), because in such case, the face value of any debt could be fully extinguished by merely buying back the stripped principal. In practice, when repurchased strips are limited in amounts, consolidating them for their market value, or for a market value adjusted by a coefficient, may be an acceptable approximation.

- financial leasing: debt includes the imputed loan, which at inception is equal to the gross fixed capital formation.

### 8.2.2.3 ACCRUED INTEREST

13. In national accounts, interest is recorded when accruing. Therefore, whether or not it is actually paid, accrued interest affects net lending/borrowing (B.9).

14. Under ESA 2010, accruing interest is continuously added to the value of the instrument in the balance sheet. That value is reduced when the interest is actually paid. The ESA nominal value contains the stocks of accrued interest.

15. Under the EDP provisions, government debt is measured at nominal value (according to the Treaty), which is assimilated to the face value, as mentioned above, by the EDP Regulation, and not to the ESA 2010 nominal value. Accordingly, accrued interest is not recorded under the corresponding debt instrument, unless it is deemed capitalised.

### 8.2.2.4 DEBT IN FOREIGN CURRENCY

16. In national accounts, liabilities denominated in foreign currencies are converted into the national currency at the representative spot market exchange rate prevailing on the last working day of each year. The derivatives instruments which can relate to them (exchange rate risk hedging, notably) are recorded separately. However, the Council Regulation (EC) No 479/2009 states that if a liability denominated in foreign currency is exchanged through contractual agreements to one or more other foreign currencies, it must be converted into the other foreign currencies at the rate agreed upon in those contracts and then converted into the national currency according to the general rule (stated in the previous paragraph).

17. The same principle applies in the case of debt denominated in national currency swapped into a foreign currency. This principle implies that liabilities denominated in a foreign currency and exchanged through contractual agreements to the national currency are converted into the national currency at the rate agreed upon in those contracts.

### 8.2.2.5 THE CHANGE IN GOVERNMENT DEBT

18. The change in government debt between two points in time (e.g. between the end of year N and the end of year N-1) is equal to the issuance in year N of new liabilities (in F.2, F.3, and F.4) minus redemption — and to other changes in the volume (K.5 and K.6) of debt liabilities. With the exception of the cases of index-linked debt and unhedged debt in foreign currency, valuation effects have no impact on government (EDP) debt. As government debt is recorded on a consolidated basis, it may also change because of transactions between holders classified within the government sector and holders belonging to other sectors (including the rest of the world).

**The EDP notification tables**

19. In the EDP notification tables filled in by the EU Member States, sent twice a year to the European Commission, Table 3 describes the link between government net lending/borrowing (B.9) and the change in government debt. Analytically, an increase in government debt should be viewed as due to two main factors:

- the net lending/borrowing of general government (B.9);
- the net acquisition of financial assets by general government (flows recorded in the financial account).

20. Some adjustments have to be made to obtain the final change in government debt:

- to other flows (other changes in volume of debt liabilities, holding gains and losses — in particular due to foreign currency debt);

- to the EDP definition: exclusion of non-EDP financial liabilities (mainly accounts payable and financial derivatives), corrections from interest accrued to interest paid and, for debt securities, from transaction value to face value. The last mentioned is the difference between the redemption price and the nominal value, taking account of the fact that the redemption price may include the payment

of accrued interest. So, the difference to the nominal value must be calculated by deducting from the redemption price the part corresponding to the payment of accrued interest (repurchase coupon).

21. Finally, a statistical discrepancy should be identified, mainly due to the discrepancy between the financial and non-financial accounts (existing in practice).

Change in government (consolidated) debt =

(–) net lending/net borrowing

+ net acquisition of financial assets (F.1+F.2+F.3+F.4+F.5+F.6+ F.7+F.8)

+ adjustments (to other flows and to EDP definition of government debt)

+ statistical discrepancies

## Box 2 – Treatment of negative interest

### Introduction

Under rather exceptional circumstances, negative interest rates can be observed.

### Background

The countries facing negative interest rates are those with a rather high international rating, a liquid debt market, and benefiting from favourable anticipations by investors.

In theory, an interest payable could be distinguished into the following components:

- risk free rate;
- risk premium;
- service of the issuing government towards the investor.

The risk premium is absent when interest rates are negative. The service component refers to acting as a safe haven for the investors.

### Treatment in national accounts

First, distinguishing a service component in the interest on debt securities would create severe problems. One should — for consistency reasons — distinguish this element also in case of positive rates. Secondly, estimating the value of the service component within the amount of interest would constitute a major problem and would necessitate a specific algorithm. Thirdly, the amounts of negative interest are deemed to be exceptional and fairly small. Therefore, a service component should not be distinguished.

The total amount of negative interest should be seen as negative interest payable by government and as negative interest receivable with the investors. Therefore, negative and positive interest flows under these government instruments should be netted.

Treasury paper is issued at a negotiated price whereas the redemption value is set in the conditions of the issue. In most cases, the redemption value equals 100 %. If the interest rate offered by government is positive, the issuance is at a discount and if the interest rate is negative, the issuance is with a premium.

In practice, the amount of the negative interest can be calculated as the difference between the issue price above par and the redemption value.

# 8.3 Recording of swaps

## 8.3.1 Overview on swaps

1. The main classes of derivatives are swaps, options and futures, but there are many types of derivatives in each class and even products made up of combinations among the classes (see ESA 2010, chapter 5 Financial transactions). This chapter focuses on swaps because these are the type of derivatives most used in the context of public debt management.

2. A swap is a legal agreement between two parties to exchange periodic payments over a defined period in the future. On one hand, they are used by some economic agents to hedge a risk linked to a market variable such as an interest rate or an exchange rate on an underlying financial instrument (like an issued bond) but, on the other hand, they also allow agents to materialise their own anticipations with generally a significant leverage effect. The banking industry is very active in the swap market.

3. Swaps are used by many governments as a financial tool for risk management purposes. Concerning debt, such management may be used for hedging exchange rate risks when the debt is issued in a foreign currency, minimising the cost of the debt on the basis of the current and anticipated yield curve (change in all short-/long-term interest rates), optimising overall liability portfolio and hedging future debt instrument issuances.

4. Government debt managers may decide to use the most suitable debt management tools according to their objectives and constraints. It is frequent to distinguish 'micro-hedging', attached to a particular debt instrument, from 'macro-hedging', linked to a more global risk exposure coming from a set of debt instruments. Risk management may also cover the assets' side, notably when government units place themselves at risk exposure for liquidity investments. As regards risk management, in substance, public debt managers in Ministries of Finance or in dedicated agencies might not fundamentally act differently from financial/treasury corporate managers.

5. A very common 'vanilla' type is 'interest rate swaps' (IRS), where parties agree to exchange flows of interest. In many contracts, one party agrees to pay to the other a fixed rate of interest in exchange for a variable rate of interest (plus, possibly, a constant spread depending on market conditions). The payments may be on any timescale but are commonly semi-annual or annual. They may be different for each leg of the swap and net settlements are frequent where applicable.

6. At inception, the obligations due by both parties are balanced (except in the case of off-market swaps), which is frequently referred to as a 'par swap' with a nil value. Over the life time of the contract, as the market conditions will change (e.g. the floating rate), one party may potentially make a gain and, symmetrically, its counterparty a loss. Thus, the swap shows a negative value (referred to as 'out of the money') for one party and a symmetrical positive value ('in the money') for the counterparty.

7. A great number of interest rate swaps contracts cover an exchange of 'fixed-for-floating' in the same currency which appears to be the standard type of transaction. During recent decades, many other types of swaps have appeared on markets, such as 'basis swaps' ('floating-for-floating'), inflation swaps (payments in one leg depending on change in a price index), amortising swaps (declining notional amount), asset swaps (conversion of cash flow from an underlying instrument), constant maturity swaps (periodical rest of interest on one leg), total return swaps (exchange of revenue and risks on assets), commodity swaps (floating price against fixed price) and range accrual swaps.

