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### European public sector accounting

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# EURO PEAN

**PUBLIC SECTOR ACCOUNTING**

**PETER C. LORSON  
SUSANA JORGE  
ELLEN HAUSTEIN  
(EDS.)**

IMPRESA DA  
UNIVERSIDADE  
DE COIMBRA  
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## LIST OF ABBREVIATIONS

ASOBAT	A Statement of Basic Accounting Theory
BCE	Before the Current Era
C	Cash flow
CE	Current Era
CF	Conceptual Framework
CFS	Consolidated financial statements
CNOCP	Conseil de normalisation des comptes publics
DRR	Dismantling, removing and restoring
EC	European Commission
EFRAG	European Financial Reporting Advisory Group
EPSAS	European Public Sector Accounting Standards
ESA	European System of Accounts
EU	European Union
FASAB	Federal Accounting Standards Advisory Board
FASB	Financial Accounting Standards Board
FP	Financial performance
FreM	The Government Financial Reporting Manual
FS	Financial statements
FTI	First-time implementation
FVA	Fair value accounting
FVLCTS	Fair value less costs to sell
GAAP	Generally accepted accounting principles
GASB	Governmental Accounting Standards Board
GDP	Gross domestic product
GFS	Government financial statistics
GFSM	Government Finance Statistics Manual
GPFR	General purpose financial reporting
GPFRs	General purpose financial reports
GPFS	General purpose financial statement
i	Interest rate



IAS	International Accounting Standards
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IG	Implementation Guidance
IMF	International Monetary Fund
IPSAS	International Public Sector Accounting Standards
IPSASB	International Public Sector Accounting Standards Board
k	kilo (i.e. 1.000)
NATO	North Atlantic Treaty Organization
NPFM	New public financial management
NPM	New public management
OBB	Output- and outcome-based budgets
OECD	Organisation for Economic Cooperation and Development
PBB	Performance-based budgets
PPBS	Planning – Programming – Budgeting System
PPE	Property, plant, and equipment
PPP	Public Private Partnership
PSA	Public sector accounting
PSC	Public Sector Committee
R&LGov	Regional and local government
RPG	Recommended Practice Guideline
SAI	Supreme Audit Institutions
SDG	Sustainable Development Goals
SNC-AP	Sistema de Normalização Contabilística para as Administrações Públicas
TFEU	Treaty on the Functioning of the European Union
UK	United Kingdom
UN	United Nations
US	United States
VIU	Value in use
WGA	Whole of government accounts
WGFR	Whole of government financial reporting

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## INTRODUCTION

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Public sector accounting (PSA) and reporting is a theme of high relevance for both academia and practitioners in the European Union (EU). The reasons do not only lie in the considerable national reforms of PSA during the last decades,<sup>1</sup> but can currently be traced back to a project run by the European Commission (EC) aiming to harmonize the heterogeneous accounting systems of its member states by the adoption of European Public Sector Accounting Standards (EPSAS), still to be developed.

The EPSAS project arose primarily as a response to the financial and economic crises beginning in 2008 and the reliability issues that became apparent, especially with the public debt data delivered to the EC by some EU member states, as data from PSA is the input for governmental financial

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<sup>1</sup> See e.g. Manning and Lau (2016) pp. 39 ff., in: Bovaird and Loeffler (ed.).

statistics in the national accounts. Presently, the EU plans to develop EPSAS with International Public Sector Accounting Standards (IPSAS) as a reference, and currently provides financial support (until 2020) to public sector entities as well as jurisdictions that opt for a voluntary use of IPSAS. For the period of 2020-2025, a transition to EPSAS was indicated by the EC leading to a homogeneous EU-landscape of PSA and reporting. However, this implies that the EPSAS development and implementation project would be completed and a legal basis for the adoption in the EU member states would have to be found. From today's perspective, this is not certain, as final decisions have not been taken yet, but an impact assessment is at present (i.e. in June 2019) ongoing.<sup>2</sup>

As PSA in Europe is currently still very heterogeneous,<sup>3</sup> professionals and academics in Europe face tremendous challenges. In particular, there will be a large need for university graduates that are knowledgeable in PSA and that are aware of the differing PSA standards and PSA systems across Europe. This book contributes to this kind of capacity building, and is one intellectual output of an EU funded Erasmus+ project ("Developing and implementing European Public Sector Accounting modules" (DiEPSAm)), which aims to develop teaching materials concentrated on existing methods and systems of PSA in Europe. The objectives of the DiEPSAm project are to develop an academic module for Bachelor's or Master's degree programmes by offering online lectures, slides, additional materials and this complementing textbook.

The DiEPSAm project is a cooperation between the Johannes Kepler University Linz (Austria), the Tampere University (Finland), the University of Rostock (Germany), the University of Coimbra (Portugal) and the University of Leicester (United Kingdom; UK). These partner countries (Austria, Finland, Germany, Portugal, UK) represent diverse national PSA traditions, thereby enriching the textbook by diverse views (at times contradicting) and

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<sup>2</sup> See EC (2019), p. 6 and also Conclusion of this book.

<sup>3</sup> See Brusca et al. (2015) and Vašiček and Roje (2019) for such an overview of PSA in single European countries.

leading to the discussion of alternative approaches. They are also the focus of some comparative studies across the book.

Accordingly, it must be underlined that this book is not about EPSAS, but tackles PSA in Europe. Thus, the aim is to provide different views not taking position of one or the other approach to PSA. Still, of course, each of the chapters represents not necessarily the view of all authors of the book. On the contrary, the DiEPSAm project and the textbook concept were driven by the idea to present an overarching European perspective and to integrate different views.

For each lecture offered in the DiEPSAm online lecture module,<sup>4</sup> the textbook contains a corresponding chapter. In each chapter, additional readings are offered and topics for discussion are presented, in order to critically reflect on the themes presented. These topics might also serve for essays or seminal papers. At the end of the book, assessment questions (both multiple choice and open questions) are listed, per chapter, so that the reader can assess the knowledge gained. The solutions for the multiple choice questions are also provided, whereas the open questions can be derived from the text or additional readings. The main part of the book is structured as follows.

**Chapter 1**, authored by *Ellen Haustein* and *Peter Lorson*, provides an **introduction into PSA** and offers a map through the book by explaining important terms with respect to European PSA and by highlighting which concepts this book will focus on. In **Chapter 2**, *Andy Wynne* indicates the long and varied **history of PSA** and sketches some of the key developments. Thereby, he also provides an introduction to the three different approaches to PSA that were developed in England, France and the Germanic countries. The EPSAS project of the EU aims to use IPSAS as a reference, which itself are based on the private sector accounting standards IFRS. Therefore, *Andy Wynne* continues in **Chapter 3** to explain the **differences between private and public sector accounting**. He stresses

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<sup>4</sup> The lecture materials are accessible at no cost (open access) here: [www.offene.uni-rostock.de/online-course-european-public-sector-accounting/](http://www.offene.uni-rostock.de/online-course-european-public-sector-accounting/)



the major differences between the accountabilities and financial reporting requirements of public sector entities and those in the private sector.

Despite the focus of the EPSAS project on financial reporting, budgeting and budgetary accounting and reporting take a centre stage in PSA. **Chapter 4**, authored by *Lasse Oulasvirta*, is thus devoted to explaining approaches to budgeting, also addressing the roles and functions of the budget as well as budget planning and budget-linked accounting. A more theoretical lens on PSA is applied by *Lasse Oulasvirta* in **Chapter 5** while describing **theoretical accounting foundations and principles for PSA**, which may influence and interact with financial accounting standards and practices.

Accounting harmonization in PSA bears several challenges because there might be frictions between the accounting standards of the private sector and of the public sector, on the one hand, and the statistical data requirements on the other hand. This topic is addressed by *Lisa Schmidhuber*, *Dennis Hilgers*, and *Hannes Hofbauer* in **Chapter 6**. They take a closer look at **PSA harmonisation between IFRS, Government Finance Statistics (GFS) and IPSAS**.

Due to their high relevance and international dissemination, IPSAS play an important role in this book, which is also reflected in the Chapters 7-11. *Lisa Schmidhuber* and *Dennis Hilgers* start these chapters by addressing **IPSAS** in **Chapter 7**, introducing their **history, spread and use**. *Susana Jorge* continues in **Chapter 8** to explain conceptual frameworks (CFs) in PSA, particularly addressing the IPSAS CF. The chapter also offers brief views on selected national CFs from a group of European countries, i.e. the project partner countries. **Chapter 9**, authored by *Susana Jorge*, is devoted to **reporting components**, namely the financial statements, primarily building on IPSAS 1 and 2, also briefly addressing **reliability issues**, tackling transparency and auditing. In order to provide an **overview of IPSAS on public sector specific topics**, *Ellen Hausteijn* and *Peter Lorson* draw on selected IPSAS in their **Chapter 10**. The general accounting treatment of property, plant and equipment (IPSAS 17, 21 and 26), revenue from non-exchange transactions (IPSAS 23) and service concessions from the perspective of the grantor (IPSAS 32) is explained. In **Chapter 11**, *Ellen Hausteijn* and *Peter Lorson* apply the same IPSAS addressed in Chapter 10

to present an **IPSAS case study** by developing accounting records and illustrating the consequences on the financial statements.

Up to Chapter 11, primarily individual financial statements are addressed, which are financial statements for a single public sector entity only. However, when public sector entities run different (public sector) entities to provide public services, individual financial statements might fail to provide a true and fair view of the whole economic entity because of the financial interactions between these separate entities. Thus, some public sector entities are required to prepare **consolidated financial statements** that combine all entities under control of a public entity. This topic is addressed by *Ellen Hausteijn* and *Peter Lorson* in **Chapter 12**, where they explain the basic ideas and theories of consolidation and how to aggregate the transactions of the parent (i.e. controlling) entity and its controlled entities by using consolidation techniques. The topic is continued by both authors in **Chapter 13** addressing **consolidation methods and reporting** with a stronger focus on applying IPSAS.

Finally, in **Chapter 14**, *Lisa Schmidhuber* and *Dennis Hilgers* look at the EPSAS project again and describe **PSA future challenges** by promising an **EPSAS outlook**.

This book, as second main intellectual output of the DiEPSAm project (besides the lectures), was funded through the EU Erasmus+ Strategic Partnership programme. Big thanks go to organizations that supported the project idea from its very beginning, namely the *Eurostat EPSAS Task Force*, the *European Group for Public Administration (EGPA)*, the *Comparative International Governmental Accounting Research (CiGAR) network*, the *Portuguese Network of Accounting Research (grudis)*, and the *Mecklenburg-West Pomerania League of Towns and Cities*. Also, the members of the DiEPSAm project's Advisory Board provided highly valuable feedback to the lecture videos and slides, for which the project partners have to express their gratitude: *Jürgen Handke* (Philipps University Marburg, Germany), *Rui Pedro Lourenço* (University Coimbra, Portugal), *Eugenio Caperchione* (University of Modena and Reggio Emilia, Italy; CIGAR), *Hanna Silvola* (Hanken Business School, Finland) as well as *Thomas Müller-Marqués Berger* (E&Y, Germany; Accountancy Europe, and IPSASB

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**CHAPTER 1**  
**APPROACHES TO PUBLIC SECTOR ACCOUNTING**  
**AND REPORTING IN EUROPE**

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**SUMMARY**

This chapter aims to provide both a context and a foundation for the book. Thereby it introduces important terms used throughout the module and differentiation of contents. By deriving a roadmap, it serves as a guidance through the different chapters and points out connections between lectures and the overall structure of the textbook.

After reading this chapter, readers will know about the relevance of public sector accounting as a field of study, the current public sector accounting developments in the EU, the reasons for differences in public sector accounting between countries and the key terms used in public sector accounting.

**KEYWORDS**

Public sector reporting, accounting concepts, harmonization, EPSAS

## 1. Introduction and background

Public sector accounting (PSA) and reporting internationally have undergone severe reforms during the last decades.<sup>1</sup> Within these reforms there has been the change from cash to accrual accounting.<sup>2</sup> However, the extent of reforms and thereby also the implementation of accounting systems and norms, differs considerably between governments on an international scale. This is a problem particularly striking for the European Union (EU), as the European Commission (EC) needs to rely on statistical data about e.g. financial debt of its member states. For these statistics, the reference is the European System of National and Regional Accounts (ESA), which is accrual-based and uses double entry bookkeeping. However, the accounting systems in the member states range from pure cash-based systems, combinations of cash- and accrual-based accounting, modified accrual accounting to accrual accounting.<sup>3</sup> In addition, the accounting systems even differ between the different levels of government within one country. Thus, there is a risk of inconsistent data being reported to the EC.

There are various reasons for the differences in PSA and reporting norms across countries.<sup>4</sup> Firstly, countries differ in their legal and juridical system. This refers for example to the extent of power that central governments have. In some countries, like Germany, the central government is not legally entitled to enforce accounting reforms at the municipal level, but only the state governments, in which the municipalities are located. As such, the central government alone would not be able to enforce harmonized accounting norms even in its own country. Secondly, the organization of the public sector differs. Some countries have a centralised state (such as France) and others run a federal system (such as Germany). Depending on the country, federal states can have an own right to determine their

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<sup>1</sup> See e.g. Manning and Lau (2016), pp. 39 ff., in: Bovaird and Loeffler (2016).

<sup>2</sup> For example, in Europe, see Brusca et al. (2015), p. P. Xiii.

<sup>3</sup> See EY (2012) and Brusca et al. (2015) for an overview. The terms are explained in Chapter 3 of this textbook.

<sup>4</sup> See for the following eight reasons: Jorge et al. (2011) with reference to Brusca Alijarde and Condor (2002), Brusca Alijarde and Benito López (2002).

accounting system. Differences in the accounting traditions may thirdly lead to differences in specific objectives of governmental financial reporting. Whereas in the Continental European countries accountability is the utmost objective, in Anglo-Saxon countries typically decision usefulness takes a centre stage. Differences in these objectives determine different accounting norms. Depending on divergent views about the principal users of financial reporting as a fourth point, the reporting contents can be different. One example is the difference between standards of the Governmental Accounting Standards Board (GASB, i.e. the accounting norms for US local government) and the International Public Sector Accounting Standards (IPSAS) Board. Whereas the citizenry is seen as the main user in the GASB Framework (there is not only focus on financial terms, but also on contents about economy, efficiency and effectiveness), IPSAS focus on service recipients and resource providers, hence suggesting a more general, financial perspective.

Fifth, the type and extent of financial resources suppliers may influence the type of information and reporting needed in order to assess financial wellbeing and the ability to repay debt. Important external financiers such as the World Bank or the International Monetary Fund (IMF) do indeed influence the accounting norms that their governmental borrowers use. As sixth and seventh reasons, national institutions can play a role in differences. Stimuli towards or resistance against reforms of governmental accounting may come from regulatory bodies such as financial regulation authorities or competition authorities or professionals such as accounting profession bodies. A final main reason are differences in the political and administrative environment. Whereas European Continental countries have a strong culture of administration and the Rechtsstaat, a so called rule of law, Anglo Saxon countries rely on common law. This leads to differences in the number of individual circumstances that have to be addressed by accounting norms and standards.

In order to reduce differences in PSA and reporting, the EC strives for harmonization of the heterogeneous accounting systems of its member states by the adoption of European Public Sector Accounting Standards (EPSAS). The EPSAS project arose as a response to the financial and

economic crises beginning in 2008 and the reliability problems that became apparent with the public debt data (and other fiscal data to monitor fiscal discipline) delivered to the EC by some EU member states. Thus, in 2011, the European Council passed a set of measures to reform the Stability and Growth Pact and to provide greater macroeconomic surveillance. The so-called ‘Sixpack’ contains 5 regulations and 1 directive. Directive 2011/85/EU refers to requirements for budgetary frameworks of the member states. Overall, this directive claims for more homogeneity of the budgeting rules among the member states. In one article of this directive, the EC was requested to assess whether the IPSAS would be suitable for adoption in all member states. In effect, this could lead to an overall harmonisation of public sector reporting in the EU. In a review of the suitability of IPSAS, the EC came to the conclusion that “IPSAS standards represent an indisputable reference for potential EU harmonised public sector accounts”<sup>5</sup>, but need some adjustments so that these “would be suitable as a reference framework for the future development of a set of European Public Sector Accounting Standards”.<sup>6</sup>

As a consequence, the EC instructed its statistical office Eurostat to undertake such an assessment of IPSAS. Thus, the Eurostat EPSAS Task Force has been founded in 2012 and is still in place. In 2013, the Task Force EPSAS Governance was created by Eurostat with the aim to exchange views with the member states’ authorities. The topics were: possible future governance arrangements and underlying key principles of EPSAS. The Task Force should assist Eurostat in developing a model for the EPSAS governance structure.<sup>7</sup>

This was followed by the creation of the Task Force EPSAS in 2014. Again its aim was to exchange experiences with authorities of the member states. The focus of this group was the analysis of IPSAS with respect to difficulties of adoption in the EU, the analysis of how to reduce difficulties for small public entities and the discussion on the implementation of

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<sup>5</sup> EC (2013), p. 7.

<sup>6</sup> EC (2013), p. 8.

<sup>7</sup> Weyland and Nowak (2016), p. 114.

standards. In order to establish a more permanent forum concerned with the development, introduction and operation of EPSAS, both task forces were completed in 2015 in favour of the creation of the EPSAS Working Group. This is a technical expert group consisting of representatives from the member states, international advisors and Eurostat staff. The Working Group meets twice a year, being supported by three EPSAS Cells. Two were set up in 2015: one on First Time Implementation and a second on Governance Principles. A third cell on Standards Principles is working since 2016. In addition, the Eurostat Task Force gets feedback from public consultations and EPSAS issue papers that are compiled by members of accounting profession.<sup>8</sup>

As the EU plans to develop EPSAS with IPSAS as a reference, public entities or governments that opt for a voluntary use of IPSAS until 2020 currently receive financial support by the EU. The period of 2020-2025 was indicated by the EU as a transition to EPSAS, leading to a homogeneous EU-landscape of PSA and reporting. However, this implies that the EPSAS implementation project is completed and a legal basis for the adoption in the EU member states has been found. To date, an impact assessment<sup>9</sup> is being completed to discuss different scenarios of the bindingness of the EPSAS pronouncements. More details on the EPSAS background and development are provided in the chapters 6 discussing the challenge for harmonization and 14 providing an EPSAS outlook.

The remainder of this chapter will derive a map through the book by explaining important terms with respect to European PSA and by highlighting on which concepts this book will focus on. Section 2 starts with identifying the reporting units, whereas Section 3 discusses sources of PSA. The different types of accounting are addressed in section 4. On which geographic focus this book will draw, is explained in Section 5 with more specific explanations of PSA standards in the EU in Section 6. Finally, different reporting units are explained (Section 7) and a conclusion with a roadmap is provided (Section 8).

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<sup>8</sup> Weyland and Nowak (2016), p. 114.

<sup>9</sup> See EC (2019), p. 6.



## 2. Scope of reporting units

In order to narrow down the content of this book, the public sector needs to be differentiated from the private sector. This chapter draws on the differentiation of ESA, i.e. the statistical system of the EU. According to its internationally recognized definition, the public sector consists of all institutional units resident in one economy that are controlled by the government. The private sector consists of all other resident units (ESA 1.35). Therefore, the concept of control is the first criterion to distinguish the public sector. Control is defined as the ability to determine the general policy or programme of an institutional unit (ESA 1.36).<sup>10</sup>

Second, a differentiation between market and non-market activities is considered to distinguish between public sector entities belonging to the general government sector and the corporations sector. A market activity has the following conditions, which do not have to be met perfectly (ESA 1.37):

- (1) Sellers act to maximise their profits in the long term, by selling goods and services freely on the market;
- (2) Buyers act to maximise their utility given their limited resources;
- (3) Effective markets exist where sellers and buyers have access to, and information on, the market.