8. One could also add 'debt equity swaps', 'equity swaps', 'dividend swaps', etc. The various types listed (as illustrative) do not seem to be used by government units on a large scale, notably by managers of central government debt or treasury. They might however be observed for public corporations included in the government sector.

9. In addition, there was a huge development of swaps related to credit risk, such as credit default swaps (CDS), which are in substance an insurance mechanism against creditors' default events (see ESA 2010 paragraph 5.218). Government does not seem to take part in such transactions but CDS on sovereign debt are usually relevant market signals and are the main category of such instruments.

10. A currency swap (and close derivative instruments, see below) operates similarly. Most often they are connected to underlying loans or debt securities and parties exchange flows denominated in different currencies. They are used by debt managers which have issued debt securities in foreign currency and wish (frequently it is in fact an obligation, as no exchange risk exposure may be allowed) to hedge the currency risk to which they are exposed. There are different types of currency swaps that differ by the time of exchange of principal and the nature of involved interest rate ('fixed-for-fixed', 'fixed-for-floating').

11. The more common currency swap, with exchange of principal both at inception and at termination date, allows a borrower in one currency to fully hedge the underlying exchange risk, as if the original currency denomination has been shifted into another one. It is frequently observed that government units, not only when their domestic market is rather narrow but even in the euro area with deep and large financial markets, issue part of debt in a foreign currency (namely in US dollars, Japanese yen, British pounds or Swiss francs) for various reasons, such as enlarging the basis of investors or benefitting from a final lower cost of borrowing under some markets conditions.[295]

12. The recourse to using swaps is quite various among EU Member States, for different reasons related to internal regulations, debt strategy, structure of the debt, etc. Debt managers have different opinions about the extent to which such debt management tools — and/or risk management — may be adequate. Several purposes may be observed, as the change in the maturity of a debt, for instance by transforming a long-term debt into short-term debt, as regards the sensibility to market rates (government paying a (floating) short term rate and receiving the (fixed) long-term rate related to a given coupon or average in case of macro-hedging). The swaps may also be used in order to reduce refinancing risk, based on some specific anticipations related to change in yield curve.

13. The swaps book itself may also give rise to active management in case government has entered, or in some cases will enter, into contracts whose conditions no longer seem 'optimal' at a future point in time or following a revision in market expectations. Government may enter into a 'mirror' swap which would negatively duplicate (as much as possible) the exposure taken in a related contract, so that there would be neutralisation (or quasi) of any negative impact. In other cases (if allowed), there may be various arrangements — such as granting to a party this right permanently or only at some agreed dates over the life time of the contract — to cancel the swap.

14. Normally a swap cancellation gives rise to the payment of an indemnity from one party to the other, which is generally equal to the market value of the swap; in an interest rate swap, it is the present value of the future flows of interest which would have been exchanged (also referred to as 'freezing the swap', all variable elements of the swaps being fixed on the basis on the current conditions at the time of the cancellation). The flows are treated as financial transactions, with no impact on government net lending/borrowing. However, it may happen that the payment is spread over the remaining life time of the contract. In this case, a loan, included in government debt, should be recorded. Imputed interest on that loan will have an impact on net lending/borrowing. The recording in national accounts (amounts and time) is based on the cash exchanged between the contractors.

## 8.3.2 Treatment of debt in foreign currency under the EDP

15. Apart from foreign-exchange options and foreign futures, exchanged on an organised market or 'over-the counter,'[296] there are several categories of derivatives transactions, which have in common the exchange of principal amounts in different currencies. A foreign exchange swap contract consists of a spot sale/purchase of currencies and a simultaneous commitment to a forward purchase/sale of the same currencies. A forward foreign exchange contract consists in a commitment to transact, at a designated future date and agreed-upon exchange rate, a given amount of specified foreign currencies.

16. Currency swaps (also referred to as 'cross currency interest rate swaps', hereafter CCS) are a major traded type of transaction for exchange rate purpose by government units. In these contracts, parties exchange flows denominated in different currencies, both for principal and for interest (see also ESA 2010 paragraph 5.213). There are different types of currency swaps that differ by time of exchange of principal and nature of involved interest rate ('fixed-for-fixed', 'fixed-for-floating').

[295] For other information about swaps in national accounts, see ESA 2010 paragraphs 5.199–5.219.

[296] Following the financial crisis, notably in the context of the 'European Market Infrastructures Regulation', some OTC derivatives could be traded through 'Central Counterparty Clearing' or could be declared to 'Central Data Repositories'

17. A common case, with exchange of principal both at inception and at termination date, allows a borrower in one currency to fully hedge the underlying exchange risk, as if the original currency denomination has been shifted into another one. This is frequently observed for government units that, even in the euro area where financial markets are deep and large, issue a minor part of their debt in a foreign currency (namely in US dollars, Swiss francs and Japanese yen) for various reasons, such as enlarging the basis of investors or benefiting from a lower cost of borrowing.

18. All the flows under derivative contracts related to foreign currencies are recorded as financial transactions both in national accounts and also in the EDP statistics. As far as the measurement of stock of debt is concerned, for the EDP purposes, all the three types of contracts are subject to Council Regulation (EC) No 479/2009. These provisions are examined in detail in the following paragraphs. It is understood that, when it is the case, the amount in foreign currency initially exchanged comes from the proceeds of a given debt instrument (with any maturity) whereas the amount in foreign currency received at the term of the contract is actually used to redeem a given debt instrument, possibly different for the previous one.

19. For the purpose of the calculation of government debt for EDP purposes, it is worth describing how liabilities denominated in, or exchanged from and/or in foreign currency, are recorded. This is also referred to as 'after swaps' debt recording.

20. The conversion of debt instruments denominated in foreign currencies is needed in order to aggregate figures and estimate the total amount of 'consolidated gross government debt.' Any conversion at a point in time means the use of a given rate of exchange. It does not mean that a debt would be necessarily reimbursed for the amount resulting from the conversion at this point of time because of possible change in the future exchange rate, in a volatile environment. Thus, there would be no sense referring to the exchange rate prevailing at time the new liability incurred.

21. The Council Regulation (EC) No 479/2009 indicates that:

- *Liabilities denominated in a foreign currency, or exchanged from one foreign currency through contractual agreements to one or more other foreign currencies shall be converted into the other foreign currencies at the rate agreed on in those contracts and shall be converted into the national currency on the basis of the representative market exchange rate prevailing on the last working day of each year.*
- *Liabilities denominated in the national currency and exchanged through contractual agreements to a foreign currency shall be converted into the foreign currency at the rate agreed on in those contracts and shall be converted into the national currency on the basis of the representative market exchange rate prevailing on the last working day of each year.*
- *Liabilities denominated in a foreign currency and exchanged through contractual agreements to the national currency shall be converted into the national currency at the rate agreed on in those contracts*.

22. Thus, when a debt instrument denominated in foreign currency is swapped into national currency, the conversion into the latter must be based on the 'rate agreed upon in those contracts'. In most cases, this rate of exchange is the spot market rate prevailing at time of the transaction but this may be different (see section 8.3.3 Off-market swaps). In the course of the contract, the value of the swap will take into account the trend in the market rate of exchange between the two currencies involved in the contract.

23. In fact, debt managers may use financial derivatives not only to suppress/mitigate any exchange risk resulting from the initial incurrence of a new liability. They can also aim to reduce the final cost of borrowing. Under these conditions, they may enter swap contracts through which they modify the exchange risk exposure, benefiting from market opportunities (or failures). According to their anticipations, debt managers can swap the proceeds in one currency resulting from debt issuance into another foreign currency. In this case, the same reasoning valid for swaps into national currency should apply. The currency denomination of the debt is changed.

    In this case, a step approach has to be implemented:

    - first, the debt instrument is converted into the currency received at inception of the swap contract, on the basis of the cross-exchange rate for both foreign currencies agreed upon the contract;
    - then, the conversion into national currency is based on the current exchange rate prevailing at the end of the year for the currency resulting from the first conversion;

- in case of a 'chain of successive swaps' into different various foreign currencies, the final currency in which the debt is denominated has to be determined and the conversion into the national currency is based on the current exchange rate against this foreign currency.