Thus, the public sector consists of the general government and public corporations, both being controlled by the government. Public sector corporations are distinguished between non-financial and financial corporations with e.g. the central bank belonging to the latter type. However, only general government units are in the focus of this chapter. Government units are legal entities established by a political process, which have legislative, judicial or executive authority over other institutional units within a given area. Their principal function is to provide goods and services to the community and to households on a non-market basis and

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<sup>10</sup> Further details in relation to the definition of control can be found in the ESA guidelines.

to redistribute income and wealth (ESA 20.06). The general government is classified further, into four levels of entities.

The **central government** subsector includes all administrative departments of the state and other central agencies whose competence extends normally over the whole economic territory, except for the administration of social security funds (ESA 2.114). On a lower level, the **state government** subsector consists of those types of public administration which are separate institutional units exercising some of the functions of government (e.g. education, road infrastructure), except for the administration of social security funds, at a level below that of central government and above that of the governmental institutional units existing at local level (ESA 2.115). As a third subsector, the **local government** includes those types of public administration whose competence extends to only a local part of the economic territory, apart from local agencies of social security funds (ESA 2.116). Finally, the **social security funds** subsector includes central, state and local institutional units whose principal activity is to provide social benefits and in which, by law or by regulation, certain groups of the population are obliged to participate in the scheme or to pay contributions; and for which general 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 2.116).

This book focuses on public entities of central, regional or state and local government. In the following and throughout the book, these are referred to as **public sector entities**.<sup>11</sup> These have specific characteristics that distinguishes them from private sector entities. On the one hand, public sector entities have sovereignty that is, depending on the structure of government, ultimately controlled by politicians who hold power and responsibility in the legislative and executive systems. On the other hand, public sector entities seek for the production of public goods and services, which can also lie in the redistribution of income or the regulation of industries. In order to raise financial resources, public sector entities hold

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<sup>11</sup> Although, at times, strictly speaking, one would need to refer to government entities.

the power to tax. As public goods and services are often delivered for free, governments entities do not strive for profits but for recovery of their costs.<sup>12</sup> These differences also lead to adjustments compared to private sector reporting as e.g. the aim of the units differ and there are potentially different stakeholders.<sup>13</sup> Also different sources of PSA information have been developed, which are explained in the next section.

### 3. Sources of PSA information

PSA information can be derived from different sources. A selected list of accounting sources is shortly introduced in the following: (1) Budgeting, (2) Budgetary accounting and reporting, (3) Financial reporting, (4) Management accounting, (5) Sustainability and Integrated reporting and (6) Government financial statistics.

**(1) Budgeting:** Government sector entities are organizations ultimately controlled by politicians. A major responsibility of politicians refers to their authority to establish a budget. The budget is an estimation of expenditures/expenses to provide public goods and services, to suppress public needs, as well as the estimated revenue to cover those expenditures/expenses. Usually the budget is established for one to two years. However, besides being merely a plan, the budget also serves as an authorization by the deliberative body (such as elected politicians) to the executive body, for any expenditure which is later on undertaken by the public entity's administration. Therefore, the budget is formalized by law. It is therefore also made publically accessible, so that citizens in general can inform themselves about how resources are spent and which public services are planned to be delivered. However, mainly, the budget is used by managers of the administration, the politicians and legislative overseers. Especially due to its legal bindingness, the budget is central in PSA and reporting.

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<sup>12</sup> Jones and Pendlebury (2010), pp. 2 f.

<sup>13</sup> See e.g. Pallot (1991).

Therefore, budgeting and budgetary accounting will be discussed in more detail in Chapter 4 of this book.

**(2) Budgetary accounting and reporting:** After the budget has been approved, in the respective budgetary year the actual payments and receipts (and/or expenditures and revenues) are documented, i.e. accounted for, and compared with the previously agreed annual budget. The budgetary reports provide information about the extent to which the budget has been realized, therefore the information is made publicly available. The statements such as budget out-turn reports (comparing budgets planned and spent), financial balance sheets and explanations of significant variances, are used by public managers, politicians, legislative overseers and also citizens. Budgetary reports are produced at least annually, however mostly also supplemented by quarterly or monthly reports.

**(3) Financial accounting and reporting:** Besides a comparison of planned *versus* actual budgetary figures at the reporting date, public sector entities can also prepare an overview of the resources, i.e. assets and sources of finance (liabilities & net assets), as well as an overview of the resource consumption and creation, i.e. expenses & revenues; cash in- & outflows, during the reporting period. The documents thereby produced on an annual basis are called financial statements which are composed by, e.g., a balance sheet (disclosing assets and liabilities), income statement (comparing revenues and expenses) and cash flow statement (showing cash inflows and outflows from three activities (operations, investing, financing – see also Chapter 9)). As such, compared to the budget and budgetary reports, financial reporting information can deliver further relevant accounting information such as reliable accounting measures in the form of net costs for services provided, assets and liabilities.<sup>14</sup> Conceptually, by deducting assets from liabilities the net assets are derived, which differ to some extent from the concept of equity that is known in the private sector. Still, the fundamentals of accounting are the same in both sectors,<sup>15</sup> if based on accrual accounting and double entry bookkeeping. Nonetheless,

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<sup>14</sup> Jones and Pendlebury (2010), p. 115.

<sup>15</sup> Jones and Pendlebury (2010), p. 30.

as Lüder (2011) asserts, financial accounting, reporting and auditing “is not mainstream and only a few scholars are working in this field” in most countries.<sup>16</sup> Due to this reason, and particularly because the main reforms of PSA and reporting internationally, in the last years, has centred on financial accounting and reporting,<sup>17</sup> and also the EPSAS project only covers this source of accounting information, the focus of most chapters in this book is on financial accounting and reporting.

**(4) Management accounting:** In the public sector management accounting and control is traditionally structured around budgeting,<sup>18</sup> however its functions go beyond pure budgeting because the information delivered is more detailed and user-oriented. Management accounting refers to the calculation of the resource consumption (costs) of organizational units or product/service units for control or pricing purposes. Statements produced on a monthly or quarterly basis are, e.g., costing systems or cost allocation sheets which refer to single product or service units or organisational units, but can also cover the entire organisation. In contrast to budgetary or financial reporting, management accounting is basically for internal users such as public managers, administration, politicians, and legislative overseers. A further difference to financial reporting is that management accounting information may, besides past information, also contain future information, e.g., in the form of cost forecasts or replacement costs.

**(5) Sustainability and Integrated Reporting:**<sup>19</sup> Both of these approaches of reporting are alternative approaches compared to traditional financial reporting as these cover also non-financial information. Both, Sustainability Reporting and Integrated Reporting address organizational stakeholders and contain past, but also future-orientated information in the form of strategy reporting. Both approaches not only concentrate on

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<sup>16</sup> Lüder (2011), p. 5, in: Jones (ed.).

<sup>17</sup> In particular, also because budgeting has a strong legal basis in each country and thus international accounting standard setting bodies focused on financial accounting and reporting (Jones and Pendlebury, 2010, p. 85).

<sup>18</sup> Jones and Pendlebury (2010), p. 85.

<sup>19</sup> Performance reporting, another source of PSA information is not introduced here.

the reporting entity itself, but also cover how the entity interacts with its environment, society and governance. Therefore, Sustainability Reporting aims at delivering an overview of an economic, environmental and social performance of an organization, whereas Integrated Reporting can be seen as a wider approach to report on organizational public value creation during a reporting period. Integrated Reporting is about representing clearly and concisely how a public entity creates and sustains public value (e.g. public welfare), taking into account economic, social and environmental factors (IIRC, 2013) by reporting financial and non-financial information in an interconnected way. Reasons for Integrated Reporting and how it can be prepared in the public sector are addressed by, e.g., Cohen and Karatzimas (2015), Oprisor et al. (2016) and Katsikas et al. (2017). With respect to the extent of reporting, Sustainability and Integrated Reporting go beyond what is covered by General Purpose Financial Statements, a term that is introduced later in this section.

**(6) Government Financial Statistics:** In contrast to the reporting approaches introduced above, Government Financial Statistics (GFS) do not only focus on single entities, but cover a total economy (e.g., region, country or group of countries) and report on all of its sectors (i.e. households, corporations and governmental entities). The aim of GFS is to deliver a systematic and detailed description of a total economy, its components and its relations with other total economies, building on an (internationally compatible) accounting framework. For the EU, the ESA 2010 is relevant, whereas on an international level, the System of National Accounts of the United Nations (SNA 2008) is used. Differences between ESA and SNA lie especially in their presentation. Accounting measures of GFS are, e.g., the net worth of a total economy (stocks of assets deducted of liabilities), its Gross Domestic Product (i.e. the sum of value added (gross)) and the value added of an industry (sum of incomes generated in an industry). Conceptually in the ESA, the demand for any product or product group has to equal its supply from within or outside the economy. Primary users of GFS information are politicians, statisticians, managers, oversight bodies (such as the EC) and the main statements produced are institutional sector accounts using an input-output framework. In the EU,

GFS requirements have also driven the call for harmonizing PSA across the member states (as the latter provides input for the former) and thus the EPSAS project. GFS will be explained in more details in Chapters 6 and 7.

With respect to sources of PSA information, not only the different approaches to accounting play a role, but also the scope of reporting. In this notion, the terms General Purpose Financial Statements (**GPFSSs**) and General Purpose Financial Reports (**GPFRs**) have been coined, which play a key role and therefore are explained in the following and depicted in Figure 1.1<sup>20</sup>.

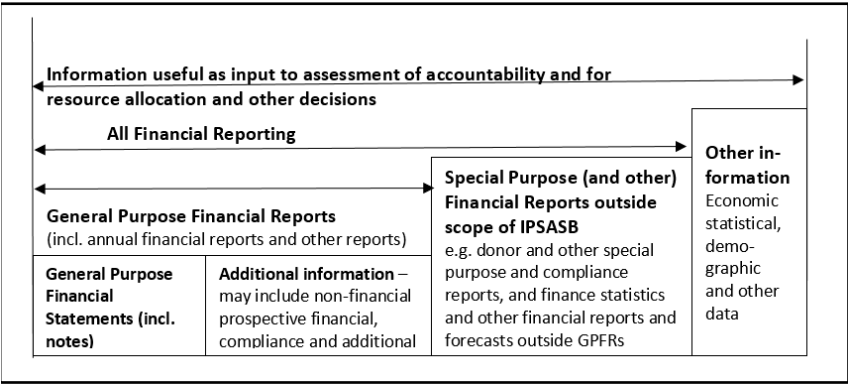


Figure 1.1: Scope of reporting depending on information needs of users

In the preface of the IPSASs, GPFRs are defined as “financial reports intended to meet the information needs of users who are unable to require the preparation of financial reports tailored to meet their specific information needs.”<sup>21</sup> In a consultation paper for the Conceptual Framework in 2008, the IPSASB aimed to distinguish GPFRs from GPFSSs and other reporting concepts. Typically, GPFSSs contain financial information about financial position, financial performance and cash flows<sup>22</sup> and are often accompanied by narrative information in the notes. GPFRs go beyond GPFSSs and include additions such as non-financial prospective financial information, compliance information and additional explanatory material.

<sup>20</sup> IPSASB (2008), 1.14 Figure 1.  
<sup>21</sup> Preface 9, IPSASB (2018), p. 14.  
<sup>22</sup> IPSASB (2018), CF 2.17.

Thus GPFRs encompass the annual financial reports and other reports. For example, the IPSAS pronouncements also entail non-binding Recommended Practice Guidelines (RPGs) with voluntary additional non-financial information.

Despite of financial reports that are not tailored to meet specific information needs, also Special Purpose Financial Reports and other reports can be prepared, for those users that have the authority to demand specific reports for their information needs. Such reports could be e.g. donor reports, compliance reports, finance statistics and other financial reports and forecasts outside GPFRs. Special Purpose Financial Reports are outside the scope of IPSASs (see chapter 9). Together, GPFRs and Special Purpose Financial Reports form the concept of ‘all financial reporting’. As also the IPSASB (2008, 1.15) states, GPFRs “may not provide all the information users need for accountability, decision-making or other purposes”. Thus, in an extension of all financial reporting, the entirety of information that is “useful as input to assessment of accountability and for resource allocation and other decisions”, as well as other information such as economic statistical, demographic and other data, can be included into the reports.

In the following, this book will focus on GPFRs and primarily will introduce financial accounting and reporting, as well as budgeting and budgetary reporting to some extent.

#### **4. Accounting systems and techniques**

As already indicated in Section 3 and when addressing the reforms in PSA, there are different systems of accounting in place, which will be introduced in this section and more thoroughly are explained in particular in Chapter 4. Thereby, a distinction is made between single entry and double entry bookkeeping as well as cash accounting and accrual accounting systems.

With respect to transactions recording techniques, one can distinguish between single entry and double entry bookkeeping. In general, bookkeeping is defined as recording of financial impacts of economic



transactions or events of an organization. Using the **single entry bookkeeping technique**, each transaction is only recorded once. Mostly, the transactions recorded are based on the inflows and outflows of cash. Advantages of single entry bookkeeping relate essentially to the simplicity of the system, which however comes with the disadvantages of risking lack of comprehensiveness and coherence.

In contrast, by using **double entry bookkeeping**, for each transaction there are at least two related recordings, balancing between each other. This leads to the advantage that an income statement and a balance sheet can be derived from the accounting data as assets and liabilities are recorded. However, the system is much more complex and requires extended knowledge for its use.<sup>23</sup> The relevance of double entry bookkeeping for PSA has been much debated in literature<sup>24</sup> and its history and reference to persons such as Luca Pacioli will be explained in Chapter 2. A basic principle of double entry bookkeeping is that for each transaction at least a debit entry on one account and a credit entry on another account is to be recorded. The system is closed so that all accounts must balance. Over an accounting period, the monetary value of debit entries must equal the monetary value of credit entries. Table 1.1 provides an overview of the changes of debit and credit entries depending on the types of accounts.

<b>Groups of accounts</b>	<b>Debit entries (D)</b>	<b>Credit entries (Cr)</b>
Assets accounts	Increase ↑	Decrease ↓
Liability accounts	Decrease ↓	Increase ↑
Capital or equity (net assets) accounts	Decrease ↓	Increase ↑
Revenues accounts	Decrease ↓	Increase ↑
Expenses accounts	Increase ↑	Decrease ↓

*Table 1.1: Principles of double entry bookkeeping*

Regarding the timing of the recognition of revenues and expenses. in general, cash accounting and accrual accounting are distinguished. For

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<sup>23</sup> Van Helden and Hodges (2015), p. 57.

<sup>24</sup> See e.g. Soll (2014).

**cash accounting**, revenues and expenses are only recognized when the receipt/payment occurs. Thus, in its pure form, cash accounting does not allow for the recording of assets and liabilities. As such, the system has been criticized for not being transparent with respect to financial implications of economic events. In contrast, when using **accrual accounting** revenues are recognized in the period earned and expenses in the period in which these are incurred, regardless when they are received/paid.

Often, single entry bookkeeping is combined with cash accounting systems and, particularly in the public sector, used for budgeting and budgetary accounting.<sup>25</sup> In the public sector of German-speaking countries, a system called cameral accounting that also uses the combination of single entry bookkeeping with cash accounting has evolved and is partially also still in place (e.g. at central level). Cameral accounting will be addressed in more details in Chapters 2 and 4.

To illustrate the differences between cash and accrual accounting, the following example can be used: On 15.11.20X0 a public entity delivers services, worth 10,000 EUR. At the same date, the service recipient receives a bill but does only pay in cash in the next year, on 01.02.20X1. In a cash-based system, a revenue will only be accounted for together with the cash when the payment is received, so on 01.02.20X1. Thus, the revenue is not shown in the year t0, in which the service was delivered. In contrast, when using an accrual-based system, the revenue is already recorded on 15.11.20X0 together with accounts receivable. Thus, the revenue falls in the year 20X0. After the payment, cash is accounted for and the accounts receivable are cleared. As such, both systems lead to a different timing recognition and reporting of revenues and expenses. This is particularly the case for the purchase of non-current assets and their depreciation which is only recorded in an accrual-based system.

Besides a strict distinction between cash and accrual accounting, also modified regimes are in place in many countries, which are further distinguished between the public and private sector. Thus, according to the extent of use of accrual accounting, Lande (2011) distinguishes

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<sup>25</sup> Bergmann (2009), p. 66.

four types of accounting systems.<sup>26</sup> In a **modified cash accounting system**, only monetary (e.g. cash-based) assets and liabilities are accounted for. Thus the list of assets only contains cash and cash equivalents and loans and investments of the year. This system is currently prevalent in the Netherlands and at the central state level of Germany. A **modified accrual accounting system** is more developed, because assets also cover receivables, and liabilities also encompass payables. Thus, financial assets and financial liabilities are accounted for. **Accrual accounting at the public sector level** means that most assets and liabilities are accounted for as this is the case in the public sector of Austria, Finland, Sweden, the UK and for the EC. In general, in the EU, **full accrual accounting** is used for the private sector. This means that enterprises have to account for all their assets, including intangible assets, and all liabilities, including provisions. However, exemptions from full accrual accounting may exist, e.g. for smaller companies, or building on the legal form of the company, as in the case in Germany.

Throughout this book, both main bookkeeping techniques and both accounting regulation regimes will be addressed, despite a focus on double entry bookkeeping and accrual accounting.

## 5. Geographic focus

With respect to the geographic focus drawn in this book, the authors decided to concentrate on the countries of the partners of the DiEPSAm project (i.e. this book authors' affiliations) and, to a wider extent, also on the EU due to its underlying EPSAS project. The strategic partners of the DiEPSAm project represent diverse national PSA traditions and can therefore contribute with contradictory and alternative approaches to create an enriched European society. Thus, in the book a transnational and comparative approach is sought for. Subsequently, the public sector financial accounting and reporting systems in the following countries are

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<sup>26</sup> See Lande (2011), p. 17 for details.

introduced: Austria, Finland, Germany, Portugal and the United Kingdom (UK). It needs to be stressed, that the brief descriptions only cover financial but not budgetary accounting. Also it needs to be distinguished between the government levels: Finland, Portugal and the UK have two government levels (central and local), whereas in Austria and Germany there are three levels of government (central, state and local).<sup>27</sup>

In Finland, Portugal and the UK, both at the central and local government level, accrual accounting systems are in place. In Austria and Germany, the systems are heterogeneous at the different levels of government. Of the three levels of government in Austria, to date only the central government has fully switched to accrual accounting. At the regional and local government levels there are diverse systems in place. However, there is a transition procedure going on to accrual accounting, which will come into force at the regional level from 2019 onwards and at the local government level from 2020 onwards. In Germany, the most diverse systems are currently in place. In general, there is an option to choose between modified cash and accrual accounting at central and state level. However, currently the central government uses modified cash as well as twelve of the sixteen federal states, so only four federal states decided to use accrual accounting. Instead, at the local level, most federal states (twelve) enforced accrual accounting for the municipalities comprised within them.

As such, where applicable, the book will draw on comparative studies between Austria, Finland, Germany, Portugal and the UK and also will shed light on the EPSAS project in the EU.

## **6. PSA standards in the EU**

As outlined in the introduction, currently the EC, authorizing via the Eurostat, aims to harmonize PSA in Europe. Thereby, EPSAS are to be developed that might use the IPSAS as a basis of reference. However,

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<sup>27</sup> See Brusca et al. (2015) for detailed descriptions of the accounting systems.

potentially, with respect to the accounting norms to be used for the EU member states, there are different options to consider.