24. It is clear that, where an original debt instrument denominated in a foreign currency is swapped into the national currency, flows of settlements are fixed in the contract between the parties, i.e., government on the one hand and one or several bank counterparts on the other. In the simple case where amounts and maturity of debt instrument and swaps are fully matched, government will regularly pay an amount in national currency and receive an amount in foreign currency. The latter will be used to pay interest or repay principal to the creditors/holders of the underlying debt instruments.

25. Under these conditions, it is obvious that government no longer has exchange risk exposure concerning payments for the original instruments. It has no need to use the exchange market in order to get the currency amounts linked to the debt service of the original debt. A rate of conversion has been implicitly fixed. In this case, the exchange rate agreed in the contract is more relevant than the current market one as the latter would in no way impact the debt instrument that is now insensitive to exchange market trends and volatility. Finally, for the part covered by a currency swap agreement, the debt can be considered to be transformed into national currency. This is similar to a case where the debt would have been originally issued in national currency, for the principal amount set in the contract.

26. The Council Regulation (EC) No 479/2009 also covers the specific, rather infrequent cases, where covering/modifying an exchange risk exposure is not the motive for writing a swap but would on the contrary create a currency exposure. A debt originally denominated in national currency might be swapped into foreign currency. In this case, the debt must be treated as if it were denominated in the foreign currency, on the basis of the exchange rate within the contract. For the required conversion into the national currency, the current exchange rate must be used, so that the final amount in national currency should come from the original proceeds from the issuance.

27. As a consequence, the impact of currency swaps on the debt may occur only through rates of exchange. Effectively, a basic provision ESA 2010 paragraph 6.64 states that any debt instrument denominated in foreign currency has to be converted into national currency at the current exchange rate prevailing at time of compilation of balance sheets on the basis of the 'representative market exchange rate prevailing at the dates to which the balance sheet relate' but this is not applicable for statistics for the EDP purposes. In ESA 2010 these swaps and debt instruments are recorded independently.

28. However, the EDP conversion rules only concern currency swaps based on existing liabilities, i.e., swaps 'against the book' linked to actual underlying debt instruments. Currency swaps which do not refer to existing liabilities are recorded under financial derivatives (AF.71). However, in many countries, debt managers, at least at central government level (the largest part of government debt), are not allowed (by law or other regulations) to enter into currency swaps with no reference to existing liabilities, i.e., to enter in a total risk exposure. Any currency swaps based on non-existing liabilities have no impact on the existing stock of government (EDP) debt as they are not accounted for in the calculation.

29. It is important to take note that, as long as the currency swap is based on an existing debt instrument, no restrictions are imposed for applying the above-mentioned provisions; notably, derivative contracts[(297)]:

    a) are not necessarily written at the time of the underlying debt instrument issuance, they may be implemented at any point of time; however, some debt managers are, for regulatory reasons, obliged to hedge exchange risk very shortly after an issuance;

    b) may have any maturity within issuance and maturity of the underlying debt instrument. It may happen that debt managers do not manage to enter in a CCS contract for the same maturity (and amount) of the underlying debt instrument;

    c) may set an exchange of settlements inferior to the flows of principal resulting from the underlying instrument. In the rather theoretical opposite case, any amount of CCS higher than the hedged debt instrument should be treated as a financial derivative (AF.71) for the excess value;

    d) may refer to a 'book' of debt instruments and not to a specific one, covering a risk exposure bearing on several debt instruments.

[(297)] These cases are largely hypothetical but not totally unlikely to be observed.

### 8.3.2.1 ACCOUNTING EXAMPLES

**1. Debt denominated in foreign currency swapped against the national currency**

Nominal value of debt instrument: $100.

Swap US dollar against euro: $100/€74.07 (exchange rate in the swap agreement: €1=$1.35).

Permanent valuation of the debt instrument according to the Regulation: €74.07.

Comments:

The rate of exchange of the swap contract is more appropriate than the market rate for reflecting the cost of the debt in national currency. At maturity, for receiving $100 from the swap counterpart (used for the repayment to the holder of the instrument), the issuer has to provide €74.07 with certainty.

**2. Debt denominated in foreign currency swapped against another foreign currency**

Nominal value of debt instrument: $100.

Swap US dollar against yen: $100/¥10 000 (exchange rate: $1=¥100).

New nominal value of the debt: ¥10 000.

Valuation of the debt instrument in euro according to the Regulation: €90.1

(On the basis of a market exchange rate: €1=¥111)

Comments:

The swap has changed the exchange risk. The valuation of the debt instrument depends now on the evolution of the €/¥ rate and no longer on the €/$ rate. The debt is in fact treated as if it had originally been issued in yen. At the end of each period, the debt is converted into the national currency (euro) on the basis of the market exchange rate €/¥, as the risk of exchange in yen is not covered.

**3. Debt denominated in national currency swapped against foreign currency**

Nominal value of debt instrument: €100

Swap euro against US dollar: €100/$135 (exchange rate €1=$1.35)

New nominal value of the debt: $135

Valuation of the debt instrument according to the Regulation: €96.43 (on the basis of a market exchange rate increased to: €1=$1.40)

Comments:

The liability is no longer in national currency but in foreign currency as the debtor has only to make a payment in foreign currency. Using the market exchange rate shows the effective cost of the US dollars he will have to buy (or borrow) on the market. In the example, the appreciation of the national currency reduces this cost for €3.58.

**4. 'Chain' of swaps**

Nominal value of debt instrument: $100

Swap US dollar against yen: $100/¥10 000 (exchange rate: $1=¥100)

Swap yen against Swiss franc: ¥10 000/120 CHF (rate of exchange: ¥100=CHF 1.2)

Final nominal value of the debt: CHF 120

Valuation of the debt instrument according to the Regulation: €83.92 (on the basis of a market rate of exchange: 1€=CHF 1.43)

Comments:

a. The relevant denomination of the debt in foreign currency is the final currency received at each swap inception by the issuer under a 'chain' of swaps.

b. Within the 'chain', the euro may be used in one leg of a swap. If it is at the end of the chain, then the debt instrument should be valued as in case 1 (exchange rate agreed in the swap contract). If not the case, the debt is converted into euro on the basis of the market exchange rate of the currency received

at inception of the last swap agreement. The rate of exchange against euro agreed on an intermediate swap contract is not relevant.

**5. Swaps on a 'partial' amount**

Note: This case may be combined with any other case – case 1 is used in this example.

Nominal value of debt instrument: $100 (half of which is swapped against the national currency and half of which is not).

Swap US dollar against euro: $50/€37.04 (exchange rate in the swap agreement: €1=$1.35).

Valuation of the debt instrument according to the Regulation: €72.74, of which

* for the half which was swapped: €37.04

* for the half which was not swapped: €35.71

(on the basis of a market exchange rate: €1=$1.40)

Comments:

The rate of exchange of the swap contract is more appropriate than the market rate for reflecting the cost of the part of the debt swapped against the national currency.

## 8.3.3 Off-market swaps

30. As far as the recording of swaps in national accounts is concerned, a fundamental issue is whether the swap is conducted on market terms or whether it has an 'off-market' nature. Such 'off-market' swaps may concern any swaps, including interest rate swaps and currency swaps. This is independent from the objective of the swap, which can be for instance benefit from anticipated favourable market trends by entering into a new risk exposure.

31. As mentioned above, in most cases a swap is initialised on market terms, i.e., at inception the present values of all payments due by each party are strictly equivalent. This is neutral on the net worth of each counterpart in the agreement. The mutual obligations agreed upon reflect the prevailing market conditions (including adjustment by a spread in one leg). Such swaps have a zero market value and are named 'par swaps' or 'at the money'. Afterwards, the impact on parties, fully symmetrical, will reflect the net change in present value of the streams of payments for each leg following the trend in market conditions.

32. In the case of a swap implemented on 'off-market' terms, the conditions have been agreed by parties ensuring that, at inception of the swap, the terms related of the flows exchanged under the swap are unbalanced in favour of one party. The market value is not nil at the start of the swap. Thus, the conditions agreed upon result in a 'loser' and a 'winner' which are clearly identified. This is one possible feature of 'off-market swaps' and is a sufficient condition for describing it. In such a case, it appears that there must be a 'counterpart' to this unbalanced swap linked to another government operation (see paragraph 35 below). Another (non-standard) feature, but (possibly) with a global zero market value at inception, would be a deviation from the cash-flow structure of a standard plain vanilla swap.[298] Therefore, any swap contract in which government enters showing a cash flow structure different from standard (plain vanilla) swaps at market conditions must be closely analysed to check whether it must be recorded according to the following specific rule; notably, the possible existence of successive periods where the market value is significantly different from zero should be considered.

33. Under these conditions an off-market swap must be divided into two parts:

    a) a conventional swap based on the prevailing spot market conditions, with nil market value at inception and recorded according to the usual rules. This is the implicit 'par' or 'at the money' component, similar to a 'standard swap'. This component is recorded as a financial derivative

[298] The cash flow structure of swaps can be constructed in any imaginable way. However, plain vanilla swaps at market conditions have a straightforward structure. For example, an interest rate swap has a fixed leg and a variable leg. In a plain vanilla interest rate swap, the fixed leg would have a constant interest rate over the whole lifetime of the swap. In an off-market interest rate swap, the fixed leg might not be constant over the whole lifetime of the swap — thus not being plain vanilla/standard anymore. Another example for an off-market swap would be a non-constant spread over the lifetime of the interest rate swap. Furthermore, the variable leg in an interest rate swap must be at market conditions. Otherwise, this would be an indicator for an off-market swap. For example, the variable leg of a plain vanilla interest rate swap at market conditions would refer to (observable) market expectations of a market interest rate (e.g. EURIBOR). In case of an off-market interest rate swap, the variable leg might rely on discretionary set variable interest rates.

(AF.71) and hence is not part of the government (EDP) debt. Thus, any change in the value of the swap component will reflect the impact on the trend in market conditions. In public accounts, such swaps would be recorded on the asset side of its balance sheet if they have a positive value for government and on the liability side in the opposite case. Positive flows are, in principle, a financial transaction on the assets side of the EDP table 3 (if the swap is an asset) and negative flows are a financial transaction on the liability side (when the swap is government liability). In addition, as the market value is the net present value of the future flows at the point of time the balance sheet relates to, there is also a revaluation effect.[299]

b) a loan (AF.4) for the off-market component. This is recorded at the initial market value (in some cases the payments for balancing the whole arrangement), usually at the start of the swap contract (an upfront payment or possibly spread during the lifetime) and not at the moment of the signature, which may in some exceptional cases, significantly differ. The loan is amortised over the life of the instrument. Interest will be imputed on it. This 'loan component' is part of government (EDP) debt. Symmetrically, government might enter off-market swaps with loan components provided to the counterparties, as an asset of government.

34. In other words, this means that one part of the flows exchanged during the life of the contract is to be considered as an amortisation of the loan, while another part is interest, with an impact on government net lending/ borrowing (B.9). The interest is calculated on the basis of a market fixed spot rate as observed at the start (trade date) of the swap contract (see sub-section 2.4.3.18).[300] In principle, the loan is amortised similarly to an 'amortising loan', i.e., not redeemed in its totality at final maturity but through 'annuities' in which the share in principal reduction and interest varies over time. There might however be other redemption schedules depending of the exact deviation of the cash flows structure compared to a plain vanilla swap.[301] These two components, interest and reduction of principal, fully set at inception, are deducted from the effective exchange of flows under the contract and the 'residual' is the effective flows to be recorded as a transaction in financial derivatives (F.71) in the financial accounts. The loan should, in principle, have strictly the same maturity as the swap contract (it could depart from it[302] although only in exceptional cases). Should the swap be cancelled, the loan would be automatically cancelled too (as an early redemption). Therefore, the imputed loan can never be longer than the swap.

35. There is a straightforward case where, at inception, the benefitting party provides to the other compensation in order to re-balance the deal, under the form of a lump sum paid in cash by the counterpart 'in the money'. It is difficult to deny, in this case, the existence of a loan. This compensation may be subject to specific agreements (instalments payments[303], writing-off of liability, etc.) that may make it more difficult to identify the 'real' rebalancing element. In case the 'counterpart' of this unbalanced payment is linked to other government operations with no evident link with the swap in question, this counterpart transaction has to be identified.[304] However, in practice, complex arrangements may also be observed, such as a combination of different swaps and/or other instruments, in a 'package', which avoids the recording of an immediate negative impact in government accounts.[305] In fact, some significant off-market swaps identified for this purpose do not result in the payment of a lump sum at inception.

36. The absence of a lump sum payment does not mean there would be no recording of a loan to government, because an off-market swap means that government has deliberately accepted to enter into a contract where it will have to pay back to the counterparty more than it has received (or will

[299] According to ESA 2010 paragraph 5.229, in national accounts a swap with a net liability value should also, by convention, be recorded on the asset side to avoid *flipping between the asset and the liability side*.

[300] Given that these swaps are off-market, using any of the rates mentioned in their legs is not particularly appropriate. More generally, the formula used in any one leg of any swap (off-market or not) can be modified without limit by way of having the same amounts also modified in the other leg

[301] For example, the 'disbursement' of a loan component and its redemption could be achieved by adjusting the spread for several periods.

[302] For instance, in a very simple example, a loan may result from an extraordinary high spread in period t, which is completely neutralized by a corresponding (negative) spread adjustment in the following period, while the overall lifetime of the swap might be much longer.

[303] For illustration, a swap could have various 'configurations', starting with a nil value at inception and then need 'rebalancing' cash instalments, taking place later over the life time of the swap. In this case, a loan component should be recorded at the time of the first received instalment, and then the loan should be progressively increased, after deduction of repayments, if any.

[304] When the off-market swap is linked to a restructuring of the balance sheet of government, an imputed transaction must be recorded. For instance, a shift from financial derivatives (AF.71) to a loan (AF.4) must be recorded as two simultaneous transactions.

[305] The value of the swap may also include fees which payment is spread all over the duration of the swap.

receive). Therefore, off-market swaps include a financing schedule (i.e., getting the cash needed at the exact time of the exchange of flows). It would not be frequent to deliberately enter into such contract, designed in unfavourable terms, if there were not behind the transaction some other (sometimes more or less hidden) reasons than a pure hedging in risk management. It is important to note that the same reasoning could apply where government is the net creditor in the financial schedule at inception of the swap. As mentioned above, a loan asset should be recorded in the balance sheet of government. This could for instance result from swaptions held by government (and then exercised because in the money for the government) or from forward swaps. It could also take place in the context of the restructuring of a swap in asset position — positive value — (see below).

37. One could argue that the market trends could turn to be favourable to government ('better fortune') so that, finally, it could have to pay back, in net terms, less than what was originally recorded as balancing item or less than other types of counterpart transactions in complex arrangements. However, this situation is quite different from a par swap, where one could assume that both parties started in equal conditions, i.e., that *ex-ante*, there is no need for balancing payments and nobody can be absolutely sure which party will win or lose in the transaction, i.e., there is uncertainty on the final result. The change in the value of a swap is by definition a win-lose situation, at least at the level of the individually considered swap.

38. There is a fundamental difference between a par swap at inception and an off-market swap, in which government starts with a real 'disadvantage'/a 'handicap' as far as the flows under the swap recorded as financial derivatives (F.71) are concerned. Only if the market trend is highly favourable could the net payments be reduced. However, because of the market uncertainty, the situation may also worsen from the already disadvantageous initial one. This has been observed in some cases. This is why the loan component must be definitively fixed at inception, on the basis on the value calculated at that time. Any further improvement or worsening must be imputed exclusively on the par component, which may only be affected by market trends. In national accounts there is no market value for loans.[306]

39. Off-market swaps must be identified as such in the context of each individual contract agreed by government, independently of the motive of the operation. They may be originated under various situations. For instance, off-market swaps may result from a completely new agreement between government and a counterparty.