On the one hand, there are the internationally accepted accounting standards produced by private standard setting bodies. However, on the other hand, private standard setting bodies do not have the power to enforce their norms into any national accounting system. Therefore, these accounting standards can either be used voluntarily by reporting units, or mandatorily by endorsement in each country individually. For the private sector, the International Financial Reporting Standards (IFRS) released by the IASB are widely used. IFRS are used as a basis of reference for the IPSAS released by the IPSASB, being adjusted to the public sector context.

Despite a voluntary use or adoption of international accounting standards, of course also national or local standards can be in place that have to be mandatorily used by resident reporting units. For private sector entities, in many countries there are national commercial codes. These often also serve as a basis of reference for PSA norms. As such, some countries have their own accounting regimes for the public sector or they adjust IFRS or IPSAS to be used in the public sector. Examples of the countries involved in the DiEPSAm project are: Finland and Germany that adjusted their national commercial code for the public sector; Portugal and Austria that use modified IPSAS; and the UK that primarily adapted IFRS directly. Therefore, the question remains – which set of norms has superior suitability for serving as an EPSAS basis.

This book aims to shed light on different accounting standards such as IPSAS, potential EPSAS, but also national systems in the partner countries, to provide comparative transnational insights.

## **7. Reporting units**

With respect to financial accounting and reporting, also the reporting unit needs to be considered, i.e. the boundaries according to which one entity is distinguished, and the extent of reporting economic transactions.

Typically, **financial statements** and consolidated financial statements are distinguished.<sup>28</sup> Accordingly, financial statements concern the individual public entity only. If a public entity holds interests in subsidiaries, these are shown as a financial asset. However, if a public entity has close and strong economic relationships with other entities, financial statements do not clearly depict the financial performance and financial situation of that public entity, if e.g. liabilities have been outsourced together with an asset. Therefore, in contrast to financial statements, **consolidated financial statements** combine all entities under control of a public entity. By applying consolidation methods, holdings, liabilities and groups transactions are combined within one statement. Consolidated financial statements are the content of Chapter 12, whereas consolidation methods and reporting will be addressed in Chapter 13.

More recent concepts, such as **whole of government accounting**, follow the statistical treatment by creating an economic entity that entails all public sector entities in one country. As such, the financial statements cover all government entities and all entities that are controlled by the government (see Section 2 of this chapter for a definition). Therefore, the approach is much broader than consolidated financial statements. Countries using this approach are New Zealand and the UK.<sup>29</sup> Whole of government accounting will be addressed in Chapter 12 in more details.

## 8. Conclusion

This chapter aimed to present key terms of PSA and reporting and in doing so, also to narrow down the content of the book. As PSA in Europe is currently still very heterogeneous, professionals and academics in Europe face tremendous challenges.<sup>30</sup> In particular, there will be a large need for university graduates and practitioners that are knowledgeable in PSA and

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<sup>28</sup> Bergmann (2009), pp. 161 ff.

<sup>29</sup> Bergmann (2009), pp. 157 ff.

<sup>30</sup> Adam et al. (2019).

that are aware of the differing PSA systems across Europe. In order to account for this development, this book concentrates on PSA in Europe. The key terms used and the linked concepts are presented in Table 1.2 below. The topics that this book addresses in the following chapters, are faded out in grey.

Scope	Public sector					Private sector		
	General government		Public corporations					
Sources of PSA information	Budgeting	Budgetary accounting and reporting	Financial accounting and reporting	Management accounting	Sustainability and Integrated Reporting	Government Financial Statistics		
Types of accounting	Bookkeeping technique			Timing of recognition				
	Single entry		Double entry	Cash accounting	Accrual accounting			
Geographic focus	International	Europe	EU	Selected EU countries				
				Austria	Finland	Germany	Portugal	UK
Accounting standards	International standards		EU Standards EPSAS	National standards				
	IFRS	IPSAS		IFRS-based	IPSAS-based	Own regime		
Reporting unit	Separate financial statements			Consolidated financial statements				

Table 1.2: Roadmap of topics presented in this book

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## **Discussion topics**

- Reasons for harmonization in public sector accounting and reporting
- Cash accounting and accrual accounting: What suits the public sector better?
- Accounting regimes for the public sector: Internationally accepted standards vs. local norms

**CHAPTER 2**  
**HISTORY OF PUBLIC SECTOR ACCOUNTING**  
**& ALTERNATIVES**

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**SUMMARY**

Public sector accounting and financial reporting have had a long and varied history. Examples are provided from ancient civilizations in China, India, the Islamic States and then developments in Western Europe are considered. Public sector accounting was a tool for the accountability of feudal stewards to their overlords. This changed to the accountability of government ministries and public sector entities to parliament with the introduction of parliamentary democracy from the nineteenth century. Finally there was a change of emphasis from control to efficiency with the move to New Public Management and especially the accrual basis of accounting from the very end of the last century.

**KEYWORDS**

accountability, accounting year, assurance, auditor, budgetary control, budget out-turn report, internal control, public sector accounting, treasurer, treasury, taxation

## 1. Introduction

The aim of this chapter is to indicate the long and varied history of public sector accounting (PSA) and to indicate some of the key developments. PSA has developed in all states that had a reasonably sophisticated taxation system, so we have many examples of different approaches. These public sector approaches to accounting may have been passed from one state to another or developed independently by individual governments.

PSA first developed as a charge-discharge system to allow feudal kings, lords etc to control and monitor the financial management of their stewards. It was designed to provide assurance that all feudal dues had been collected, adequately accounted for and, as necessary, paid into the Treasury.

Budgetary accounting developed from the 19th century with the move to democratic accountability and parliamentary democracy. This originated in Western Europe and then spread to other countries especially across the European colonies. Finally we had a change of emphasis, in some countries, from financial control to efficiency with the move to New Public Management and the adoption of accrual accounting from the end of the last century.

This chapter indicates the long history of PSA, from the Western Zhou dynasty of China, originating around three millennia ago, through India, the Islamic States and finally Western Europe. This chapter also provides an introduction to the three different approaches to PSA that developed in England, France and the Germanic countries.

We will emphasise the importance of financial control and adherence to rules and regulations rather than the recent attempts to improve efficiency or performance management as part of New Public Management and specifically accrual accounting.

This chapter should also provide an understanding of the objectives of PSA and the change from:

- accountability of stewards to feudal overlords (charge-discharge); to

- budgetary control by democratic parliaments and
- the more recent change of emphasis from compliance to efficiency.

We will also emphasise the importance of not using current objectives of public financial management to assess earlier accounting systems. When the objectives have changed, previous approaches should not be criticised for not being able to achieve current objectives.

## **2. The long history of PSA**

PSA originated in ancient civilisations including, for example:

- China from around from nearly 10,000 years ago;
- Mesopotamia (current day Iraq) around 5000 BCE (Before the Current Era);
- Ancient Egyptian civilisations 3000 to 300 BCE;
- India nearly 2,500 years ago;
- Ancient Greek civilisation also nearly 2,500 years ago;
- Islamic States 700 to 1200 CE.

PSA later spread to or was developed in Western Europe. Here three main approaches were developed and evolved over time. More recently the common approach of the IPSAS is being promulgated, although the level of adoption of such standards still remains relatively limited.

### **2.1. Western Zhou Dynasty of China**

The earliest form of PSA, at least that we have documentation for, originated in central China in the city of Xian during the Southern Song Dynasty around 7000 BCE. The kingdom was divided into territories and each was governed by officials appointed by the king.<sup>1</sup>

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<sup>1</sup> Liu (2017).

The Western Zhou Dynasty of China (1046–771 BCE) was the longest-lasting dynasty in Chinese history. The Rites of Zhou, written during this period, describe annual, monthly, and 10-day accounts. These accounts were used to assess the official's performance.<sup>2</sup> These procedures also include the “Shangji” [grand calculation]. This was a summary assessment undertaken every three years, which decided the official's promotion, demotion, or dismissal.

“The grand Treasurer (dafu) was the highest ranking officer in the Treasury. The auditor of the National Treasury was labelled as the zaifu.”<sup>3</sup>

So even at this time, the distinction between these two essential roles in PSA had been recognised. The grand Treasurer, or accountant, prepared the accounts and an independent auditor checked and confirmed the accuracy of these accounts. The central importance of budgeting for PSA was similarly recognised in these times:

“Every year the court decided its budgeted expenditure according to its budgeted revenues.”<sup>4</sup>

Chinese bookkeepers did not use paper (which was later invented in China around 100 BCE), but engraved their accounts on bones and on wooden boards<sup>5</sup>.

Confucius (551–479 BCE) the famous Chinese philosopher started his working career as a frontline official responsible for stores accounting.<sup>6</sup>

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<sup>2</sup> Previts; Walton and Wolnizer (2011).

<sup>3</sup> Chatfield (2014), p. 122.

<sup>4</sup> Chatfield (2014), p. 122.

<sup>5</sup> Chatfield (2014).

<sup>6</sup> Liu (2017).

## **2.2. Mesopotamia (current day Iraq)**

City states developed in this region around 5000 BCE with an associated approach to PSA. The financial officials used clay tablets with pictographic characters to record financial transactions.

“Far from being a rudimentary, accounting practices in both ancient civilisations [Egypt & Mesopotamia] displayed remarkable levels of detail.”<sup>7</sup>

The details provided with these records and the sophistication of systems increased over time.

## **2.3. Ancient Egypt**

Various civilisations developed in Egypt over a long period from 3000 to 300 BCE. These civilisations provided great innovations, but also amazing (from our stand point) stability. So, for example, the daily pay for workers remained essentially the same over the whole of the third millennium BCE. This period also demonstrated the significant influence of the public sector as the major sector of the time:

“The royal palace and the temples constituted two influential institutions in the economy of ancient Egypt.”<sup>8</sup>

These civilisations also indicated the importance of accounting for taxation:

“Once tax was assessed and collected, it was transported to the state granaries, and this process was organised and documented carefully by the scribes.”<sup>9</sup>

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<sup>7</sup> Salvador and Mahmoud (2007), p. 196.

<sup>8</sup> Salvador and Mahmoud (2007), p. 189.

<sup>9</sup> Salvador and Mahmoud (2007), p. 192.

## 2.4. Kautilya – The Arthashastra

Kautilya, an Indian teacher, described public sector administration, including PSA, in a book. The title was *The Arthashastra* and was written nearly 2,500 years ago<sup>10</sup>.

As with Chinese PSA, there were two separate offices, but their responsibilities differed from the previous example (and current practices):

- the Treasurer managed the assets;
- the Comptroller-Auditor maintained the records, compiled the rules, audited, and presented financial reports to the king.

Kautilya also recognised the significance of corruption saying:

“just as it is impossible not to taste the honey or poison on the tip of your tongue, so it is impossible for someone dealing with government funds not to taste at least a little bit of the king’s wealth.”

Kautilya proposed three conditions for efficiency and compliance:

- citizens (including government officials) have to be informed of the laws;
- organizational structures should reduce the scope for conflicts of interest;
- comprehensive schemes of rewards and punishments are needed to increase compliance.

He also provided considerable details on the accounting rules to be followed, for example:

“The Closing Day for the Accounting Year shall be the full moon day of the month of Asadha [June/July]”

and

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<sup>10</sup> Sihag (2004).

“Day-to-day accounts [to be submitted once a month] shall be presented before the end of the following month and late submission shall be penalized.”<sup>11</sup>

Thus Kautilya, writing nearly two and a half millennia ago, made contributions on systematic record keeping, periodic accounting, budgeting, and independent auditing. These remain core aspects of PSA to this day.

## **2.5. Ancient Greece – Aristotle**

Aristotle (384–322 BCE) wrote *The Politics*. This book described the Greek approach to governance, including PSA.<sup>12</sup> Public officers presented their accounts 10 times a year to the Assembly of the Citizens and also at the end of their term of office. Accounts were also posted in different wards (comparable to our online publication).<sup>13</sup>

The English word ‘audit’ is derived from the Latin word ‘audire’, which means ‘to hear’. Ten auditors were selected by lot from members of Council and they heard explanations of how public money had been spent by the accountant.

“To prevent the exchequer from being defrauded, let all public money be delivered out openly in the face of the whole city and let copies of the accounts be deposited in the different wards, tribes and divisions.”<sup>14</sup>

## **2.6. Islamic States**

“[F]or five centuries, from 700 to 1200 Islam led the world in power, organization, and extent of government”.<sup>15</sup>

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<sup>11</sup> Sihag (2004), p. 143.

<sup>12</sup> Aristotle (384 BCE – 322 BCE).

<sup>13</sup> Gustavsson (2013).

<sup>14</sup> Aristotle, Book V chapter V111.

<sup>15</sup> Zaid (2000), p. 153.



Pacioli (Italy 1494), who wrote the earliest accounting manual, may have learnt about the concept of double entry book-keeping from the Islamic States (they also preserved much knowledge from the ancient Greeks for later Western European societies).

The Zakat (religious levy) and increasing responsibilities of the Islamic State led to the development of accounting processes, these then spread to the private sector (a reversal of current ideas):

“the successful application of accounting systems by government authorities promoted the adoption of similar procedures among private entrepreneurs”.<sup>16</sup>

“Annual reports prepared by Al-Kateb (the accountant) were reviewed (audited) and compared with prior year reports.”<sup>17</sup>

“Budgeting also featured in the accounting systems and was used as an internal control procedure as well as being a tool for analysing and interpreting the monthly and yearly financial statements. Auditing was practiced in the Islamic state and was mandatory.”<sup>18</sup>

## **2.7. Other civilisations with tax collection**

There were many other states throughout history that developed their own approaches to PSA. For example, there were several states in West Africa that had well-developed taxation systems whose accounting systems are not known in any detail due to the destruction of the records, the feeling that we had nothing to learn from such administrations and so the lack of detailed research:

- Benin Empire (1440–1897): in the south of modern Nigeria, developed an impressive bronze technology;
- Ashanti Empire (1701–1894): in what is now Ghana, had a gold based treasury and inheritance tax.

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<sup>16</sup> Zaid (2000), p. 158.

<sup>17</sup> Zaid (2000), p. 158.

<sup>18</sup> Zaid (2000), p. 168.

- Sokoto Caliphate (1804–1903): an Islamic empire in northern Nigeria, one of the most powerful empires in sub-Saharan Africa prior to European conquest.

Detailed research of the accounting systems of such civilisations may provide alternative approaches to PSA that could be a source of inspiration to solving some of our modern day problems.

### **3. Historical Traditions of PSA in Europe**

#### **3.1. Introduction**

The significance of state finances has hugely increased in the last century or so. So, for example, in France, over the century to 1913, state expenditure increased fivefold. So it was five times higher at the end of the century compared with the start of the century.<sup>19</sup> Similarly, the value of European public spending increased a thousand fold from 1866 to 1950. In the early years of 20th century public sector expenditure was only around 15% of Gross Domestic Product (GDP). This increased to around 35% by the late 1940s, having peaked at around 55% and 70% of GDP during the two world wars. From around 1980 it stabilised at above 40% of GDP despite the adoption of neoliberal principals of privatisation and out-sourcing.<sup>20</sup>

At least three different approaches to PSA and audit developed in the modern era in Western Europe, these included the following:

- England – pipe rolls from around 1100 CE;
- France – dual system (instruction and payment);
- Germany – cameral accounting.

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<sup>19</sup> <https://oll.libertyfund.org/pages/budget1848>

<sup>20</sup> Tanzi and Schuknecht (2000); Ortiz-Ospina and Roser (2019).

Modern public sector financial reporting is, at its core, budget accounting – a comparison of actual spending and receipts with the previously agreed budget. Parliament agrees the budget for the year and the accountability cycle is completed through the presentation of a budget out-turn report indicating the extent to which the original authorisations were complied with during the year:

“The importance of the budget for accountability was that it provided quite precise standards by which to judge the annual accounts”.<sup>21</sup>

The budget provides a way of assessing under or over spending and to high-light these problem areas. The audit report in turn identifies any spending that is not in-line with the budget or did not follow the Financial Regulations.

### **3.2. Adoption of double entry book-keeping**

The argument for the adoption of private sector practices by the public sector, including accrual accounting, has had a long and disputed history. An example of this is the very slow adoption of commercial style double entry book-keeping by governments across Europe. This reform took over 500 years to spread from its origins in the city state of Genoa (before Pacioli’s famous publication) to the Norwegian government. People can walk faster than this reform spread! The dates of adoption of this approach are:

- Local government of Genoa in 1340<sup>22</sup>;
- Spanish central government – 1592;
- Portuguese Royal Treasury – 1761;
- France – 1815 (initially introduced in 1716);
- Britain: – 1829, but

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<sup>21</sup> Normanton (1966), p. 6.

<sup>22</sup> Miley and Read (2017).

“As late as 1857 the Select Committee on Public Monies was still urging the merits of the double-entry system of book-keeping.”<sup>23</sup>;

- Norway – 1879<sup>24</sup>.

The problem was clearly not that public officials were not aware of such approaches, but perhaps they did not feel these reforms were necessary nor generally relevant for the public sector. Here accounting is largely the analysis of payments and receipts in line with the agreed annual budget rather than calculating the annual profit earned by a merchant. Luca Pacioli’s approach to book-keeping, published in 1494, was designed to assist these private sector merchants.

### **3.3. England – Exchequer audit of sheriffs**

From the 12th century the local sheriffs of each county of England “were audited by the great nobles sitting in the Exchequer.”<sup>25</sup> The Exchequer met twice a year, at Easter and Michaelmas (29 September). This court of law could discharge the sheriff (with the Latin words “et quietus est”) or rule an amount that was owed to be paid by the sheriff into the Treasury. Irregular visits were also made to the individual counties by the Justices in Eyre to confirm the accuracy of the sheriff’s accounts (a possible early form of internal audit).

These procedures originated in France and were brought to England with the Norman invasion of 1066. The English system then followed its own evolutionary path and differences with the French approach gradually increased.

The Pipe Rolls (the financial records for each county) were written on sheep skin in Latin (until 1733) using Roman numerals (I, II, IV, XI etc).

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<sup>23</sup> Chubb (1952), p. 15.

<sup>24</sup> Parry and Hughes (2019).

<sup>25</sup> Normanton (1966), p. 14.

Treasury receipts were wooden tallies (stock and foil) and were used until the nineteenth century as receipts by the king's treasury.

This process ensured the accountability of county sheriffs to the king for their revenue collection and local expenses. It was not an open or public process. It was a Charge-Discharge system – the objective was to calculate and record the sums owed to the king by the sheriff of each county.

“[T]he Steward was charged with the sums for which he was responsible (opening balance, plus receipts), and discharged of his legitimate payments; the end balance showed what he must handover to his lord.”<sup>26</sup>

“The upper exchequer was responsible for the audit function, the purpose of which was the detection of fraud or dishonesty of individual officials within specified areas of responsibility.”<sup>27</sup>

“This approach to government accounting persisted for some 700 years until the abolition of tallies in 1826, followed by sheriffs in 1833 and the exchequer in 1834.”<sup>28</sup>

The Pipe Rolls (financial records) for each county had the following format:

<i>Net sum due and payable by the sheriff</i> (being the result of the following calculation):	XXX
Gross value of the farm (estates managed by the sheriff)	XXX
Less any profers (payments on account) paid at Easter (or Michaelmas)	XXX
Less specific deductions allowed	XXX
Less Terrae datae (lands alienated/gifted to others by the king)	XXX
Less casual payments made, based on a king's writ	XXX
	XXX
Plus other income due to the king (including income from boroughs – towns)	XXX

<sup>26</sup> Cooper; Funnell and Lee (2012), p. 198.

<sup>27</sup> Cooper; Funnell and Lee (2012), p. 199.

<sup>28</sup> Cooper; Funnell and Lee (2012), p. 203.