40. It may also be the result of the entry into force of a swap previously agreed under a swaption, which gives to its holder the right (but not the obligation) to enter into an underlying swap specifically designed. Generally, the seller of the swaption ('writer') receives a premium at inception.[307] The option was created some years before and the conditions of the swap might have been frequently balanced (at par) at inception. This could also be observed for forward swaps (a swap agreed at a point of time but starting later, sometimes after a few years).

41. However, when the option is exercised this will, by definition, no longer be the case. The swap will show a market value (otherwise the option would have not been exercised) and the only feature to take that into account is that government will enter in an unbalanced transaction in a new financial instrument. What counts would not be the date at which the swaption contract was signed but the date at which a swap is effectively implemented. This would also be applicable to the case of other kind of agreements (not optional) which foresee an entry in force of a swap at a future date.[308] As these result in a specific new swap contract, this must be treated according to the general rule related to the 'out of the money' swaps.

42. An off-market swap may also appear in the context of a renegotiation/restructuring of an on-going swap, such that a new swap (which is agreed under a new contract replacing any previous one) would start with a negative value for government because the market value of the swap — just before the restructuring takes place — was not settled but applies in the restructured swap.

---

[306] As a reminder (see ESA 2010 paragraph 5.122): if a loan becomes regularly traded (and not only exceptionally traded, which means that there is *de facto* a rather active market), it must be reclassified as a debt security.

[307] There is a distinction between a 'payer swaption', giving the owner of the swaption the right to enter into a swap where it pays the fixed leg and receives the floating leg, and a 'receiver swaption' giving the owner of the swaption the right to enter into a swap in which it will receive the fixed leg and pay the floating leg. Government may be involved in both.

[308] It is important to make a distinction between a swaption which is an option, theoretically tradable separately, and any embedded option included in a swap (this may refer to 'cancellation right' but also for instance to a shift from a fixed rate to another or from floating to fix etc.) which cannot be traded separately and which, moreover, does not need the signature of a new contract when exercised. In this case, no specific treatment is required.

## Box 3 – Restructuring of swaps

In general terms, a swap restructuring (also referred to as renegotiation, amendment, revision) before the contractual termination of a swap, means that the parties involved agree on a change in several basic parameters of the swap: maturity, notional principal amount, level of a fixed rate, floating reference, spread, options, etc. It is explicitly mentioned that a new swap contract replaces the previous one, nullifying any previous obligations between parties.

This must be seen as similar to the cancellation of an existing swap and the origination of a new swap. The difference is that, instead of the counterpart showing a negative value (a liability) paying an indemnity, recorded as a financial transaction, to its counterpart (immediately or spread over time, according to market practice, which would require the recording of a loan liability), the compensation related to this early termination would be 'embedded' in the new swap. This means that the payments due by each party are adjusted on purpose. Therefore, the treatment of swap restructuring must be equivalent in national accounts to a swap cancellation, which is followed by the entry in a new swap at par. In substance, the transactions are very close, even if (in terms of scheduled actual payments) there are normally differences. In national accounts, and for EDP purposes, the use of these management tools of risk position of government must finally result in a same effect on government (EDP) debt.

In this context, the initial nature of the swap that is restructured has no importance. The key point is that there is a new swap contract, which, deliberately, does not start with a nil value for the flows recorded as financial derivatives (F.71). In national accounts, the fact that government enters in a new arrangement based on different parameters reflecting a change in its anticipations, must prevail in the analysis. According to the design of the new swap, there should be different consequences on the future financial position of government.[309]

It must also be stressed that a swap may be restructured several times. Thus, considering the nature of the very initial contract is not relevant, as each restructuring is a rescission in the previously agreed obligations. In case the swap before restructuring included already a loan component (negative or positive market value for government), the remaining principal amount of the loan would have to be revalued as all or one part of the market value of the previous swap would not have been recorded as a loan component.

At present, restructuring of swaps seems not frequent on markets, notably for swaps with short/middle term maturities. Normally, a counterpart is not obliged to accept a restructuring and it may prefer the swap to be cancelled or reach its contractual maturity. However, government (notably at central level) is usually a significant issuer on markets in terms of volume, and the counterparts consider these acquired assets normally as 'risk free'. For this purpose, government enters into markets essentially through a selected number of counterparts, generally referred to as 'primary dealers'. For business reasons, one could assume that the latter could more likely agree upon a restructuration with a significant partner.

In this context, any alternative for the counterpart, which was asked to enter into a renegotiation, must be neutral, as far as its financial position is concerned. In other words, its positive or negative market value in the previous swap should be unchanged in the new swap contract, apart from technical reasons, which have a minor impact.[310] For this reason, change in swap parameters must be consistent. For instance, if the maturity of the new contract is shorter (longer) than in the previous one, all things being equal (fixed rate, floating reference), the notional amount would be increased (decreased) to neutralise this effect.[311]

This 'market value equivalence' is a condition for a swap restructuring. That is, a counterpart with a positive value (asset) would normally not enter in an unbalance swap if it is not ensured to start from the same position in the new swap. Being a profit-oriented unit, engaged in commercial business,

[309] For instance, a longer maturity exposes government to more market volatility than in the previous swap. Similarly, a shorter maturity (generally together with a higher principal amount) would imply higher annual cash disbursements.

[310] It may happen however, that the fees charged for such transaction (generally not negligible) are integrated in the new market value of the swap, i.e. their payment is spread over the lifetime of the new swap. In this case, the market value is by definition changed.

[311] This means that the sensitivity of the value to a given change in variable market reference is similar. The restructuring takes normally place in one day and the valuation are based on the same market conditions

there seems to be no reasons for accepting a reduction in its claim on government. Similarly, government has no interest to renegotiate a swap which would result in an increase of such liability.

After the restructuring, government may expect an improvement in its position, which would be reflected in the market value of the 'swap component', starting at zero, as mentioned above. However, in most cases, the counterpart is not anticipating a total reversal of its asset position (for instance following a reversed yield curve when it is short payer and fixed receiver under the swap). Government may in addition protect itself against adverse trends by various means (global management, options, etc.).

Finally, in most cases, the restructuring takes place with the same contractors but it happens that the new swap is arranged with a new non-government counterpart, for various reasons (a case referred to as 'novation', including transfer of swaps to a central counterparties). The treatment on restructuring of swaps should not apply when only one counterpart in a swap is changed and no other parameter.

43. It must be stressed that, in some cases, through off-market swaps, government might benefit from large one-off cash payments, which, if not recorded as a loan, are evidently a 'hidden' government (EDP) debt. Moreover, government may use such swaps to postpone payments due at a point of time and spread them over a relatively long period. It may also result in an artificial improvement (or hidden worsening) of the actual government debt position. This would be in contradiction with the fundamental principle in national accounts to provide a measure of the situation 'in substance' at any time.

44. Finally, in the absence of treatment of off-market swaps as stated in this chapter, government units would have the opportunity to undertake specific operations, sometimes complex, for other purposes than debt management, i.e., not directly related to hedging/mitigating risks on existing liabilities. This is frequently referred to as 'window-dressing' (one-off measures improving the financial situation) and might also 'hide' the cost of such operations (notably by spreading it). All off-market swaps transactions must always be totally reflected in the level of the government debt at the time they are concluded.

### 8.3.3.1 ACCOUNTING EXAMPLE OF OFF-MARKET SWAPS

**a) The case of an interest rate swap**

An interest rate swap has been agreed with the following conditions:

Maturity: 10 years, notional amount: 100, fixed rate payment by bank counterparty: 4.5 %, floating rate payment by a government unit counterparty: Euribor 12m + 5.50 %.

It is clear that such arrangement is very obviously unbalanced and the bank counterparty will be a net receiver all along the contract (the Euribor 12m rate would need to be – 1 % to achieve parity).

On the basis of the spot market conditions the par value of the swap (again so that at inception it would be equal for both parties) can be evaluated and the 'off market' component (such as the balancing payment) may be deduced.