### 3.4. Parliamentary control of finances

The principle of “no taxation without consent” was established under the Magna Carta (1215). This ensured that the king was accountable (to a certain extent) to the feudal lords. During the seventeenth century, the House of Commons struggled to gain control over the executive and so to control the government’s expenditure. The more detailed principle developed of “no expenditure except in amounts and ways approved by Parliament”. A system of control based on these two principles has been progressively refined in the modern era.”<sup>29</sup>

It was not until the middle of the 19th century that the British parliament was able to hold ministers to account for sums spent by their ministries. Before that, financial control was achieved by the Comptroller General’s role of controlling releases of funds from the Treasury (combined with the role of the Auditor General). Or putting it another way, financial control had been through budgetary release – rather than a review of financial statements. The Treasury was only a small department at this stage still only having 35 staff by the middle of the 18th century.<sup>30</sup>

From the perspective of the strict process of budgetary control that had developed by the mid 20th century:

“[G]overnment accounting... was gravely deficient until well into the nineteenth century. The departments themselves kept embryonic records.”<sup>31</sup>

“in 1782 great accounts twenty and thirty years old were still open”.<sup>32</sup>

“from 1780 demands for returns of accounts were frequent as the House of Commons sought to implement the new responsibility it was beginning to feel. Yet it was not until 1802 that annual ‘Finance Accounts’ were presented, and 1822 that balanced accounts appeared.”<sup>33</sup>

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<sup>29</sup> Pallot (1992), p. 3.

<sup>30</sup> Roseveare (1969), p. 102.

<sup>31</sup> Chubb (1952), p. 15.

<sup>32</sup> Chubb (1952), p. 15.

<sup>33</sup> Chubb (1952), p. 19.

Ordinary government expenses were generally just funded from particular sources or types of tax – rather than by the amount budgeted. Specific types of tax were allocated to individual ministries (or the king’s household) rather than the amounts actually raised by these taxes.

Annual budgets were voted for armed services from the late 17th century (in total), but these were not supported by detailed estimates for many years. Detailed budgets or estimates were introduced in the 19th century and made universal with the Exchequer and Audit Departments Act of 1866.<sup>34</sup>

The modern English or Westminster approach is based on two funds, the Consolidated Revenue Fund that should receive all income that has been collected and the Capital Development Fund that allocates all funds for capital expenditure. The allocations of monies to individual ministries are then made from each of the two funds as indicated in the figure below:

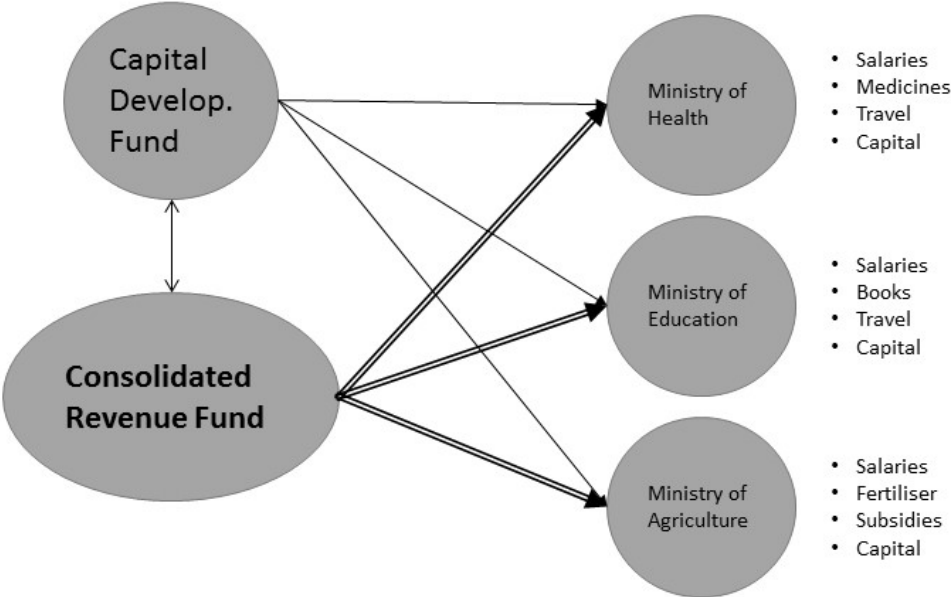


Figure 2.1: Structure of public accounts

<sup>34</sup> Chubb (1952), p. 11.

All revenue (taxes etc) should be paid into the Consolidated Revenue Fund. Transfers are then made to the Capital Development Fund (and then from this fund on to individual ministries) and to individual ministries for their recurrent spending. So each ministry receives monies for recurrent spending from the Consolidated Revenue Fund and monies for capital spending from the Capital Development Fund. At the year end, accounts are produced for both the Consolidated Revenue Fund, the Capital Development Fund and each individual ministry. At their simplest, these accounts would be budget out-turn reports as indicated below:

<b>Ministry of Health</b>	<b>Budget</b>	<b>Actual</b>	<b>Variance</b>
	<b>€</b>	<b>€</b>	<b>€</b>
Wages & salaries	225	220	5
Medicines	75	70	5
Stationary	13	12	1
Telephone	5	3	2
Travel	12	8	4
Rent	12	10	2
Other goods & services	8	10	(2)
Capital spending	100	150	(50)
<b>TOTAL</b>	<b>450</b>	<b>483</b>	<b>(33)</b>

*Figure 2.2: Budget out-turn report*

Thus there is one budget line for each type of expenditure in each ministry and the financial statements highlight the differences between the budget and the actual expenditure (variance).

### **3.5. Early experiments with accrual accounting**

Birmingham City Council adopted accrual accounting from around 1850 as its main role was to provide public utilities like a private sector company. However, a century later, the House of Commons (parliament) *Committee on the Form of Government Accounts* rejected moves to accrual accounting in government ministries. Accrual based financial statements had been produced for six years by the British



war ministry in the early 1920s, but according to the Committee:

“the experiment had not led to commensurate economies in administration and seemed unlikely ever to do so”<sup>35</sup>

and so the committee concluded that:

“no practical advantage would be secured from the adoption of [an accrual]... basis of accounting”.<sup>36</sup>

Accrual based financial statements were finally introduced for central government ministries from the 2001/02 financial year (after the more general adoption of New Public Management).

#### **4. France – objective is control**

The French system of PSA evolved into a sophisticated system whose main objective was control. That is to ensure that payments were made accurately and the accountants could account for all the payments that they had made. The French system was copied by the Italian Government in 1877 and Portugal had emulated the French approach in 1761.<sup>37</sup>

##### **4.1. Two sets of accounts**

The French system of PSA is based around two sets of accounts which are maintained by two sets of independent officials:

1. *Comptes administratifs* – accounts of the *ordonnateurs* who raise orders and provide payment instructions to the comptable public.

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<sup>35</sup> Committee on the Form of Government Accounts (1950), p. 70.

<sup>36</sup> Committee on the Form of Government Accounts (1950), p. 21.

<sup>37</sup> Parry and Hughes (2018).

2. *Comptes de gestion* – accounts of *comptable public* (cashier/accountant) who, like the sheriffs of old England are given ‘quitus’ by the auditors if their accounts are considered to be adequate and legal.

The *Cour des comptes* (court of accounts = auditors) certifies the accounts of the *comptable public* (accountants), but not necessarily every year. The auditors also certify the consistency of the above two sets of accounts. The Auditors report any other significant findings to the President and National Assembly. So the role of the French public sector Auditors are significantly different from those in England (and of course their colleagues in the private sector).

The *Loi de règlement* (budget out-turn report) records the financial out-turns for revenue and expenditure and compares these with the budget estimates.

The Government of the old regime (Ancien Régime – before the revolution of 1789) did not have centralised accounts and government revenue collection and management of expenses could be outsourced to private managers (‘tax farmers’).

Taxes were introduced in France in the 12th century to pay for the crusades.

“A decree of Philippe V in 1319 gave some precise form to the *Chambre des Comptes* of Paris... from this foundation the present French state audit body traces an almost direct descent.”<sup>38</sup>

But there were also local audit courts – 13 by the time of the French revolution (1789).

Reforms were attempted in the 1680s and again from 1781, but the modern approach only really started with the French revolution in 1789. The chaotic state of the public accounts may in fact have contributed to this event<sup>39</sup>.

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<sup>38</sup> Normanton (1966), p. 15.

<sup>39</sup> Parry and Hughes (2018).

## 4.2. French revolution and Napoleon

After the revolution of 1789, the French Constitution stated:

“all citizens have the right to see – for themselves or through their representatives – the necessity of the public contribution, the right to consent to it freely and to check on the use made of it”.

This led to the creation of a single central account allowing the production of a balance sheet (1792).

The French revolution introduced formal annual accountability. As part of this process,

“From 1815, strict budgeting has spread through European States.”<sup>40</sup>

## 4.3. French reforms of the 19<sup>th</sup> and 20<sup>th</sup> centuries

The 1822 Ordinance outlined the principles of public finance and accounting:

- the different roles of the orderer (*ordonnateur*) and public accountant (*comptable public*) – each with their own set of accounts;
- *Universality* ensures that revenue and expense are shown gross, with no netting-off;
- *Specialization* determines the level of items authorized within the whole budget;
- *Equilibrium* of revenue and expense may be achieved by approving expenditures; and then voting adequate taxes, or vice-versa;
- *Annuality* of the budget process agreed by the legislature;
- *Unity* – budget in a single document.

The decree of 1862 governed budgeting and control. By 1872 the Cour des comptes was responsible for the audit of over 1,000 public

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<sup>40</sup> Forrester (1990), p. 311.

accountants.<sup>41</sup> However, the process of regulating the control of commitments of public expenditure was only effective by the end of the First World War.

The Constitution of 1958 and the 1959 Ordonnance reduced the direct parliamentary control of finances.

It was only after 1967 that the requirement to submit the audited accounts to Parliament by the end of the following year was achieved.<sup>42</sup>

#### **4.4. Programme budgeting & accrual accounting**

La loi organique loi de finance [Organic Finance Law] (2006) – was the major law introducing the ideas of New Public Management in France. It aimed to allow parliament and citizens to monitor budget performance via management of budget programmes and accrual accounting. It is generally considered to have been successful. However, ten years after its introduction the French public sector auditors (Accounts Court) concluded that:

“to date, the contributions of accrual accounting do not appear to correspond to the resources devoted by the administration to its establishment”.<sup>43</sup>

### **5. Germany – cameral accounting**

Cameral accounting developed to achieve following aspects of control:

- Payment – separation of instruction and payment functions (as with the French system);
- Budgetary – is the budget implemented as agreed?;
- Cash/money – accounts to provide running total of cash balances;
- Result reporting – overall budget balance.

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<sup>41</sup> Bottin (1997).

<sup>42</sup> Department of International Economic and Social Affairs (1978), p. 8.

<sup>43</sup> Cour des comptes (2016), p. 69.

Cameral accounting has been used since the beginning of the 14th century in German speaking countries (Germany, Austria, Switzerland) and influenced accounting in Nordic countries, Netherlands, Belgium, Hungary and northern Italy.<sup>44</sup> It was also used in Russia from the early 18<sup>th</sup> century until the 20<sup>th</sup> century.<sup>45</sup>

### 5.1. Developments in cameral accounting

Devised as an internal auditing aid for royal financial administration (charge & discharge).

Developed in four phases:

- First Phase (ca. 1500-1750)  
Simple Cameral bookkeeping or cash receipts and payments recorded in a day book;
- Second Phase (ca. 1750-1810)  
Introduction of current dues accounting – allowing payment instructions to be recorded;
- Third Phase (from ca. 1810)  
Separation of result-affecting items from non-result-affecting;
- Fourth Phase (from ca. 1910)  
Development of Enterprise Cameralistics for government enterprises, especially municipal enterprises.<sup>46</sup>

Ernst Walb wrote one of the classic books about cameral accounting in German. It was entitled *Die Erfolgsrechnung privater und öffentlicher Betriebe* (1926) (Performance Result Accounting for Private and Public

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<sup>44</sup> Monson (2002).

<sup>45</sup> Nazarov and Sidorova (2016); Forrester (1990).

<sup>46</sup> Monsen (2002).

Organisations).<sup>47</sup> The Norwegian academic, Norvald Monsen, has also published a series of articles in English describing cameral accounting.

Chairs in administrative or cameral science were established across Germany, in the Austro-Hungarian Empire and in Sweden by the early 18th century. This included studies of cameral accounting which had developed into a well controlled and sophisticated approach, so that:

“By 1689, data flowed through the Prussian Hofkammer so reliably and comprehensively that a general account, an audit and a budget for the coming year were possible”.<sup>48</sup>

**5.2. Cameral book-keeping**

The main cameral ledger has two sides, one for revenues and a similar one for expenditures, as indicated below:

	<b>Revenues/Expenditures</b>			
	Balances or residual dues b/f (BD)	Current dues (CD)	Actuals (A)	Balances or residual dues c/f (B)
<b>Description of transaction (character or type)</b>				

- BD – balances unpaid in the previous period & brought forward
- CD – payment or receipts instructions made in the current period
- A – payments (or receipts) made in the current period
- B – balances unpaid (or not received) and carried forward to the next accounting period

<sup>47</sup> Monsen (2002), p. 40.

<sup>48</sup> Dorward (1953), p. 117; Forrester (1990), p. 310.

Cameral book-keeping is a single entry system as entries are made either on the revenues or the expenditures side of the cameral account. It has two rules, that:

- (1) no payment can be carried out without an earlier or a simultaneous instruction
- (2) balances carried forward = balances brought forward + current dues – actuals.

Cameral accounting could be extended to allow budgetary control for democratic control of public sector spending – by comparing current dues with the relevant budget. Monsen commented that:

“cameral bookkeeping method for centuries has been used in the public sector, as opposed to the commercial bookkeeping method. It has also been pointed out that attempts to replace the former with the latter method, has failed every time”.<sup>49</sup>

Until the end of the 1990s local governments and States in Germany were required to produce cameral based financial statements – Hausshaltsgrundsätzesetz (HGrG).<sup>50</sup> The State of Hessen agreed to adopt an accrual based approach to financial reporting in 1998. This was followed by two other of the sixteen states and many local governments have adopted a broadly similar approach, especially in these three states.

## **6. Move to accountability to parliament**

Parliamentary accountability is now accepted as being essential to a modern democracy, but this was not always the case. The development of parliamentary accountability and parliamentary control of the budget

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<sup>49</sup> Monsen (2002), p. 45.

<sup>50</sup> Filios (1983).

process took hundreds of years to achieve in England, France and Germany.

### **6.1. Originally accountability of officers/stewards to the king**

There was a gradual move to the idea of the accountability of the king/queen and his/her government to Parliament.

The separation of powers between the executive and parliament was documented by Montesquieu in *De l'Esprit des Loix* (1748).

The American constitution required that no money should be spent by the government except as agreed in the budget and a regular *Account of Receipts and Expenditures* was to be published from time to time (Article 1; Section 9, 1789)

“The French Revolution [1789] went much further and proclaimed a doctrine of popular sovereignty over finance”.<sup>51</sup>

From 1866 the British Comptroller and Auditor-General was to work “on behalf of the House of Commons” rather than the auditor working for the king/queen.

### **6.2. Extension of the right to vote in England**

Parliamentary democracy (as one person one vote) developed initially in the 19th Century in England.

In 1800 only 8% of men (and no women) had the vote and parliaments were still effectively controlled by landowners and business people. The new cities of Manchester, Birmingham and Glasgow had no members of Parliament at this time.

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<sup>51</sup> Normanton (1966), p. 5.



The Reform Acts of 1832, 1867 and 1884 each doubled the numbers of people allowed to vote, so that two thirds of men could vote by the end of the 19th century. In 1918 and 1928 the right to vote was extended to all people aged 21 years or above, including women.

With the Parliament Act of 1911: the House of Lords could no longer reject bills; it could only amend or delay legislation; elections were to be held every five years; and payment for Member of Parliament's was introduced. An approach to parliamentary democracy working on behalf of all citizens including financial accountability of the government had developed.

## **7. Conclusion**

PSA arises in all civilisations, so history provides us with a wide variety of different approaches and objectives. We should remember that ancient accountants were as intelligent as our current 'experts'. So relatively sophisticated systems of PSA developed, although the purposes and objectives varied from time to time. Until around the 19th century accounting was mainly for the public sector as the state was by far largest economic entity, except perhaps the church.

There was a move away from the feudal charge-discharge system as parliamentary accountability developed, initially in the 19th century.<sup>52</sup> From this period, PSA was originally budgetary accounting with the main objectives being control and accountability. This changed in the late 20th century with the adoption of New Public Management and its emphasis on efficiency.

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<sup>52</sup> Miley and Read (2017).

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## **Discussion topics**

- Using one or two examples from this chapter, consider some of the similarities to PSA across different societies.
- Describe the different objectives of PSA from the examples described in this chapter.
- Why do you think that different societies in history have developed their own approaches to PSA?
- Why do you think that the complementary roles of accountant and auditor have developed in most cases of PSA (and in the private sector)?
- Why do you think budgeting developed as a key aspect of PSA?
- Why do you think the public sector expanded so quickly in the hundred years from 1850?

**CHAPTER 3**  
**DIFFERENCES BETWEEN PRIVATE AND PUBLIC**  
**SECTOR ACCOUNTING**

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**SUMMARY**

International public sector accounting standards are based on the international accounting standards for the private sector. However, there are major differences between the accountabilities and financial reporting requirements of the public sector entities and those in the private sector. These differences include the objectives, different processes for generating revenues, the stakeholders and the fact that public sector entities are generally much long lasting than those in the private sector. This chapter considers these differences and the extent to which these will require changes and adaptations to private sector accounting standards to make them applicable to the public sector.

**KEYWORDS**

accountability, accounting standards, accrual, citizens, assets, balance sheet, budget, depreciation, financial accounting, financial reporting, financial statements, liabilities, New Public Management, private sector accounting, public sector accounting, stakeholders

## 1. Introduction

In this chapter we consider the different approaches to financial reporting adopted in the private and the public sectors and the fundamentally different roles that they play. The chapter is based round a publication from the *Government Accounting Standards Board (GASB)* issued in 2006.<sup>1</sup> These differences could perhaps lead to a questioning of whether the public sector should be adopting private sector approaches to financial reporting or, at least, emphasising the need for significant adaptations to private sector approaches to make them suitable for the public sector.

This is in stark contrast to the International Federation of Accountants (IFAC) who argue voraciously that the private sector model of financial reporting provides a comprehensive and appropriate model that should be adopted by the public sector. This is consistent with the approach of New Public Management. This argues that the public sector should adopt private sector styles of management to enable it to emulate the supposed efficiency of the private sector.

According to the GASB White Paper, the public and private sectors of the economy have:

- different purposes;
- different processes for generating revenues;
- stakeholders are starkly contrasting;
- public sector entities may often be long lasting in contrast to the often short life of private sector companies.<sup>2</sup>

This chapter provides an introduction to the different roles of financial accounting in the private sector and the public sectors. It then goes on to consider the:

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<sup>1</sup> GASB accounting and financial reporting standards for U.S. state and local governments (1984).

<sup>2</sup> GASB (2006). These Arguments are accepted by IFAC in its Conceptual Framework.

- key stakeholders in each sector;
- different relationships between revenue generation and the supply of goods and services in the two sectors.

This will lead to considerations of the implications for public sector accounting (PSA) reform of the fundamental differences between public sector and private sector entities.

This chapter will attempt to answer the following questions:

- What are the key differences between the public and the private sectors that may impact on their approaches to financial accounting?
- What are the key differences in the purposes of public and private sector financial statements?
- How do the processes of raising revenue differ between the public and private sectors?
- Who are the core stakeholders in the public and private sectors?
- What are the implications for the relative longevity of public sector entities?

Given the differences between the objectives of public sector and private sector accounting, how relevant are private sector approaches to accounting and how should these be adapted to ensure relevance in the public sector?

### **Should public sector learn from the private sector?**

“Governments are fundamentally different from for-profit business enterprises in several important ways. They have different purposes, processes of generating revenues, stakeholders, budgetary obligations, and propensity for longevity.”<sup>3</sup>

The above assertion contrasts with the dominant view of the last three decades, with what has been termed New Public Management. This argues that:

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<sup>3</sup> GASB (2006).

- the free market creates wealth and prosperity for all;
- governments should be minimised;
- the residual public sector should be run efficiently (at the lowest cost) "like private sector".

There has been an on-going debate for centuries between the advocates of the two sectors and their approaches to financial reporting. The previous chapter indicated the history of change and reform in the public sector. These earlier reforms were at least partly in response to fundamental changes in the nature of the public sector from a feudal system to the adoption of parliamentary democracy.

The previous chapter also indicated that there had been a debate over the adoption of commercial double entry book-keeping by European governments from its first adoption in the mid-14th century in the City State of Genoa to the eventual adoption by the central government of Norway over 500 years later.

There has been a similar debate over the adoption of accrual accounting, or the private sector approach, by the public sector. This started in the mid-19<sup>th</sup> century when Birmingham City Council, the second largest city of England, adopted this basis for its financial statements.

Accountants trained in commercial accounting practices assume that this approach is superior to the practices adopted in the public sector. They are concerned that physical assets are not valued nor included in public sector balance sheets.

The European Union (EU) proposes to require IPSAS style accrual accounting across its member governments by 2025. But this reform has not been uniformly accepted. The Federal Audit Board in Germany, for example, has argued that accrual accounting is not suitable for the public sector and should not be a mandatory approach for all European governments.<sup>4</sup>

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<sup>4</sup> Federal Audit Board (2017).

## 2. The benefits of accrual accounting

According to the IFAC, the information contained in financial reports that are prepared on an accrual basis of accounting is useful both for accountability and decision-making. Thus, it argues, that financial reports prepared on an accrual basis allow users to:

- assess the accountability for all resources the entity controls and the deployment of those resources;
- assess the financial position, financial performance, and cash flows of the entity; and
- make decisions about providing resources to, or doing business with, the entity.<sup>5</sup>

At a more detailed level, IFAC argues, that reporting on an accrual basis of accounting:

- shows how an entity financed its activities and met its cash requirements;
- allows users to evaluate an entity's ongoing ability to finance its activities and to meet its liabilities and commitments;
- shows the financial position of an entity and changes in financial position;
- provides an entity with the opportunity to demonstrate successful management of its resources; and
- is useful in evaluating an entity's performance in terms of its service costs, efficiency, and accomplishments.<sup>6</sup>

## 3. Different purposes

“The purpose of government is to enhance or maintain the well-being of citizens by providing public services in accordance with public policy goals.”<sup>7</sup>

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<sup>5</sup> IPSASB (2011).

<sup>6</sup> IPSASB (2011).

<sup>7</sup> GASB (2006).



The purpose of the private sector is to earn profit.<sup>8</sup> As a result, accrual accounting has been designed and developed to provide a comparable and consistent view on the amount of the annual profit that companies have earned. One of the key aspects of this approach is depreciation. This is designed to spread the costs of capital assets (buildings, machinery etc.) over their useful lives. This is to enable the costs of these assets to be matched with the revenue that they have helped to earn and so calculate the annual profit.

PSA, in contrast, is primarily designed to account for receipts and payments and to compare these with the agreed annual budget. It is for the government and its ministries to provide accountability for the way that it has used budgeted resources and to demonstrate that these have been used in line with the relevant laws and regulations.

Private sector companies have to sell goods or services in order to earn a profit. In the public sector, governments could maximise their 'profit' or surplus by not spending any money and so not providing the agreed services. So whilst profit provides a reasonable indicator of the extent to which a private sector company may achieve its main objective, this is not the case in the public sector.

In the public sector, financial statements are required for governments and their ministries to demonstrate accountability for the manner in which they have managed and utilised their annual budget. However, other measures, including perhaps non-financial performance indicators, are required to demonstrate how successful public sector entities have been in providing public services.

In the private sector, the annual income statement indicates the performance of the private company in achieving its key objective of making a profit. In contrast, in the public sector, the annual income statement is just a financial statement and cannot directly indicate the performance of the public sector entity in achieving its wider range of objectives.<sup>9</sup> This is one of the reasons why Johns claimed that the

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<sup>8</sup> GASB (2006).

<sup>9</sup> Johns (1951).

introduction of private sector accounting practices into the public sector had always been a failure.<sup>10</sup>

### **3.1. Redistribution of resources**

The redistribution of income and wealth, to achieve less unequal societies, is a key role of government.<sup>11</sup> So governments generally tax the rich at a higher rate and provide a greater level of services to the poorer members of society. For this reason, in 2015, the leaders of 193 governments promised to reduce inequality as part of the United Nations Sustainable Development Goals (SDGs)<sup>12</sup>. Goal 10 is to “Reduce inequality within and among countries”<sup>13</sup>.

In contrast, if anything, private sector companies redistribute income, and so wealth, from the general public to a smaller group of shareholders (usually richer members of the public).

### **3.2. Intergenerational equity?**

Those who advocate business like accounting for the public sector often claim we need to show intergenerational equity – not a concept that is used in the private sector. It is not clear why this should be an objective for the public sector, as governments do not demonstrate equity even within the current generation. As indicated above, governments re-distribute resources from tax-payers to service users.

Intergenerational equity is often used as a reason for minimising government debt (whist ignoring the assets procured with that debt).

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<sup>10</sup> IPSASB (2011).

<sup>11</sup> United Nations (2015).

<sup>12</sup> SDGs (2015).

<sup>13</sup> SDGs (2015).

This would have the impact of reducing the size of governments which is consistent with New Public Management and Neoliberal thinking.

#### **4. Generating revenues**

“[B]usinesses receive revenues from a voluntary exchange between a willing buyer and seller, governments obtain resources primarily from the involuntary payment of taxes. Taxes paid by an individual taxpayer often bear little direct relationship to the services received by that taxpayer.”<sup>14</sup>

Matching of costs and the income that is received from the goods and services that are sold is central to private sector accounting. This is the reason why depreciation is used to spread the cost of capital costs over the estimated lives of the assets.

In contrast, taxes are non-exchange transactions. There is no expectation that tax payers should receive services that are commensurate with the taxes that they have paid. Indeed, the opposite is usually the case, wealthier members of society generally pay higher rates of tax and receive a lower level of services.

Taxes are often collected for general government services and so cannot be matched with the services that they fund except that such independent activities occur in the same financial year. Taxes are generally paid into a common pool, the Consolidated Revenue Fund, from which the generality of government services are funded. There are exceptions including hypothecated taxes like the BBC (British public television channel) licence fee and vehicle licenses. The hypothecation of a tax (also known as the ring fencing or ear marking of a tax) is the dedication of the revenue from a specific tax for a particular expenditure purpose.

“In the private sector in general there exists a causal relationship: incoming services and products are exchanged for outgoing payments, and vice versa.

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<sup>14</sup> GASB (2006).

In general we do not find such a causal relationship in the public sector, since the state and local governments receive taxes from the inhabitants, and they give many services free of charge to the inhabitants.”<sup>15</sup>

Governments aim “to provide a wide variety of services as economically as possible to beneficiaries who may or may not pay for the service.”<sup>16</sup>

## 5. Stakeholders

“Citizens are not owners.”<sup>17</sup>

Private sector company accounts are addressed to its shareholders. This is a discrete, relatively affluent group of people with access to expert advice. The accounts inform the shareholders on the level of the annual profit the company has earned and the viability of company as a going concern indicated by the balance sheet.

With parliamentary democracy, the government is accountable to parliament and through its members to the wider citizens (those who have the right to vote). Financial accountability consists of providing assurance that the budget and relevant laws and regulations have been complied with as required. So the report of the Auditor-General is as important as the financial statements which compare the actual payments and receipts to the budget that was previously agreed by parliament.

IFAC, in contrast, defines service recipients and resource providers (and their representatives) as the key stakeholders for public sector financial statements.<sup>18</sup> This is a slightly different group to citizens, although many citizens will receive services from the government and pay taxes. Not all citizens are direct service recipients (except for general services like the armed forces) and resource providers may not be citizens, for example,

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<sup>15</sup> Monsen (2002).

<sup>16</sup> Mautz (1981).

<sup>17</sup> Mautz (1981).

<sup>18</sup> IPSASB (2014).

foreign residents or companies may pay taxes, but will not be entitled to vote in elections. In contrast many citizens may not pay taxes, at least directly. Public sector accountability is not directly related to the taxes that a person pays nor the services that they receive. It is based on the principle of one person one vote and democratic accountability to the citizenry.

### **Subsidiary stakeholders – creditors**

“Creditors and potential creditors of governments seek information about the ability and willingness to levy taxes to finance debt repayment and the costs and obligations of those activities that could compete for those resources”.<sup>19</sup>

Liquidation of private sector companies is relatively common. When this happens, those holding its debt will rely on asset sales to recover their funds. Thus banks and others holding such debts will want to see the company’s balance sheet to assure themselves that their loans remain secure. Private sector debts are compared with the current value of assets to ensure that if the company goes into liquidation, the creditors will still be able to recover their money from the sale proceeds of these assets.

Major lenders can ask governments for specific information they require and so do not have to rely on the General Purpose Financial Statements (GPFs). Public sector creditors also get assurance that their debts will be paid from the future income stream and budget surplus:

“investors have apparently relied more on the existence of the government’s taxing power than on any information reported in the financial statements.”<sup>20</sup>

Loans to major governments, like those of the European Union, are generally considered to be risk free, in contrast to shares in private sector companies. This status of public sector debt does not usually vary from year to year based on the results reported in the GPFs.

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<sup>19</sup> GASB (2006), p. 6.

<sup>20</sup> Mautz (1981), p. 58.

## 6. Budgetary obligations

“[G]overnmental budgets can be the primary method by which citizens and their elected representatives hold the government’s management financially accountable.”<sup>21</sup>

Budgetary compliance is key to public sector accountability. As a result, a comparison of the actual results to the budget is essential in public sector financial statements. PSA is essentially budgetary accounting.

In the public sector, resources can only be used in amounts and ways approved by the parliament. The budget should be formally agreed by parliament before the start of the financial year. This gives authority to the government to spend in line with this budget and in compliance with the relevant laws and financial regulations.

The financial statements then indicate how the government used the allocated resources in line with the budget. The Auditor-General confirms that all spending was appropriate, in accordance with the budget and that all the relevant laws and regulations were actually complied with. Any exceptions are detailed in their annual audit report to parliament.

Public sector budgets were traditionally detailed, line-item budgets which may have extended to hundreds of pages. They indicated exactly how ministries were to spend their money with each item of expenditure making up a budget line. One aspect of New Public Management is to relax this budgetary oversight by parliament and to allow managers more freedom to decide how they should spend their budgets to achieve the stated objectives. This approach can be called performance based budgeting and the financial budgets may be accompanied by non-financial performance indicators to measure the relative success of the government spending.

In contrast, budgets, if used, are only advisory for the private sector and are usually only internal management documents. Thus budgets are not usually included as part of private sector financial statements and are not usually made public.

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<sup>21</sup> GASB (2006), p. 9.

## **7. Propensity for longevity**

Many states have lasted for at least hundreds of years – governments rarely liquidate – they may fail, but this is generally for political reasons which are rarely linked to finance.

Most private sector companies, in contrast, have a relatively short life, bankruptcy and take-overs are a normal part of business activity:

- in Britain 60% of small businesses fail in their first five years (2016 estimate);
- average listing on S&P (US stock exchange) may only be 15 years (2012).

Due to the longevity of public sector entities/governments debtors can rely on their future income streams rather than sale of their assets under liquidation. Public sector stakeholders do not have to worry so much about the possible financial collapse of their government, nor the healthiness of its balance sheet.

## **8. Inputs, outputs and financial processes in the private and public sectors**

The financial business process model of the private sector is significantly different from the that found in the public sector, as demonstrated in the figures below. The reason for the dominance of the accounting model in the private sector is that the accrual accounting model provides a universal input-output model as illustrated in the first model below:

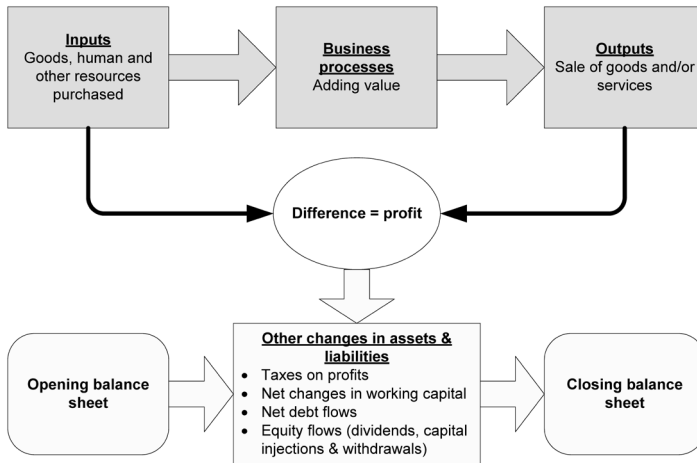


Figure 3.1: The business accounting model (Parry, 2005)

In contrast, the accounting model for governments cannot be an input output model – inputs are specified in money, but outputs are service delivery, e.g. health care, education, defence – the outputs are not “sales”<sup>22</sup>.

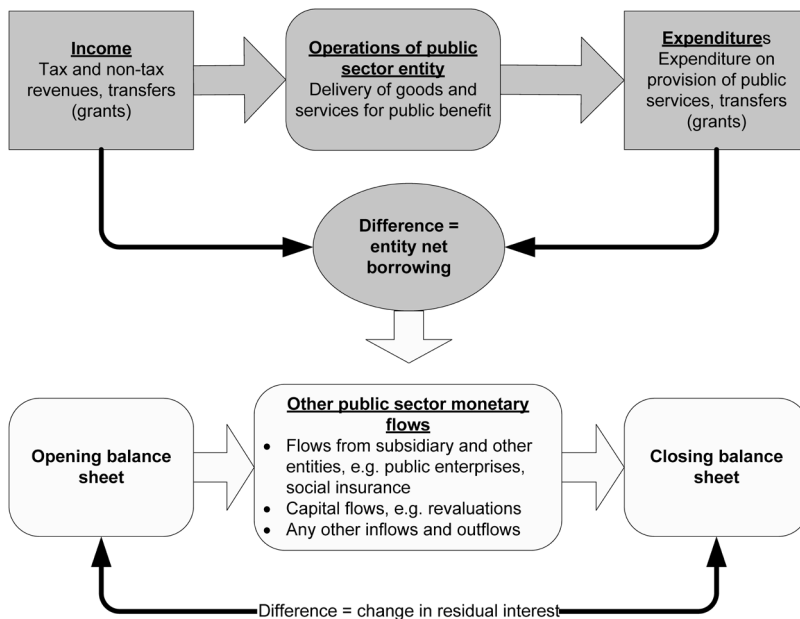


Figure 3.2: The Public Sector Accounting Model (Parry, 2005)

<sup>22</sup> Parry (2005).



Historically, management and control in governmental organizations has differed from the corresponding processes in business enterprises, summarized brilliantly by Rudolf Johns:

“One must distinguish sharply between the *business sector* on the one hand and the *governmental sector* on the other. In both sectors one incurs *expenditures/expenses* in order to produce products and services, that is, to carry out *activities*. The value of the products/services should always be higher than the value of that which one has to give up in order to be able to produce the products/services. An *income struggle* thus is found in both sectors. The respective income statements are, however, very different. In the governmental sector it is only possible to prepare a *financial income statement*, in the business sector a *performance income statement*. Within the governmental sector (the state, municipalities, counties, state governments etc.), one offers services in order to carry out *public tasks*. These services are not sold. If at all payments are claimed for these services, it is in the form of *fees* and not *prices*. These fees have only little or no connection to the expenses incurred to produce the services. The expenses are not covered by prices, but rather in another way, mainly through *taxation*. In a certain year the taxes collected are not identical to the amount used for producing the services. Societal and financial considerations and possibilities determine the size of and relationship between revenues and expenditures.” (Johns (1951), p. 5; translated from German, italics in the original).<sup>23</sup>

## 9. The nature of assets and liabilities

The nature of many assets and liabilities are different in the public sector from those in the private sector. In the private sector assets are assumed to contribute to positive future cash flows. In the public sector assets are generally expected to have negative future cash flows. These will include running costs and maintenance.

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<sup>23</sup> Monsen and Oulasvirta (2008).

In the private sector:

“Liabilities are typically incurred to obtain assets that will then be used productively in the operations of the enterprise. Through such operations the assets are intended to produce positive cash flows which, over time, permit repayment of the liabilities.”<sup>24</sup>

Thus a company may borrow money to construct a factory which will be a source of revenue and profits in future years. These profits can then be used to pay for the interest and repayments of capital on the loan. If the company fails, then the factory can be sold to pay for the remaining outstanding debts.

In contrast, in government,

“Liabilities are incurred to acquire properties that in turn add to the unit's obligations to make cash payments in the future”.<sup>25</sup>

So, for example, a government may borrow money to pay for the construction of a hospital. The government will then be under some expectation, if not obligation, to pay for the running costs of the hospital in future years. So public sector assets may be a source of future costs. In addition, as noted above, governments rarely fail financially and so do not go into liquidation, their assets are rarely sold to pay for outstanding loans.

So, public sector assets are rarely used to secure loans. Future taxation will be used to repay the costs of loans and to fund the costs of the associated assets. For most governments, this future taxation will be its most significant asset. Despite this, few people argue that the right to tax should be valued and included in the government's balance sheet:

“The governmental unit's major resource, its taxing power, is not included in its balance sheet.”<sup>26</sup>

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<sup>24</sup> Mautz (1981), p. 55.

<sup>25</sup> Mautz (1981), p. 55.

<sup>26</sup> Mautz (1981), p. 54.

In the public sector there are a range of assets for which there is no market and so it is difficult to assign a value. These include heritage assets and infrastructure assets (such as roads and railways). In the case of many heritage assets the original cost price may also not be available.

## **10. Importance of public audit report**

In the private sector, the audit process adds credibility to the financial statements indicating that they were subject to independent scrutiny. The stakeholders, primarily the shareholders, are given assurance that the financial statements, including a range estimates, provide a reasonable ('true and fair') view of the level of profit that has been earned.

In the public sector the audit report is probably more important than the financial statements, in terms of public accountability:

- it indicates where there have been budgetary or other irregularities;
- it may indicate other ways in which financial management has not been optimal – performance or value for money failures.

So the publication of public sector financial statements will rarely result in coverage in the media, but the publication of the annual and other reports of the Auditor-General may lead to some press coverage.

At least under the cash basis of accounting, public sector financial statements do not include any estimates. The amount of revenue received and the amounts paid to contractors for capital contracts should be known accurately, as long as the year-end cut-off regulations have been followed properly (this should be confirmed by the auditors). In contrast, comparable figures in private sector financial statements (or under the accrual basis of accounting) are based on estimates of, for example, the useful life of an asset being used to calculate the annual depreciation.

## **11. The problem of externalities**

The government of each state has wider responsibilities than a private sector company and may have to deal with externalities created by the private sector, such as the following:

- inequality and unemployment;
- environmental pollution;
- dealing with major disasters and private sector failure;
- insurance responsibility of last resort.

As an example, the banking crisis of 2008 resulted in huge expenditures for many governments. This included supporting the banking sector and taking over some major banks including their liabilities. This had a significant impact on the finances of some governments and led to a period of austerity or reduced government expenditure which has now lasted over a decade. However, the liabilities that crystallised in 2008, had not been included in the balance sheets of the concerned governments. Even if they could have been foreseen, they could not have been estimated reliably and so could not have been included in the balance sheets.