Assume that, in this case, the present value of the net payments (without the rebalancing payment) is estimated at 50. The bank counterparty must pay this sum to the government at inception. The impact on EDP data would be as follows:

At inception, there is no impact on net lending/borrowing (B.9) as the lump sum is not recorded as revenue. At inception, there is an increase in the debt by 50 as the lump sum is recorded as a loan (AF.42) that is amortised over the life of the swap, here 10 years.

Each year over the lifetime of the swap, there is a negative impact on the net lending/borrowing (B.9) due to the interest imputed on the loan (as the counterparty is a bank, this is actually partitioned into D.41 interest and FISIM, but this is not shown here for reasons of simplicity); all other flows are recorded as financial. Part of these other flows under the swap is to be recorded as amortisation of the loan.

It is recommended to use the following method:

- the loan is at a fixed, and not revisable, interest rate;
- that fixed interest rate is derived using the funding cost of the government unit;

- the loan imputation involves payment of regular instalments (annual or semi-annual) at constant amount that are split between redemption of the principal and payment of interest on the basis of the fixed rate as mentioned above;
- the interest on the loan must be recorded on an accrual basis;
- each year over the lifetime of the swap, government debt is reduced by the repayments of the loan until the final maturity date of the loan component.

In this example, Euribor 12m was 3 % at inception of the swap. The fixed interest rate applicable for the loan is 4 %. The following transactions would be recorded:

Initial AF.4 liability: 50

Interest rate 3 % (from Euribor)

Imputed loan annuity: 6.165 (the amount required for constant annual payments to repay the loan at the interest rate used of 4 %)

Net swap cash settlements: after one year +4.5 (by bank), 8.5 (by government; 3 + 5.5) = net payment of 4 by government

Entries in the accounts would be:

D.41 interest payable: 2 (4 % on principal of 50)

Amortisation of principal in first year: 4.2 (F.4 liability flow)

F.2 asset flow of –4 (the cash settlement)

F.71 asset flow of –2.2 to balance the accounts.

The closing period AF.4 liability is: 45.8 (50–4.26)

One assumes no revaluation in AF.7 assets/liabilities during year 1

**At inception**

| **General government** | | | | **Bank** | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R | U/ΔA | | | R |
| B.9 | 0 | | | B.9 | 0 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.2 | 50 | F.4 | 50 | F.2 | –50 | | |
| | | F.7 | 0 | F.4 | 50 | | |
| | | | | F.7 | 0 | | |
| | | B.9f | 0 | | | B.9f | 0 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 50 | AF.4 | 50 |
| | | AF.7 | 0 |
| | | B.90 | 0 |

| A | | | L |
|---|---|---|---|
| AF.2 | –50 | | |
| AF.4 | 50 | | |
| AF.7 | 0 | B.90 | 0 |

**Year 1**

**General government** | **Bank**

**Non-financial account**

| U/ΔA | | | R |
|---|---|---|---|
| D.41 | 2 | | |
| B.9 | –2 | | |

| U/ΔA | | | R |
|---|---|---|---|
| | | D.41 | 2 |
| B.9 | 2 | | |

**Financial account**

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | –4 | F.4 | –4.2 |
| | | F.7 | 2.2 |
| | | B.9f | –2 |

| ΔA | | | ΔL |
|---|---|---|---|
| F.2 | 4 | | |
| F.4 | –4.2 | | |
| F.7 | 2.2 | B.9f | 2 |

**Closing balance sheet**

| A | | | L |
|---|---|---|---|
| AF.2 | 46 | AF.4 | 45.8 |
| | | AF.7 | 2.2 |
| | | B.90 | –2 |

| A | | | L |
|---|---|---|---|
| AF.2 | –46 | | |
| AF.4 | 45.8 | | |
| AF.7 | 2.2 | B.90 | 2 |

**b) The case of a currency swap**

Assume that a government unit has issued a euro-denominated fixed rate long-term bond with a nominal value of 100. The remaining maturity on the bond is now 10 years. For various reasons, government would like to reduce its nominal debt figures.

The following arrangement takes place:

Government enters into a currency swap EUR/US$ (here fixed/floating) where the exchange rate agreed in the contract is EUR/US$ = 1 whereas the spot market exchange rate is EUR/US$ = 1.25 (equivalent to US$/EUR = 0.8).

At inception, government exchanges €100 and receives US$100 from its counterpart (and not 125 at the prevailing spot market exchange rate).

At the end of the swap contract (if no early cancellation takes place), government will return $100 and get back €100 that will be used for redeeming the underlying bond. Due to the use of the less favourable rate of exchange for the euro, this arrangement would effectively result in a reduction of government debt as, under EDP methodology, the conversion would be as follows:

€100=US$ 100 (at 1:1, using contractual rate); then converted back to €80 (at EUR/US$=1.25, using market spot rate)

The cash flows on the currency leg would be adjusted so that the government unit will repay US$ 125 over the life of the swap.

In market terms (without recognizing the balancing payment), the swap would be unbalanced, with a market value of US$25 (€20), in favour of the counterpart (that has provided only US$100 in the swap initial exchange).

Under these conditions, it would have to pay an equivalent lump sum of US$25 (€20) to government at inception.

In the absence of the Eurostat rules on off-market swap, at the signature of the contract government unit would have benefited from a reduction of its debt (conversion).

As a counterpart, government would pay more 'net interest' payments during the lifetime of the contract (offsetting the initial positive effect) and, moreover, would have taken an exchange risk exposure. It has changed the original debt in domestic currency into a foreign currency debt, the value of which is sensitive to adverse market movements (here a depreciation of the domestic currency).

Under the Eurostat rules on off-market swaps, such an arrangement would not help this government to meet its initial objective as:

- the currency swap would be split into a 'par/at the money swap', on the basis of the prevailing market rate of exchange at the start of the contract (EUR/US$=1.25) and a loan in foreign currency (recorded in AF.4) for the amount of the additional cash payment received by government;
- the loan, denominated in foreign currency, would be amortised, over a period of 10 years, by the regular 'interest net payments' during the contract, following the method described in the previous example of the off-market interest rate swap.

Thus, the 'favourable' effect on the debt resulting from the use of an off-market rate of exchange is totally offset by the entry of a loan liability.

# 8.4 Repurchase agreements and securities lending

## 8.4.1 Background

1. Repurchase (repo) transactions may be used in both money markets and securities markets. Debt securities issued by general government are often used in repo transactions: they commonly represent the main vehicle due to various considerations on liquidity and risk for securities issued by central government. However, the crucial point here is that units classified in the general government sector may enter into such contracts, either as liquidity provider or as cash borrower.

2. Under these conditions, repos may have an impact on the calculation of general government debt, directly where a general government unit is the 'cash receiver' in such transactions (recording of a new liability). As a reminder, where two units included in this sector are involved, there is no impact because of the consolidation rule, except in the case of a resale of the asset by the assignee. In addition, it must be pointed out that repos are frequently used by government debt managers in the context of the investment of the funds that may be available generally for a short-term period.

3. ESA 2010 paragraph 5.127 states that *a securities repurchase agreement is an arrangement involving the provision of securities like debt securities or shares in exchange for cash or other means of payment, with a commitment to repurchase the same or similar securities at a fixed price. The commitment to repurchase may be either on a specified future date or an 'open' maturity.* 2008 SNA paragraph 11.74 specifies that a repo is a repurchase agreement *where securities are provided for cash with a commitment to repurchase the same or similar securities for cash at a fixed price on a specific future date.* Repos are usually set for very short-term period, e.g. overnight or one day.[312]

4. In economic terms a repo is a 'secured' loan, due to the existence of collateral. In addition, a repo is a sale and repurchase agreement in which there is a firm commitment — and this is a fundamental feature — not a simple promise for one counterpart. Effectively, at maturity, or before where the contract makes provision for it, the temporary 'purchaser' (or assignee) is obliged to return the security (or an equivalent one) to the original 'seller' (or assignor) that is engaged to buy it back at the price fixed in the contract. Generally, national regulations require separate identification of the securities used in a repurchase agreement from the rest of the portfolio. In addition, on some markets, more complex features may be observed, such as 'margining'.