In the private sector, in contrast, the liabilities of a company are known more accurately and so can be included in the balance sheet.

### **11.1. Heritage or Community Assets**

Heritage or community assets are held and maintained principally for their contribution to knowledge and culture rather than for providing services. These may include ancient remains, museums, art galleries, national monuments, etc. These assets are held in trust for future generations. They do not have readily obtainable historic costs nor market values. In many cases they are unique and the government is not able to sell or dispose of the assets.

Private sector companies do not hold this type of asset so we cannot look to private sector accounting practice to determine how such assets should be accounted for.

Governments should perhaps report whether these assets have been properly maintained and indicate the cost of regular maintenance if this has not been undertaken.

## **11.2. Public goods**

Another set of goods which are not found in the private sector is public goods. These are goods that are both non-excludable and non-rivalrous. Individuals cannot be effectively excluded from their use and use by one individual does not reduce availability to others. Thus it is not possible to charge directly for the use of such goods as no-one can be excluded from the benefits of such assets. Many public services have at least elements of being public goods. These include, for example, the police and army. Everyone benefits from these services and no-one can be excluded from this benefit.

Other public services may also be considered to be public goods and are underprovided if they were to be only provided by the private sector. This includes public education and health. There are wider benefits to these services than just the individuals who are being educated and treated. Society at large suffers if charges are made for such services and so their take-up is reduced. Public health campaigns and inoculations benefit the whole of the public and not just a few individuals.

So public goods should be provided universally and equitably to the whole of the public. It is not clear how private sector style financial statements can demonstrate these requirements and so public goods provide another challenge to the adoption of private sector approaches to financial reporting.

## 12. Conclusion

A leading British PSA academic summarised the differences between private and public sector accounting as follows:

The essential difference between the two sectors must be acknowledged. Public accountability is not well served by financial statements that focus on the interests of investors, and public sector assets frequently do not give rise to future cash inflows. On the other hand, fiscal control and compliance is important in the public sector, but is not in the commercial sector. Furthermore, the adoption of [private sector accounting approaches] emphasises financial accounting and external reporting to the neglect of budgeting and cost analysis that have traditionally been important aspects of public sector accountability.<sup>27</sup>

The argument about whether the public sector should adopt private sector approaches to financial reporting has been taking place for hundreds of years. There has been a largely successful push by the professional accountancy profession (IFAC, national accountancy bodies and professional firms) for the adoption of accrual accounting over the last thirty years and they have benefited handsomely from the introduction of these reforms.

However, due to the differences between private sector and public sector accountabilities, private sector approaches to accounting have to be significantly adapted to be suitable for the public sector.

Rather than adopting private sector approaches, specific additional information could be provided within public sector financial statements to meet the particular public sector accountability requirements.

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## Discussion topics

- As a citizen of your country, what types of information would you find it useful to find in the financial statements for your government?
- Why do you think that some governments have adopted the accrual basis of accounting (private sector approach) in the last couple of decades?
- How important do you think equity is? Should financial statements indicate the government's success in reducing inequality in a society? How important is intergenerational equity? Can this be demonstrated in government financial statements?
- Who do you think are the people who read public sector financial statements? When did you last review the financial statements of your government? What information should public sector financial statements include?
- Why do you think that most investors consider that Government debt is a very safe investment?
- Consider the above two diagrams indicating the processes for private and public sector entities. What are the key differences that may be important for accountability and financial reporting?
- How should we account for public sector externalities? To what extent do you think that public externalities should be included as liabilities in public sector balance sheets?
- What should the starting point be for the reform of public sector financial reporting? The financial statements developed for the private sector or what refinements are needed to provide useful information at reasonable cost?



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## CHAPTER 4

# BUDGETS AND BUDGETARY ACCOUNTING

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### SUMMARY

This chapter describes various approaches to budgeting, which is the traditional essence of public sector accounting. This includes budget planning and budget-linked accounting. The roles and functions of budgets are presented as well as the ideas and practices of both traditional budgets and modern variants such as output- and performance-based budgets.

### KEYWORDS

Budget planning, budgetary accounting, budget models, types of appropriations

## 1. Introduction

In the public sector, the traditional core area of financial decision-making and management is related to budgeting and budget implementation. Elected representative bodies are the ultimate decision-makers in a democracy. One elementary part of this role is the budget power of the representative body.

The duty to be publicly accountable is more significant in government than in business financial reporting. As a consequence of the accountability of public administration to citizens and to their representative bodies (parliaments, councils, etc.), the principles of publicity and transparency are important in budgetary and financial reporting. This includes the lawful and regular behaviour of budget entities, compliance with the approved budget and striving to provide as much value as possible with the entrusted collective resources. Instead of the narrower profitability assessment in the private sector, in the public sector, the many-sided performance and value-for-money assessments are crucial.

Public sector budget structures and accounting conventions have been shaped by national practices. It is just lately that harmonisation pressures have emerged. Public sector accounting (PSA) is nowadays shaped more than ever before by international accounting standards, in addition to domestically developed accounting conventions. However, this international standardisation is more targeted to general-purpose financial statements than to budgets, and even this phenomenon is at an early stage in many countries.

In this Chapter 4 we first explain in Section 2 the budgetary accounting as one part of PSA. Section 3 is devoted to functions and principles of budgets such as the publicity and transparency principle. This is followed with a description of traditional annual budgets and modern variants such as budget appropriations in Section 4 and budget-linked budgetary accounting in Section 5. The last section gives a conclusion.

## **2. Budgetary accounting in the family of PSA systems**

The **budgetary accounting** approach emerges from the agreed budget in the public sector. Bookkeeping must follow the logic and structure of the budget regarding the allocation of income and expenditure to the correct budget codes. If the budget is cash-based, then the follow-up bookkeeping must also be cash-based. If the budget is accrual-based, then the follow-up bookkeeping must also be accrual-based.

Cash-based budgeting and accounting can achieve money control purposes in the public sector. Accrual budgeting means spending measured on a cost basis rather than on a cash basis.<sup>1</sup> Accrual budgeting and accrual accounting also serve the need for management information with their steering and control functions.

### **Link between budgeting and accounting**

The chart of accounts for budgetary accounting is derived from the budget structure. Budget entities may establish more detailed accounts as subaccounts to those accounts derived from the budget for management accounting and intra-organisational steering and control purposes.

If budgetary accounting and the financial accounting are on the same basis, these two accounting systems can be merged into one serving both budget reporting and financial statement reporting purposes. For instance, if the budget is on an accrual basis, the entries made during the year into the ledger make up a double-entry system that generates both the budget outturn reports (budget statements) and accrual based financial statements.

### **3. The functions and principles of budgets**

Budgets in the public sector have several purposes. Annual legal budgets are normally supplemented with medium- to long-term strategic multi-year plans. These are typically less legally binding, but more strategic than annual budgets. They contain policy decisions regarding financing priorities, service provision priorities, etc.

Annual budget plans involve short-term planning by nature: they are financing and resource allocation tools for public sector entities. Available financing and resources are allocated to each department, unit and activity inside the organisation. Budgets contain not only allowed amounts

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<sup>1</sup> Schick (2007), p. 118.

of expenditure, but often also the amount and maybe also the quality standards of the services that are to be provided.

Annual budgets have a financial control function because the approved budget is used as a control tool during the budget year. Appropriations are authorisations to use money according to budget rules, and unauthorised use of resources should be prevented with budget control. Control should guarantee the compliance of activities and spending using the budget, budget laws, regulations and rules. In addition, counterproductive and wasteful use may be prevented with proper budget control. Auditors have the responsibility to report on any breaches that they may identify.

The reporting function is fulfilled by publishing budget plans, but also ex-post budget reports (budget outturn statements). Reporting may include both interim reports and final reports. Actual figures are compared to both the first approved and the final adjusted budget figures. Published final budget statements should be audited by professional and independent auditors.

Budgets are also a means of empowerment and delegation inside each public sector organisation. Along with the allocation of resources, the budget also aligns with the division of tasks to responsible budget entities inside the organisation. Furthermore, it is a communication device inside the organisation, and the budget and budget processes deliver information through the organisation. Budgeting also has behavioural aspects and effects on the budget entity's performance. It serves at best as a motivation tool for personnel: for instance, it may reward good performance. It has an impact on budget entity managers' and all employees' motivation and behaviour.<sup>2</sup>

## **Publicity and transparency principle**

International Public Sector Accounting Standard (IPSAS) 24 does not require budgets to be published. From the democracy, accountability and transparency point of view, it is self-evident that public sector budgets

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<sup>2</sup> Coombs and Jenkins (2002), pp. 83-86; Bergmann (2009), pp. 44-48; Prowle (2010), pp. 189-191.

should be published. Published budgets, budget out-turn reports and the associated audit reports are key elements of public sector accountability.

## **Other budget principles**

In addition to publicity and transparency, some other important budget principles are explained below.<sup>3</sup>

Budget preparers have the responsibility to anticipate and estimate all expenditure and revenue for the budget period. The completeness principle in budgeting means that all expenditures and revenues should be included and not be offset or netted off against each other.

Extra budgetary funds not included in the approved budget should be avoided. Furthermore, use of “off-budget” fiscal mechanisms should be very constrained. We may refer here to the OECD (Organisation for Economic Cooperation and Development) recommendation (2015):

“Governments should include and explain public programs that are funded through non-traditional means – e.g. PPPs – in the context of the budget documentation, even where (for accounting reasons) they may not directly affect the public finances within the time frame of the budget document.”<sup>4</sup>

PPP refers to Public-Private Partnership. This is a cooperative arrangement between two or more public and private sector actors, typically of a long-term nature.<sup>5</sup> These PPP arrangements should be transparently explained in reporting.

The prudence principle in budget planning means deliberate avoidance of exaggerating revenues or understating expenses. However, this may be a disputed principle if its practice goes against the principle of neutrality, which requires that preparers must not adjust figures to achieve certain pre-determined results.

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<sup>3</sup> Jones (1996), pp. 56-59; Coombs and Jenkins (2002); PSC (2004); Prowle (2010).

<sup>4</sup> OECD (2015).

<sup>5</sup> Jones (1996), pp. 56-59; Coombs and Jenkins (2002); PSC (2004); Khan (2013); Prowle (2010); IPSAS 24.

The reasonable balance principle means that budgets should not lead to unsustainable indebtedness. We may also talk about a formal budget financial balance rule that means that all budget expenditure must have corresponding budget financing. Public sector entities must plan budgets so that expenditures can be paid from incomes, loan income included. If their own revenues are not enough, public sector entities must borrow money (or use donations) to meet their obligations.

#### **4. Traditional annual budgets and modern variants**

Traditionally, local government budgets were split into recurrent budgets and capital budgets. In central government, it has been more usual to have only one comprehensive budget without splitting it.

Capital budgets include investments that the government is planning – their timescale is often more than one year (for instance, infrastructure projects such as constructing highways, railways, tunnels, airports, harbours, universities, hospitals and so on).

Modern budgeting has been developed from detailed and strictly limited use of money to lump-sum budgets, one-line item allocations and the delegation of budgetary power to separate budget entities. This leaves more flexibility for the managers of budget entities to manage their entities – when connected to performance-related rewards, this should lead to appropriate and productive behaviour in the budget entities.

Furthermore, one-line item budgets have often been connected to activity performance goals. This means that the counterpart to the added decision-making powers regarding budget entities operations is the added responsibility to produce outputs of defined quality and with desirable impacts on society.

#### **Budget appropriations**

Decision rules connected to the budget are important. One vital aspect is how the budget money usage is authorised. An appropriation is an

authorisation granted by a legislative body to allocate funds for purposes specified by the legislature or similar authority (IPSAS 24, definitions).

The timing basis of appropriations can be divided to three classes:

- 1) cash-based appropriations;
- 2) commitment-based appropriations; and
- 3) accrual-based appropriations.

Furthermore, another trait, the particularity of appropriations, is connected to how detailed or less detailed the appropriations are. Budget appropriations may be strictly detailed line item appropriations or, at the other end of the continuum, one-line (lump-sum) general appropriations.

Virement rules are a process of controlling the transfer of funds from one budget head to another. Virement rules may be stricter or more flexible from the point of view of the budget entities.

In addition, budget appropriations may be either fixed (restricted to the current year) or transferable (some ability to carry-forward part of the funds to the next year). The possibility to transfer usage of unspent appropriations to the next year is one factor that demotivates waste of public money before the end of the budget year.

<b>Budget year:</b>	<b>X</b>	<b>X+1</b>
	€	€
Appropriation - transferable	1,000	0
Spent part of the appropriation	700	
Unspent and transferred part	300	
Spending of the transferred part		300
<b>Note:</b> A two-year transferable appropriation for the whole expenditure is included in the budget for Year X (usable during X or X+1 years). €300 is not included in the budget for Year X+1, but is transferred from the appropriation for Year X.		

*Table 4.1: Wholly transferable appropriations - example*

If the government is using the carry-forward option, this prohibits waste in the end of the budget year. However, it may lead to excessive liquidity



because all appropriations must have full cover on the financing side (the formal balancing requirement).

Another at least equally important factor is the choice between gross and net appropriations. Traditionally, public sector entities have had gross budgets. Nowadays, it is quite common for budget entities to have net appropriations. Net appropriations have both a spending portion and a revenue portion. They encourage budget entities to be active and creative in generating their own additional revenues.<sup>6</sup>

If net budgeted revenues are more than estimated in the budget, the entity may by its own decision increase its expenditure, as long as it does not exceed the net appropriation. In our example in Table 4.2, the net expenditure is fixed at 600 €.

Not all government revenues are suitable for net budgeting: tax incomes should not be earmarked for the tax agency’s own spending, neither should fines be earmarked for a police station’s own spending.

Net budgeting is an incentive to innovate on the revenue side because revenues earned can be kept inside the budget entity for incurred expenditures as long as the net sum approved in the budget is not exceeded. There is also a risk to the net budget entity that the revenues fall below the estimate used in the approved budget. In that case, the budget entity will be required to reduce its expenditures to achieve the agreed level of net expenditure.

<b>A) Gross budget entity</b>	<b>Budget</b>	<b>Actual</b>
	€	€
Expenditure	1,000	1,000
Income	400	500
<b>B) Net budget entity</b>	<b>Budget</b>	<b>Actual</b>
Expenditure	1,000	1,100
Income	400	500
Difference/ Net expenditure (=net appropriation)	600	600

*Table 4.2: Gross versus net budgeting – an example*

<sup>6</sup> Khan (2013), pp. 342-345, Brusca et al. (2015), OECD (2017), p. 19.

Innovativeness and improvements on the revenue side may thus be encouraged in budget entities when additional revenues earned are not lost to the Treasury or central financing office.

Traditionally public sector budgets have been prepared on a cash or modified cash basis. For these bases, the focus is on the money transfers and money control. Table 4.3 gives an example of a cash-based budget. The approved budgets allow cash outlays of 600 € during the first budget year and 400 € during the next budget year.

	<b>Budget</b>			
Cash basis	Budget year	X	X+1	Total
	Cash-based expenditure	600	400	1,000
	Actual payments	600	400	1,000
	Difference	0	0	

*Table 4.3: A cash-based budget – an example*

There is a misunderstanding that governments have been using only a pure cash basis, while many governments have in reality been using not a pure but a modified cash basis. The short-term commitment basis in budgeting is an example of a modified cash basis. In this case, if goods or services are planned to be received in budget Year X, they may be paid in the first few months in Year X+1 and still belong to the budget Year X expenditure.

Budget planning should also take into consideration contracts, including goods or services that are received in later budget years that result in equivalent longer-term payment commitment. These payments should be included in the approved budgets for later years unless the government is using transferable appropriations that extend the usage of such appropriations beyond the current budget year.

	<b>Budget year</b>	<b>X</b>	<b>X+1</b>	<b>Total</b>
		<b>€</b>	<b>€</b>	<b>€</b>
Commitment basis	Appropriation	700	300	1,000
	Account entries	700	300	1,000
	Spending margin	0	0	0
Note	Accounting for budget follow-up: 600 € was paid during Year X, and the budget entity has an obligation to pay a vendor 100 €. Accounts payable, credited with 100 € (expenses 700 €, bank account 600 € and accounts payables 100 €).			

*Table 4.4: Commitment-based budget – an example*

**Accrual budgeting**

What is accrual budgeting? According to Khan’s definition:

“Accrual budgeting means application of the accrual concept to the preparation and presentation of the budget. It entails planning that includes revenues and expenses in the budget of the year in which the underlying economic events are expected to occur, not necessarily in the year in which the related cash is expected to be received or paid.”<sup>7</sup>

Accrual budgeting requires the application of generally accepted accounting principles in the preparation of the budget. However, accrual is not an overriding concept in accrual budgeting. According to Khan, for instance, estimating budgeted tax revenue on a long-term accrual basis (predicting future accruing tax incomes caused by taxable realised events in the budget year) could be subject to strong uncertainty (for instance, because of delayed taxation decisions, uncollectable taxes, etc.). Therefore, the estimate may be considered unreliable. In such a case, the accrual-based

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<sup>7</sup> Khan (2013), p. 340.

estimate may have to be changed to a measure that is closer to a cash-based estimate.

The reliability concept may override the accrual concept in PSA and budgeting. The accrual budget may also recognise cash implications of budgetary decisions. For instance, in Britain departments have both an accrual based appropriation and a cash limit. The accrual budget structure implies the use of both prospective accrual operating statements and cash flow statements. The accrual budget may also contain a prospective balance sheet with projected assets, liabilities and net equity (Khan 2013).

In practice, accrual budgeting does not entail a systematic use of accrual appropriations in OECD countries. Many countries use a mix of accrual and cash appropriations. Examples of items that may not be included in budgetary appropriations include the following:

- Provisions;
- Depreciations, inventory value change;
- Losses arising from changes in market values of assets and liabilities.

Examples of budgetary appropriations/revenue estimates kept on a cash basis in (modified) accrual budgets include:

- Repayment of debts – cash basis;
- Tax revenues – cash basis.

Capital expenditures may require both accrual- and cash-based approval and legal control. Furthermore, accrual budgets may be combined with commitment appropriations – a government can have an accrual budget but exercise legislative control at the commitment stage. Usually, in practice, governments exercise controls over both cash items and accrual items.<sup>8</sup>

Proponents of accrual budgeting argue that it provides incentives to better manage capital assets, especially the acquisition, disposal and maintenance of fixed assets.

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<sup>8</sup> Khan (2013), pp. 342-345; Brusca et al. (2015); OECD (2017), p. 19.

Planning and recording only cash movements may give too late information about the impacts of policy decisions. Accrual budgeting facilitates the better planning of investments and maintenance and also provides incentives for public sector organisations to dispose of assets that are unnecessary. It provides (and compels the planning of) more fiscal indicators than cash budgeting.<sup>9</sup>

However, presenting accrual budget information in a user-friendly manner is challenging. Scope for manipulation and creative accounting is increased because adjustments in discount rates, changing ways of capitalising expenses and revaluing assets and so on can be manipulated. Personnel, information and Communication Technology capacity requirements may hinder accrual budgeting – it requires skilled staff and sophisticated information technology facilities.

New public financial management (NPFM) generally favours and promotes accrual-based budgeting. However, in practice, modified accrual-based budgeting is more realistic and popular than full accrual-based budgets. One reason for this is that full accrual-based budgeting requires high maturity in a country's accounting resources, information systems and accounting skills. In many countries, not all the preconditions of fully-fledged accrual basis are available in practice.

According to Schick, accrual budgeting is not ready for widespread application as a budget decision rule because of its complexities. However, for most countries it suffices rather as an analytical tool than a decision rule in budgeting. Without appropriate discretion, managers are likely to regard accruals as technical entries that have no bearing on the resources available for expenditures.<sup>10</sup>

A full accrual-based government budget structure is illustrated in Figure 4.1 below. After the budget year, the annual actual figures are reported in budget statements. Budget statements contain comparisons between the approved budget plans and actual realised budget figures.

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<sup>9</sup> Based on Khan (2013), pp. 349-358.

<sup>10</sup> Schick (2007), pp. 131, 137-138.

This figure shows some important influences from one part of a budget plan to another using the arrows. For instance, if the public sector entity invests in fixed assets (investment budget), this has ramifications for the operational recurrent budget because the asset in use typically creates expenses depreciations. It also has ramifications for the planned balance sheet and naturally for the cash flows during the budget period.

The annual margin before depreciations is the starting item in the cash flow budget. The net cash flow after operations and investments is an important balance ratio: if it is negative, it typically means that the local government must raise new debts. Net borrowing is shown in the funding cash flow section. After several adjustments that eliminate all non-cash items from the figures, the cash flow budget ends up showing the change in the liquid assets of the local government. If the local government has a buffer in its cash reserves, it may use also liquid assets to finance net investments.

A surplus or deficit in the income statement budget will show the anticipated influence on the net assets. Typically, a local government should aim to have an annual margin that covers its depreciations. If the result after depreciation is positive, the local government may earmark provisions for needed new investments or alternatively let the surplus accrue to the balance sheet. However, local governments should not accrue surpluses continuously because this would be a sign of collecting too much tax from local tax-payers.

### Example of a full accrual-based local government budget structure

Recurrent budget impacts: maintenance costs, depreciations, etc.

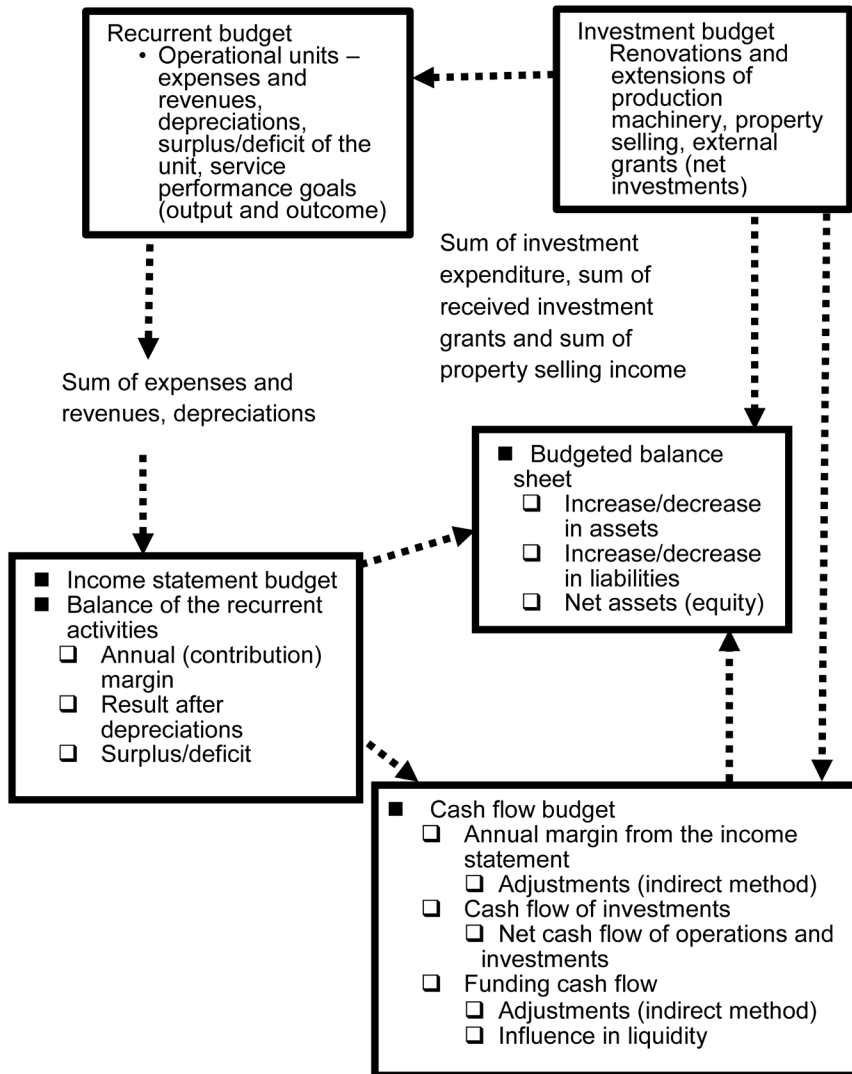


Figure 4.1: A full accrual-based budget with separate partial budget plans

In a fully-fledged accrual budget, the depreciation costs of fixed assets are included as appropriations. In addition, changes in the inventory and other accruals must be recognised in the budget according to the rules of business accounting.

Table 4.5 gives, for the reason of simplicity, an example of only depreciation costs in an accrual-based budget. Usually the depreciation cost is not an appropriation, but rather an informative element in the budget. However, it affects the accrual financial performance and the balance sheet. Budgets that are on a cash basis or commitment basis do not have depreciation costs in the budget, or such allocation items as change of inventory during the accounting period.

	<b>Budget year</b>	<b>X</b>	<b>X+1</b>	<b>Total</b>
		€	€	€
Accrual basis	Operation (recurrent) budget and income statement budget			
Item example:	Depreciation cost	0	50	50
Note	The investment is planned in the investment budget. Straight-line depreciations 100 per year, the construction is taken into use 1.7.X+1 (so only half a year of depreciation in this year).			

*Table 4.5: An accrual-based budget – an example of budgeted depreciation costs*

The allocation of expenditures, expenses, incomes and revenues to the budget should be defined clearly. Appropriate financial management must have a systematic and consistent manner for how to budget; it cannot be done in an undefined way. Legally binding appropriations must be clearly defined so that they can be distinguished from other non-binding budget information. Budget decision-makers have the right to know and understand how the budget information and authorisations have been allocated to the annual budgets.

## **Performance-based budgeting**

The so-called Planning – Programming – Budgeting System (PPBS) was invented in the 1960s based on the ideal rational planning and decision-making model that flows from overall goals to programmes and annual



budgets all in perfect congruence with each other. Later the emphasis was laid on budgeting for results and for outcomes or performance-based budgeting. Input-based budgets have been transformed more or less into output- and outcome-based budgets (OBB) or performance-based budgets (PBB).

<b>Activity goals 2017</b>	<b>Indicator</b>
Strategic	
Customer orientation and cost-efficiency: A mobile enterprise resource planning system put into operation during 2017	Daily working time carried out face-to-face with the customer, travel cost savings, use of stand-in personnel
Fluent service chains: Entitlement criteria drawn up and service commitments prepared for all services	Queuing times for services, customer feedback on service quality

	<b>Number</b>
Home care 2017 (statistical data)	
Home care customers	175
Home care visits	45,000
Customers of support services (meal service, etc.)	420
Caring for close relatives, number of persons in care	62
Residents in sheltered housing (outsourcing service)	77
Old people's home, bed days in long-term care	22,000

*Table 4.6: Example of a performance budget (Finnish municipality of Lempäälä: Annual budget 2017, Old peoples' care service section of the annual budget).*

The real-life example in Table 4.6 is from Finland. In Finland, output targets included in the approved budget are binding. Appropriations must be dimensioned in the original budget so that the output targets can be achieved. If it seems during the budget year that they cannot be achieved, either the goals, the appropriations or both must be changed by council

decisions so that they are again compatible (the output targets must be achieved with the funding) in the final and executed budget.<sup>11</sup>

Generally, it is more difficult to calculate from qualitative outcome goals to costs than from quantitative output (product) goals to costs. Cost-effectiveness is in principle the ultimate key ratio in public sector activities, meaning that the budget money should be allocated and used in the best possible manner in providing outputs with desirable outcomes related to citizen needs and agreed activity goals. Economy alone is not a comprehensive yardstick, because it measures costs related to output – for instance, economy as euros/patient care operation – but not effectiveness as euros/cured patient (outcome). In practice, it is many times easier to measure and report the cost per output figures than cost-effectiveness figures containing quality and impact assessments.

Budget reforms often go hand-in-hand with lump-sum budgeting, which means that budget authorisations do not go to detailed single line items, but rather contain total revenues, total expenses and investments, or even only a total result figure. Budget entity managers have greater freedom, as long as they do not exceed the gross amounts and reach their performance targets.

These reform features mean that budget entity managers should have more flexibility and power to operate, for instance, regarding personnel policies, recruiting, outsourcing, etc. On the other hand, responsibilities regarding activity performance have increased in terms of output and outcomes with budget resources.

Budget reforms in the above-described style may have not only efficiency ramifications, but also problematic democracy and personal effects, often linked to reducing the powers of trade unions and general public sector staff. So such reforms may not increase the democratic culture of public

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<sup>11</sup> In Finland, output goals decided in the council are as binding budget rules as financial budget rules. Section 110 § (4) of the Local Government Act of 2015: “The budget shall include the appropriations and revenue estimates required to fulfil the duties and meet the operating targets, and an indication of how the financing requirement will be covered. The appropriations and the revenue estimates may be stated in gross or net terms. Budgets and financial plans shall have a section covering operational finances and an income statement, and a section on investment and financing.”

sector entities, especially when they are linked to senior managers being paid what can be seen as grossly inflated salaries.

In addition, if the government entity managers lack operational decision-making power and the entity lacks reliable and sufficient data on outputs and outcomes, performance-based budgeting is not in practice a realistic budget model.<sup>12</sup>

### **Other planning and reporting modes**

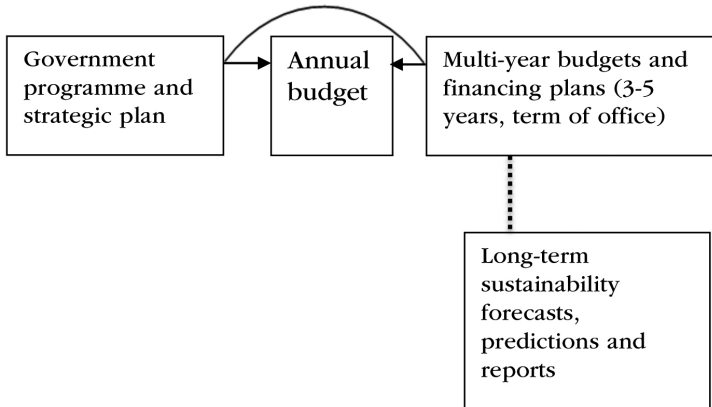
If governments only prepared annual budgets, the planning horizon would be incomplete. That is why governments also make and publish separate strategic plans, multi-year budgets, medium-term spending frameworks and long-term fiscal sustainability reports. It is important to align operative budget plans with government strategic plans. However, when a government has or is planning to have a wide array of plans and reports, it is often in practice so that they turn out to be more or less disconnected from one another, giving rise to confusion and reform fatigue.<sup>13</sup>

From the point of view of the budget decision-maker, it would be ideal for them to be supplied not only with consistent information on yearly costs but also the total life-cycle costs of long-term liabilities caused by contracts, commitments and investments to which the government is planning to bind itself. If this information is not directly in the budget figures, it could be in budget overview text or in budget supplements. Furthermore, life-cycle calculations of significant investments or complicated PPP arrangements may be included and transparently explained in other plans and documents. In this case, the budget documents should make reference to these other sources of information.

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<sup>12</sup> Schick (2007).

<sup>13</sup> Schick (2007), p. 121.



*Figure 4.2: Government planning and reporting system*

## 5. Budget-linked budgetary accounting

As already mentioned, the link between budgeting and accounting forms the basic feature of governmental accounting. Allocation of expenses, revenues and capital expenditures into the budget may follow a cash basis, modified cash basis, commitments basis or accrual basis. Because budget accounting (budget bookkeeping) is budget-linked, the recognition principles of budgetary accounting must correspond to the allocation principles of the associated budgets. This should help to secure proper control during budget execution.

Financial management and budget surveillance require an account classification for budgetary accounting to be created. The chart of budgetary accounts should be derived from the legally binding budget. The main budgetary accounts may be further divided into subaccounts according into different management and reporting needs inside the organisation.

### Parallel accounting systems

Some countries have established accrual-based financial accounting besides the traditional budgetary accounting that has remained mainly on

a modified cash basis. Recording financial information in both financial accounts and budgetary accounts may happen simultaneously inside one combined information system. Information technologies with sophisticated software allow the integration of these two subsystems. Alternatively, budget entities may carry out reconciliations between the accrual financial accounting and budgetary accounting systems (Brusca, Caperchione, Cohen and Rossi 2015).

Below is what the IPSAS 24 requires:

“47. The actual amounts presented on a comparable basis to the budget in accordance with paragraph 31 shall, where the financial statements and the budget are not prepared on a comparable basis, be reconciled to the following actual amounts presented in the financial statements, identifying separately any basis, timing and entity differences:

(a) If the accrual basis is adopted for the budget, total revenues, total expenses and net cash flows from operating activities, investing activities and financing activities; or

(b) If a basis other than the accrual basis is adopted for the budget, net cash flows from operating activities, investing activities and financing activities.

The reconciliation shall be disclosed on the face of the statement of comparison of budget and actual amounts or in the notes to the financial statements.”<sup>14</sup>

A reconciliation between the budgetary results and the financial statements is provided, for instance, in the OECD Annual reports.<sup>15</sup> The financial statements of the OECD are prepared on an accrual basis following the IPSAS. The OECD budget is prepared on a cash/commitment basis. The most significant of the IPSAS adjustments relates to changes in employee-defined benefit liabilities. Another important difference lies in the treatment of investments.

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<sup>14</sup> IPSAS 24 Presentation of budget information in financial statements: Reconciliation of Actual Amounts on a Comparable Basis and Actual Amounts in the Financial Statements, paragraph 47.

<sup>15</sup> OECD – Annual report of OECD (2014).

## 6. Conclusion

In the public sector, approved and authoritative budgets are the core area of PSA and accountability. The budget-based approach emerges from the authoritative budget and its execution, management and control.

The budget needs budgetary-linked accounting. This accounting must follow the logic of the budget, especially regarding the allocation of incomes and expenditures to the budget (budget codes). If the budget is cash-based, the associated bookkeeping must also be cash-based. If the budget is accrual-based, the bookkeeping must also be accrual-based.

At the same time, it must be understood that general financial accounting and reporting may or may not be merged with the budgetary accounting and reporting. If they are not merged, a government will have to maintain a dual accounting system for different purposes with different reporting modes. In some countries, governments may account for and publish only budget-based statements.

It is crucial to note that public sector performance is only partly captured with financial figures and financial performance. That is why non-financial activity performance, accounting of outputs and outcomes are important for public accountability. These matters are planned and reported using performance-based budget systems.

With New Public Financial Management, a movement towards accrual-based budgets and performance-based budget has evolved. However, they face many practical obstacles that hinder their proper functioning and hence their ability to reach their ultimate goals of better information used in decision-making and better performance than before. Performance-based budgeting is easy to explain but difficult to implement on a strict basis (as a budget decision rule). Accrual-based budgeting is difficult to explain and even more difficult to implement.

Performance-based budgeting and accrual budgeting are very demanding regarding data quality and reliability. Their success is also dependant on politicians' and managers' willingness and ability to use the additional information provided by the budgeting and accounting systems.

Furthermore, it is necessary for governments to have reliable auditing institutions. Here we may refer to Schick's conclusions:

“For performance budgeting and accrual budgeting to take root, it is essential that governments have formal procedures for reviewing reported results, including accepted standards for measuring outputs and outcomes and for reporting costs and liabilities.”<sup>16</sup>

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<sup>16</sup> Schick (2007), p. 120.

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## **Additional readings**

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## **Discussion topics**

- What would you prefer as the best choice on the continuum from cash basis to accruals basis in public sector budgeting and why?
- Find some examples of different budget types from the web pages of local government budgets or state/central government budgets in your country or internationally and discuss how informative they are.



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**CHAPTER 5**  
**THEORETICAL APPROACHES TO FINANCIAL**  
**ACCOUNTING PURPOSES AND PRINCIPLES**

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**SUMMARY**

Accounting theories are described and then accounting conventions and principles and how they may be interpreted in the public sector context. Public sector Conceptual Frameworks for financial accounting are described especially from the point of view of the primary users' needs, valuation and measurement principles. Different and competing theoretical approaches to public sector accounting frameworks are also explained.

**KEYWORDS**

Financial accounting, accrual, cash and modified basis of accounting, accounting theories, conventions and principles, conceptual framework

**1. Introduction**

The aim of this chapter is to describe basic accounting theories, concepts and principles for public sector accounting (PSA). Theoretical accounting

foundations and principles influence and interact with financial accounting standards and practices. The European Public Sector Accounting Standards (EPSAS) are still under preparation and are open to development. Therefore, it is important to relate this development to the basic theories, concepts and principles of financial accounting.

## **2. Accounting theories**

What do we mean by accounting theory? According to the definition by Hendriksen (1982), accounting theory may be defined as logical reasoning in the form of a set of broad principles that provide a general frame of reference by which accounting practice can be evaluated and guide the development of new practices and procedures.

Accounting theory may also be used to explain existing practices to obtain a better understanding of them. But the most important goal of accounting theory should be to provide a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices.<sup>1</sup>

Below, we briefly explain the following common accounting theories:

- Proprietary theory;
- Entity theory;
- Funds theory;
- Cameral theory.

In the private sector, entity and proprietary theories have been popular as frames for accounting approaches. On the other hand, the cameral and funds theories have been targeted mainly at the public sector.<sup>2</sup>

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<sup>1</sup> Glautier and Underdown (1994), p. 23.

<sup>2</sup> Monsen (2002).

## Proprietary theory

The proprietary theory of accounting emphasises that financial accounting must be structured in a way that satisfies the owner's interests. All accounting principles and concepts are defined from the owner's point of view.

The owner's purpose is assumed to be to increase their wealth. Revenue is defined as an increase in proprietorship wealth, and an expense is defined as a decrease in proprietorship wealth. The two key accounting equations are:

$$\text{Equity (wealth of owner)} = \text{Assets} - \text{Liabilities}$$

$$\text{Result} = \text{Distribution of profit to share owners} + \text{Earnings retained in the firm.}$$

According to the private sector international standard-setter International Accounting Standards Board (IASB) and its draft conceptual framework:

“The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.”<sup>3</sup>

## Entity theory

The entity theory was developed by the critics of the proprietary view of accounting. Although this theory was developed for corporate accounting, supporters of entity theory believe that it can be applied to proprietorships, partnerships and even non-profit organisations. The crucial question is whether accounts and transactions should be classified and analysed from

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<sup>3</sup> IASB (2015), paragraph 1.2.

the point of view of the operating entity unit or from the point of view of the proprietorship or other single interests.<sup>4</sup>

In this entity approach, an enterprise is understood as an entity separate from its owners. Principally, both equity and debts are seen as the financial capital of the entity. Share capital belongs to the entity. The two key accounting equations for entity theory are:

- $\text{Assets} = \text{Financial capital}$  (all assets must be financed whether from own capital or debt capital);
- $\text{Result} = \text{Distribution of profit to owners} + \text{retained earnings} + \text{share of lenders}$  (debt interest).

## **Fund theory**

Under fund accounting, funds have restrictions on the use of resources from the accounting entities. Special funds can be established to account for revenues earmarked, for instance, for schools, museums or parks. A capital project fund is on the other hand established to account for funds to be used only for capital facilities, debt service funds etc.<sup>5</sup> Fund theory is mainly used in the public or not-for-profit sectors.