## 8.4.2 Treatment in national accounts

### 8.4.2.1 TREATMENT IN ESA 2010

5. ESA 2010 specifies clearly the treatment of repos, in line with 2008 SNA and BPM 6th Manual. The main point is that a new financial instrument appears in a repo transaction. A repo creates a new relationship between two counterparts. There is clearly a new set of reciprocal claims and liabilities. For the seller, there is an increase in the balance sheet for the cash received and available for any purpose, on the asset side, and for its counterpart, on the liability side. For the purchaser, there is no increase but only a substitution on the asset side from cash to another item.

6. The treatment of repos is clarified in ESA 2010 paragraphs 5.127 to 5.133. It is notably based on the nature of the original holder of the security. ESA 2010 paragraph 5.130 states that *The supply and receipt of funds under a securities repurchase agreement, or securities lending with cash collateral, do not involve any new issuance of debt securities. Such provision of funds to institutional units other than monetary financial institutions is treated as loans; for deposit taking corporations*[313] *it is treated as deposits.*

[312] The term 'reverse repo' is used from the point of view of the receiver of the cash/security taker but in this chapter only the term repo is used. Government may be both receiver/taker in the context of short-term treasury management.

[313] *Id est* monetary financial institutions.

7. An important point is that 'the securities provided under securities lending and repurchase agreements are treated as not having changed economic ownership because the lender is still the beneficiary of the income yield by the security, and subject to the risks or benefits of any change in the price of the security' (ESA 2010 paragraph 5.129).

8. The rationale is that there is no change of ownership for the underlying security from an economic point of view, which prevails in ESA 2010 over legal arrangements. Effectively, the seller is exposed to a change in market valuation of the underlying asset. Under a repo, the underlying assets are kept in ESA 2010 within the accounts of the original holder. As no change in economic ownership is recognised, no transaction can be recorded in securities. The underlying security is not directly the purpose of a repo. It is not a means of investing in financial markets. It is clearly shown by the associated rate of interest, based on the maturity of the engagement.

#### 8.4.2.2 FURTHER COMMENTS

9. Several points must be made more explicit:

   a) the difference between the selling price and the repurchasing price should be recorded as interest, on an accrual basis, and included in property income;

   b) provisions about repos apply to any asset used in a similar transaction (thus relating to any kind of collateral) and not only to securities;

   c) the treatment specified in ESA 2010 for repos is applicable only in the case the original seller of the asset has an unquestionable commitment (and not only an option or a commitment subject to some conditions) to repurchase it under conditions agreed at inception;

   d) the case of an effective delivery of securities used in a repo, notably through electronic depository systems, has no effect on the conceptual treatment;

   e) where an economic agent resells an asset 'acquired' under a repo arrangement, a negative entry should be recorded in their balance sheet;

   f) securities lending with cash, and only them, should be treated in a similar way to repos, as mentioned in ESA 2010 paragraph 5.128: *Securities lending with cash collateral and repurchase agreements (repos) are different terms for arrangements with the same economic effects: those of a secured loan, as both involve the provision of securities as collateral for a loan or a deposit, where a deposit taking corporation sells the securities under such an arrangement….*

## 8.4.3 Rationale of the treatment

#### 8.4.3.1 VALUATION

10. Repurchase agreements are considered loans or deposits, recorded in national accounts at nominal value. Thus, the value is based on original funding. In other words, the cash amount exchanged at the beginning of the period is the value of the new financial instrument. There are no holding gains as in the case of outright transactions in securities. Accrued interest is also included in the price of the transaction. However, there might be a need for adjusting the amount recorded as interest:

    - first, in order to exclude commissions or fees recorded as service charge (but from a practical point of view, where very negligible, the amount could be ignored);
    - second, for transactions in assets denominated in foreign currencies:
      - in this case, the change in the value of the asset due to a possible effect of the change in the exchange rate is not imputed on the remuneration of lending/borrowing of funds;
      - the repurchasing price should be estimated on the basis of the original rate of exchange and any difference recorded as nominal holding gains or losses in the revaluation account;
      - for practical reasons, it may be easier to start from the amount of holding gains or losses (provided that the effect of the change in the exchange rate is rightly identified) and to deduct the interest on repos by using an estimate based on an average maturity.

### 8.4.3.2 UNDERLYING ASSETS

11. ESA 2010 and 2008 SNA deal only with repos backed by securities, generally government bonds and treasury bills because of their deep and liquid markets. In some countries, other assets can also be used, namely loans to non-financial agents according to some criteria, and even real estate assets. Treatment as repos should also apply to those cases. Thus, the definition of repos may be enlarged to cover any arrangement concerning the provision of cash for a given period of time to an economic agent that, in counterpart, 'supplies' as collateral any asset he holds with a repurchase engagement.

**Repurchasing clause**

12. As mentioned, for the original seller (assignor/borrower of funds) there must be a firm commitment to repurchase the securities. From a legal point of view, there exists an unquestioned claim held by the buyer or assignee. At the maturity date, automatically, the initial position would be offset by a reverse transaction, whatever the new conditions on the market. Where contracts stipulate that the seller has only an option to buy back the securities, the treatment of repos should not be implemented. The arrangement includes only a kind of promise. The expression 'spurious repurchase agreements' is sometimes used in this case.

13. This may also be observed in sale/buyback transactions where there are strong similarities with repos concerning the economic nature of the transaction but also some technical differences. Sale/buybacks should, however, be treated as repos where the original holder has a strict obligation to buy back and the assignee an unquestioned claim to get back liquidity. Therefore, the transactions should be recorded in the same way and, if necessary, the sources used for compilation should be corrected, notably in the respective portfolios.

14. Where the original seller does not have a firm commitment to repurchase the asset(s), it should be considered an effective transfer of economic ownership. As a consequence, for securities, a change in both contracting parties' portfolios should be recorded, with no increase in the balance sheet of the seller. As a reminder, the contingent asset corresponding to the possible resale should not be included at all in the financial account, according to ESA 2010 paragraph 5.09.

15. In some cases, the repurchasing transaction, even if not firmly legally based, is in fact quite certain because of the nature of the parties. For instance, a repo is undertaken by two units classified in general government. However, it is recommended here to apply the rule about firm commitment in a rather restrictive way, i.e. in limited situations where there is very strong evidence that in case of conflict the commitment would be certainly recognised by legal or arbitration authorities. Some very infrequent 'conflicting' cases were observed and resulted generally in the obligation to repurchase.

### 8.4.3.3 DELIVERY OF SECURITIES

16. According to national regulations and market practice, securities may effectively be delivered to the buyer. It is notably the case where it needs only an adjustment in the book-entry depository system via efficient electronic delivery-payment organisation. Fundamentally, this feature does not change the nature of the operation as a repo from an economic point of view. But, obviously, it adds, however, some complexity in the compilation process and may be the source of discrepancy as mentioned later.

17. As the transaction is recorded in loan/deposit instruments and the assignee is supposed not to have bought securities, the purchaser's portfolio must be corrected if the asset has been entered. It may be the same in the portfolio of the original holder so that he keeps the asset in his portfolio, in addition to the new instrument representing the temporary cash lending.

18. Even in the case of delivery, it is assumed that the 'seller' keeps his right of property on the securities he has transferred. The main point is that he assumes risks, for instance, when the value of the securities would be less than the repurchase price due to change in market conditions. Moreover, in case of default from the issuer of the security, he would have to repay the fixed sum to the lender. Normally, the seller continues to receive benefits (e.g. interest) associated with the securities. It means that if such payment occurs during the contractual period, the temporary buyer has to repay it.

### 8.4.3.4 SALE OF ASSET DURING A REPO ARRANGEMENT

19. It may happen that the buyer ('assignee'/liquidity provider) sells the asset received under the repo transaction before the second 'leg' of the transaction. In this case, a negative entry is to be recorded in

the purchaser's portfolio in counterpart to the cash taken from the sale. However, the initial relationship resulting from the repo does not disappear and is not at all changed by the second transaction.

20. The temporary purchaser has a liability to provide a 'comparable' security back. This is the reason why their balance sheet has to show a negative asset. This entry also shows that the purchaser is now theoretically exposed to market risk, which was not the case before the resale. However, this treatment may raise some difficulties that are not, nevertheless, specific to the transactions undertaken by general government units but is a general issue for repos. Identifying such transactions may in addition be particularly difficult in the case of cross-border flows.

#### 8.4.3.5 SECURITIES LENDING

21. Securities lending may also be largely used by investors on securities' markets for various reasons such as covering short-term positions (as in the case of short selling) or for derivatives' position management.

22. Where there is an effective flow of cash, it is clear, from an economic point of view, that the case is very similar to a repurchase agreement transaction. Effectively, there is no definitive change of economic ownership and there is a firm commitment concerning the reverse transaction on securities. Thus, the transaction should be recorded in loans or deposits, according to the general rules mentioned above, notably the absence of transactions in securities in national accounts. In this case, a negative entry is also required in the purchaser's portfolio.

23. On the contrary, securities lending without a flow in cash (generally for very short maturity) should not be treated as a repurchase agreement, as specified in ESA 2010 paragraph 5.131: *If a securities lending does not involve the supply of cash, that is, if there is an exchange of one security for another, or if one party supplies a security without collateral, there is no transaction in loans, deposits or securities*.

24. Generally, in the accounting system of the contracting parties there is no effect on the balance sheet but possibly an entry in the 'off-balance sheet', in order to record the forward reverse transaction. But in some countries, portfolios directly reflect the transaction, i.e., they change according to the transaction. Two cases should be distinguished:

- where the distinction between securities lending with cash and without cash is available, for lending without cash, the counterpart in the balance sheet of parties would be preferably classified under other accounts receivable/payable (for consistency reasons no entry under deposits or loans). Nothing should be recorded in national accounts;
- where the distinction is not available, the treatment would depend on the estimated share (through specific information) of each kind of transaction within the global figures. However, a good proxy seems to consider that only a few transactions are cash-free and, thus, to apply a 'repo-like' treatment for the whole.

## 8.4.4 Effect on government debt

25. There may be different effects on general government debt of this category of financial instruments where:

- a unit in general government is 'assignor', temporary seller of securities and 'cash receiver', there is an impact on gross debt as the item loans (AF.4) is increased in counterpart to the borrowed funds. Of course, if the counterpart is another unit classified in general government, the effect is nil at a consolidated level;
- government is 'assignee', placing liquidities and providing funds to an economic agent classified in another sector, namely a monetary financial institution, there is no impact on the debt at consolidated level, but a change in the structure of its assets;
- the transaction is not recognised or else treated as a repo, without a firm commitment concerning the reverse transaction, there is a change in economic ownership of the assets. Government debt would be changed only when a unit classified in general government lends or borrows government securities with a counterpart classified outside the general government sector.

26. The latter effect comes from the consolidation rules. Thus, consolidated debt is increased when the government unit is lender (decrease in assets) or reduced when the government unit is borrower

(increase in assets). There is no impact for transactions on securities with a unit classified in general government, whatever the instruments involved.

## 8.4.5 Accounting examples

Government enters into a **repurchase agreement** (on treasury bonds) for a value of 100 with a bank. The original maturity is 3 months. The repurchase price is 101.

**1. At inception**

| General government | | | | Bank | | | |
|---|---|---|---|---|---|---|---|
| **Financial Account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.22 | –100 | | | F.22 | +100 | F.29 | +100 |
| F.29 | +100 | | | | | | |
| | | B.9f | 0 | | | B.9f | 0 |

**2. Over the remaining period**

| General government | | | | Bank | | | |
|---|---|---|---|---|---|---|---|
| **Non-financial account** | | | | | | | |
| U/ΔA | | | R/ΔL | U/ΔA | | | R/ΔL |
| | | D.41 | 1 | D.41 | 1 | | |
| B.9 | +1 | | | B.9 | –1 | | |
| **Financial account** | | | | | | | |
| ΔA | | | ΔL | ΔA | | | ΔL |
| F.22 | +101 | | | F.22 | –101 | F.29 | –100 |
| F.29 | –100 | | | | | | |
| | | B.9f | +1 | | | B.9f | –1 |

# 8.5 Keywords and references

| | |
|---|---|
| Financial assets and liabilities | ESA 2010, 7.01 and following |
| Valuation of financial assets and liabilities | ESA 2010, 7.33 and following |
| Currency and deposits (AF.2) | ESA 2010, 7.64-7.66 |
| Debt securities (AF.3) | ESA 2010, 7.67-7.69 |
| Loans (AF.4) | ESA 2010, 7.70 |
| Financial derivatives (AF.7) | ESA 2010, 7.86-7.89, 20.187 |
| Other accounts payable (AF.8) | ESA 2010, 7.90 |
| Index-linked securities | ESA 2010, 4.46 (c), 5.100-101, 20.187 |
| Discounted and zero-coupon bonds | ESA 2010, 20.184-20.186 |
| Financial leasing | ESA 2010, 5.134-5.135, 15.13-15.22 |
| Swaps | ESA 2010, 5.210-5.213 |
| Securities lending and repurchase agreements | ESA 2010, 5.126-5.133 |
| Credit default swaps | ESA 2010, 5.11, Box 5.1, 5.218-5.219 |
| Off-market swaps | ESA 2010, 20.133 |

# Annex  Legal texts (references and links)

**Legal texts:**

https://ec.europa.eu/eurostat/web/government-finance-statistics/legislation

**European System of Accounts 2010 (ESA 2010):**

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

**Transmission programme:**

ESA 2010 Transmission programme of data

**Excessive Deficit Procedure Statistics:**

Commission Regulation (EU) No 220/2014 of 7 March 2014 amending Council Regulation (EC) No 479/2009 as regards references to the European system of national and regional accounts in the European Union

Council Regulation (EU) No 679/2010 of 26 July 2010 amending Council Regulation (EC) No 479/2009 as regards the quality of statistical data in the context of the excessive deficit procedure

Council Regulation (EC) 479/2009 on the application of the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community

## Getting in touch with the EU

**In person**
All over the European Union there are hundreds of Europe Direct Information Centres. You can find the address of the centre nearest you at: http://europa.eu/contact

**On the phone or by e-mail**
Europe Direct is a service that answers your questions about the European Union. You can contact this service
– by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
– at the following standard number: +32 22999696 or
– by electronic mail via: http://europa.eu/contact

## Finding information about the EU

**Online**
Information about the European Union in all the official languages of the EU is available on the Europa website at: http://europa.eu

**EU Publications**
You can download or order free and priced EU publications from EU Bookshop at: http://bookshop.europa.eu. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see http://europa.eu/contact)

**EU law and related documents**
For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu

**Open data from the EU**
The EU Open Data Portal (http://data.europa.eu/euodp/en/data) provides access to datasets from the EU. Data can be downloaded and reused for free, both for commercial and non-commercial purposes.

KS-GQ-19-007-EN-C
KS-GQ-19-007-EN-N

# Manual on Government Deficit and Debt

## IMPLEMENTATION OF ESA 2010

This new 2019 edition of the Manual is an updated version of the edition published in March 2016. In the current edition, at least one chapter of all parts has been amended in substance (see full list of chapters in the preface of the Manual), except Part 5 Sale of assets and Part 7 Debt related transactions and guarantees. New sub-sections 2.4.3.17 Recording interest when there is a derivative in a debt instrument, 2.4.3.18 Interest on off-market swaps, 2.4.3.19 Claims in dispute and interests accrued on them and 2.4.3.20 Interest accrued on intergovernmental loans unlikely to be repaid, as well as section 2.6.3 Accounting treatment of the EU financial instruments and chapter 4.7 Income contingent loans were added. As usual, this edition results form a collective work under the supervision of Eurostat, in cooperation with experts representing EU Member States and other international institutions.

**For more information**
**https://ec.europa.eu/eurostat/**

Publications Office
of the European Union

Print: ISBN 978-92-76-09292-6
PDF: ISBN 978-92-76-09294-0