In this approach, the focus is on restrictions and the service potential of assets, not on their income earning capacity. Assets are acquired in order to contribute to increased service production by the fund. Assets are not acquired in order to earn profit; any profit (or surplus) is not seen as belonging to the proprietor (proprietary theory) or to the organisation itself (entity theory), but is retained to further the objectives of the fund. In principle, this approach suits budget-linked governmental accounting. Here, budgetary decisions represent the authority to use and receive money and also provides restrictions on the use of disposal of assets. Even though fund theory of accounting was originally developed for the business sector, it has

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<sup>4</sup> Monsen (2017), pp. 23-24.

<sup>5</sup> Monsen (2017), pp. 60-62.

not gained a stronghold there. It was later developed in the governmental sector in the Anglo-Saxon countries.<sup>6</sup>

Funds accounting is also used in the US. Local governments and states have several separate public funds for different purposes. In funds accounting, financial statements present a short-term (annual) view of governmental fund activities.

### **Cameral accounting theory**

This theory was developed for use in the public sector. It has a money and budget control purpose. Budget control in public sector entities ensures that public (tax) revenues are managed (money management) according to the politically adopted budget (budgetary control). Cameral accounting was developed originally as single-entry bookkeeping.<sup>7</sup>

In cameral accounting, no cash can be received or paid by an organisational unit without receiving a previous or simultaneous payment instruction from another higher organisational unit having this competence (payment control). Cameral accounting was explained further in Chapter 3 of this book.

### **Bookkeeping models**

The two basic alternatives in current bookkeeping are single-entry or double-entry bookkeeping.

Cash-based single-entry bookkeeping involves recognising money outflows and inflows in the cash/bank account. Within modern commercial accounting, the principle of single-entry bookkeeping has been replaced by that of double-entry bookkeeping. The money (cash) focus has been

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<sup>6</sup> Monsen (2017), p. 77.

<sup>7</sup> Monsen (2002, 2011, 2014).

replaced with a financial performance (profit accruals) focus. We can call this commercial double-entry bookkeeping for profit accounting purposes.<sup>8</sup>

Cameral single-entry bookkeeping does not have the purpose of profit accounting but does fulfil the purpose of money accounting and budget control. In the government sector, both cameral accounting and fund accounting have a strong link with the budget. It is important to realise that they are not only based on actual cash receipts and payments. The money accrual principle includes, in addition to realised cash movements, payments that become due later in the short term.

The double-entry bookkeeping was developed to measure commercial profit. Each entry has two aspects, the debit and the credit.

### 3. Accounting conventions and principles

Several accounting principles and conventions have been developed in the accounting literature. A possible systematisation of these can be arranged according to a three-level structure:

- pervasive principles (conventions);
- broad operating principles;
- detailed principles.

Theoretically, the principles of each level should interrelate with the principles at the other two levels. However, many accounting practices have not been based on higher principles but have simply evolved from experience.<sup>9</sup>

If accounting rules are *principles-based*, they do not have to be very detailed (as with European accounting, IFRS and IPSAS). If accounting standards are *rules-based*, standards are written in a very detailed manner to encompass a wide variety of practical situations (as with the US approach

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<sup>8</sup> Monsen (2011).

<sup>9</sup> McCullers and Schroeder (1982), p. 27.

to accounting standard setting). We will now explain briefly some important concepts and principles.

Accounting principles/concepts	
1. Accounting entity	6. Consistency
2. Money measurement	7. Prudence
3. Going concern	8. Accruals principle
4. Cost concept	9. Matching
5. Realization principle	10. Periodicity

## Accounting entity

The purpose of the **entity** concept is to make a clear distinction between the economic affairs of the accounting entity and other entities.

The difficulty comes in defining what constitutes the government accounting entity and what off-budget entities should be consolidated into it. Several criteria could be used:

- government ownership and control of the entity;
- the entity's dependence on government transfers;
- the legal form of the entity.

General government as a whole is **divided into several levels of government** (central, regional/state and local).

Furthermore, central, regional, and local governments may consist of sub-organisations, and there are many and varied criteria which determine which of these sub-organisations form accounting sub-entities that maintain their own separate accounting books. This may not be determined simply by legal ownership.

Defining the **demarcation lines between accounting entities** and the extent to which the consolidation should be done determines the sphere of annual financial reporting. Questions related to consolidation are handled in later chapters of this book. Consolidation is an approach learnt from the



private sector and has only really been used in the public sector over the last 20 years or so. The accounts of several subsidiary entities are combined to produce the accounts of one larger combined entity.

## **Money measurement**

The business accounting convention is to measure all transactions with (constant) monetary units.

The main difference in the public sector regarding this convention is that many transactions are non-exchange transactions. These include non-exchange inflows such as tax revenues or non-exchange expenses such as grants and social benefits. Furthermore, many assets including human resources and heritage assets, both cultural and natural, are difficult to value in money terms.

In the public sector, expenses are usually not related to future revenues. Usefulness (consumers' utility) of free and tax-financed services cannot be measured with prices. Hence, non-financial reporting of the services provided by a public sector entity is at least as important (in terms of public accountability) as traditional financial reporting.

In some cases, even if money measurement is possible, for instance, information on military assets, may be sensitive and may not be willingly disclosed publicly.

## **Going concern**

The **going concern** principle is based on the assumption that the business is a continuing one, at least in the near future not on the verge of cessation and bankruptcy. Many assets in a firm derive their value from their employment in the profit-creation process. Should the firm cease to operate, the value which could be obtained from these assets on a forced sale basis would probably be much less than their accounting or book value.

Independent countries normally have a good foundation for continuity, so the going concern as a postulate is generally correct in the public sector. Governments have sovereign power, tax financing and statutory functions that do not abruptly cease in a bankruptcy-like situation.

On the other hand, many kinds of accounting entities inside the government, agencies and so on can cease to exist on the basis of administrative or political decisions. In this case, the going concern principle is not guaranteed.

However, and this is important, although public entities may sometimes be dissolved, the rights and obligations entrusted in them by the sovereign power are not cancelled as a result, unlike business entities for which the amounts due on liquidation are limited to existing net assets.<sup>10</sup> So the debts of a cancelled subnational government would become those of the national government. In addition, public sector entities are rarely abolished purely for financial reasons. This issue was discussed more in Chapter 3.

## **Cost concept**

In PSA, cost measurement has been based typically on **historical costs** rather than on **current costs**. Historical cost is based on reference to the cost of acquisition of assets.

While the historical cost concept may raise many problems for the business accountant, it raises far fewer such problems for the public sector accountant. In the public sector, accounting for historic or actual costs is more important than indicating what profits may have been earned.

The historical costs of acquisition of assets do not take into consideration changes in the purchasing power of money. Some assets face abnormal inflation and rising prices, which means, among other things, that depreciation calculated from historical asset values will not finance replacement costs. The historical cost approach is not always followed consistently, because in some cases revaluations are accepted in the public

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<sup>10</sup> CNOCP (2014), paragraph 34.

accounting tradition, for instance, regarding real estate, if the reassessed value is considered reasonably permanent.

## **Realisation concept**

The **realisation** concept refers to the moment the firm realises an asset by selling or disposing of it in some other way. The realisation price compared to the book value reflects the profit earned or loss incurred by this disposal. The realisation principle has been criticised, and commercial accounting standards accept revaluations and holding gains and holding losses that are included in the profit figure.

In the public sector, holding gains and holding losses are less useful concepts, because assets are kept for service and goods provision for citizens, and it may be more meaningful to account for only realised transactions that have money and budget effects.

**Consistency** is important for making relevant comparisons between accounting periods. If there is no continuity of accounting methods and rules, using the information becomes difficult.

**Comparability** between accounting entities and consistency in accounting methods over time increase the value of accounting information. According to this principle, it is advantageous if accounting standards do not change continuously, causing the need for constant and costly training and changes in accounting technology.

**Prudence** is a general guiding principle for financial statements. Prudence means, among other things, that all costs must be recognised fully and that only realised profits are recognised in the income statement. Provisions providing for future costs (liabilities) are shown in the income statement. Prudence in the public sector means care in estimating budget incomes so that they are not exaggerated and care in estimating budget expenditures so that they are not underestimated. However, excessive implementation of prudence may be against the neutrality principle and lead to biased information.

## Accruals principle

The accrual concept is described in Chapters 1 and 3. In commercial accounting, accruals are required to match income and expenditure in the calculation of profit. This is the normal basis of the preparation of accounts for commercial undertakings.<sup>11</sup>

According to Chan,<sup>12</sup> accruals can be practised in the public sector with different strengths. Furthermore, it must be understood that implementing accrual accounting is not only a technical accounting exercise. It needs, in order to function well, a cultural change, and should be linked to wider public management reforms in governments that may not be used to the accrual ways of thinking. According to Hepworth (2017), if financial accrual accounting is not used for managerial purposes, its advantages get lost at the entity level. Merely making information available achieves nothing unless someone uses that information. Again, according to Hepworth, technical training for preparers of financial statements and potential users is not enough. Managers must have an interest in using accrual information and must have managerial discretion powers that motivate them to use the accrual information for making better decisions. Politicians must be willing to support accrual reform.<sup>13</sup>

Furthermore, the capacity of citizens and parliamentarians to assess general purpose financial reports independently is limited. From the citizens' and politicians' point of view, financial statements produced on a rather less complicated modified cash basis may be preferable to those prepared on a more complicated and strong accrual basis.

**Matching** is a fundamental accounting principle in the private sector, which means that when computing profit, all costs are matched against the revenues to which they relate. Many practical difficulties arise to hinder perfect matching. Depreciation is one of the most important means of

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<sup>11</sup> Brockington (1993), p. 6.

<sup>12</sup> Chan (2003), p. 17.

<sup>13</sup> Hepworth (2017).

allocating costs of assets to accounting periods. This means allocating asset costs to those accounting periods over which the asset is used.

Theoretically, matching in the public sector does not fit non-exchange transactions. These form the major part of governmental transactions. In non-exchange transactions (for instance, transfers to enterprises and households or tax revenues), one cannot find a direct causal relationship between expenditures and tax revenues.

When services are delivered free of charge to inhabitants, direct matching of expenditures and revenues is not possible. However, the public sector income statement relates revenues earned and expenses incurred during the accounting period and shows a balance or lack of balance between them.

In the public sector, non-exchange transactions are common, which makes matching, in the private sector sense, impossible. However, in the public sector, costs of production factors can be matched with the usage (consumption) of those same production factors. For instance, if a total investment cost of 8 million € of a school building is spread over its useful life of 40 years, this means a 200,000 € depreciation expense per year using the straight-line method of write-offs.

Depreciation can be interpreted in the public sector *as a means* for distributing the investment expenditure over the whole use-period of the investment, so that only the costs of goods and services used in providing services during the year should be included in the financial performance statement. However, this depends on whether the performance or efficiency of the government is to be indicated by such statements, or merely how the money was used.

**Periodicity** means that the life of an accounting entity must be divided into constant periods **for reporting purposes**. Matching makes it possible to match revenues and expenses for the accounting period. However, in PSA, profitability is not the aim of matching. The income received in a year must simply be matched with the expenditure in the same year.

<b>Conventions/ principles</b>	<b>Public sector applications</b>	<b>Explanations</b>
<b>1. Accounting entity</b>	Demarcation lines between the whole government and other sectors (consolidation principles)	Demarcation lines outside and inside the multi-level public sector (division into sub-entities doing separate book closures)
<b>2. Money measurement</b>	Not entirely valid	Often one-sided actions, non-exchange transactions
<b>3. Going concern</b>	Partly valid	Abrupt dismantling possible at the agency/organisational level
<b>4. Cost concept</b>	Historical cost	Less use of changing current values compared to the private sector
<b>5. Realisation concept</b>	Emphasised in the public sector	Revaluations and holding gains and holding losses less useful compared to the private sector
<b>6. Accruals concept</b>	Money accruals, nowadays also modified profit accruals	In the not-for profit sector, modified cash basis common, accruals pushed less far than in the private sector
<b>7. Matching concept</b>	Valid but not usually in the same way as in business accounting	Direct matching of incurred expenses to earned revenues not possible in non-exchange transactions
<b>8. Periodicity</b>	Valid as such	Technically the entity's lifetime must be divided into accounting periods
<b>9. Consistency</b>	Valid as such	Constant changes of rules problematic, especially in poor jurisdictions with low accounting resources
<b>10. Prudence principle</b>	Emphasised	Favoured in the public sector, based on strict end-of-year cut-off rules

*Table 5.1: Summary of Section 3*

## **4. Conceptual frameworks**

This section discusses theoretical approaches that may lie behind accounting standards and their conceptual frameworks.

### **Users of general purpose financial statements**

Accounting approaches and conceptual frameworks usually start with the objectives and purposes of accounting and financial statements. Users, especially primary users, of financial information should have a crucial impact upon the conceptual framework of accounting. Two main concepts in conceptual frameworks are accountability and decision usefulness, demonstrating the usefulness of financial information. Information should serve the control purpose of making an assessment of the behaviour of the accountable administration that used the collective resources. Furthermore, information should be appropriate for making decisions regarding the future usage of collective resources in the best possible way.

Accountability is related to the past, with the control of the managerial actions (agents) taken in the past on behalf of the principals. Information for this purpose serves the principal's decisions regarding the agents; for instance, discharge of liability, need to change the manager, ways to develop steering and incentive systems, etc..

Decision usefulness is related to the future and the usefulness of information in forecasting the economic viability of the entity, whether it is a going concern or not, capacity to cope with obligations, medium- and long-term sustainability, etc..

The most common international framework for financial statement presentation is the conceptual framework of the IASB, which issues International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). The IASB emphasises as primary users shareholders and creditors, and hence their needs regarding financial reporting information.

The conceptual framework of the IASB assumes that financial accounting information that satisfies the needs of shareholders and creditors also satisfies the information needs of other users of the financial statements. According to IASB, the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.<sup>14</sup>

### **Primary users in the public sector**

The interpretations of accountability and decision usefulness are different in the public sector because of different user needs. The primary users are the citizens. The **primary users** of state and local governmental financial reports are those to whom government is primarily accountable, the citizenry and the legislative and oversight bodies that directly represent the citizens.

### **Valuation and measurement of financial statement elements**

#### **Historical costs and current costs**

There are two main alternatives regarding the valuation method in financial accounting. The first is the historical cost method of valuation. This refers to the money figure for which an asset was originally acquired.

The other main alternative is the current cost method of valuation. This uses current values, not historical values from the original transactions and events. As the basis of valuation of an asset, it uses the amount which

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<sup>14</sup> IASB (2015).



it would currently cost to obtain. This may be interpreted as the cost of replacement or the opportunity cost of the asset.<sup>15</sup>

The opportunity cost is the cost of an action in terms of the value of the best alternative opportunity thereby forgone,<sup>16</sup> for instance, the value of the opportunity forgone by using a certain asset in service provision instead of selling it.

### **The Governmental Accounting Standards Board (GASB) divides valuation into four approaches<sup>17</sup>**

- 1. Historical cost** is the price paid to acquire an asset or the amount received pursuant to the incurrence of a liability in an actual exchange transaction.
- 2. Fair value** is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
- 3. Replacement cost** is the price that would be paid to acquire an asset with equivalent service potential in an orderly market transaction at the measurement date.
- 4. Settlement amount** is the amount at which an asset could be realised or a liability could be liquidated with the counterparty, other than in an active market.

The settlement amount can be used in either an initial measurement approach or in a remeasure approach.

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<sup>15</sup> Brockington (1993), p. 66.

<sup>16</sup> Brockington (1993), p. 161.

<sup>17</sup> Concepts Statement No. 6 Measurement of Elements of Financial Statements (2014).

## **Initial and subsequent measurement**

### **1. Initial amounts**

Initial measurement reflects the value at the transaction date (when the asset was acquired or liability incurred).

In the assessment of whether current-year revenues cover the cost of the government's services, the most relevant cost associated with these assets is the cost that has been incurred by the government – the cost based on the initial amount.

### **2. Remeasured amounts**

Subsequent measurement reflects the conditions in effect at the financial statement date. Re-measurement changes the amount reported for an asset or liability from an initial amount or previous remeasured amount to an amount indicative of the value at the financial statement date, providing information to assess the financial position, including the service potential of assets and the ability to meet obligations when due. When remeasured amounts are used in a statement of financial position, those assets and liabilities may have more meaning because they reflect a value as of a common date.<sup>18</sup> However, this is because private sector financial statements are indicative of future profitability, which is not the case in the public sector.

## **Balancing competing objectives of financial reporting**

According to the GASB, the statement of financial position and the resource flows statement are both important, yet because a single measurement approach is required to be selected for a particular transaction, the choice may indicate which financial statement is more important in that circumstance.

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<sup>18</sup> GASB (2014).

According to the GASB, “initial amounts generally have less relevance than remeasured amounts when evaluating the statement of financial position to assess the level of services that can be provided by a government. However, initial amounts generally have more relevance than remeasured amounts when evaluating the cost of services information that is presented in a resource flows statement.”<sup>19</sup>

<b>Date of acquisition 1.1.XX Beginning of usage 1.1.XX Straight-line depreciation</b>	<b>Historical cost – remeasured value at 1.1.XX+5</b>	<b>Replacement cost – remeasured value at 1.1.XX+5</b>	<b>Realisable value Potential sale of asset at market value at 1.1.XX+5</b>	<b>Net present value of future income at 1.1.XX+5</b>
<b>Not-for-profit entity</b> Initial asset acquisition cost 1,000,000 (day care facility)	500,000 (1,000,000 less depreciation for half its estimated life)	600,000	400,000 (No active markets, estimation of a settlement amount)	The asset generates no or insignificant cash flows. However, the asset’s ability to provide future services may have a greater value than the sale of the asset now.
<b>For-profit entity</b> Initial asset acquisition cost 1,000,000 (production equipment)	500,000 (1,000,000 – depreciation for half its estimated life)	700,000	700,000 Market price in active markets	1,200,000 Estimation of discounted present value of future cash inflows (from year X+5 to the end of the useful life of the asset)

*Table 5.2: Examples of valuation alternatives: 1 million investment for a day care facility and 1 million investment for production equipment, useful life for both is (for reasons of simplicity) 10 years.*

<sup>19</sup> GASB (2014), p. 20.

Historical costs often are reliable and verifiable. Furthermore, this approach facilitates a comparison of actual financial results and the approved budget prepared on a historical cost basis. This is essential in the public sector where officials are accountable for the amounts that are spent compared to the agreed budget.

According to Glautier and Underdown, current value accounting consists of three forms:<sup>20</sup> Replacement cost accounting (entry price), realisable value accounting (exit price), and net present value of future income generated from the asset.

Current replacement costs are relevant to assessments of the current cost of services and operational capacity but are not relevant for assessing financial capacity.

Realisable value is relevant when assets are used to provide services measured at market value. However, relevance decreases or vanishes if services are provided in non-exchange transactions or on subsidised terms. It is relevant for assessing financial capacity because it gives information on the amounts that would be received on the sale of an asset. Observe here that net selling price, which is entity-specific and includes the entity's costs of sale, differs from the market value concept.

Net present value relates to the concept of value in use (the asset's remaining service potential or ability to generate economic benefits). In the public sector context, it is generally inappropriate because most assets are not generating economic benefits measured in cash. In addition, the calculation of value in use can be very complex.

Public sector-specific non-exchange transactions require their own recognition criteria: a) non-exchange revenues, taxes, and b) and non-exchange expense transactions, such as grants, social benefits and other contribution transfers. These are often recognised either based on the pure cash movements they cause or based also on their short-term obligations causing due payments in near future.

The GASB requires **(only) government investments** to be measured at fair value. An *investment* is defined as a security or other asset that (a) a

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<sup>20</sup> Glautier and Underdown (1994), p. 346.

government holds primarily for the purpose of income or profit and (b) has a present service capacity based solely on its ability to generate cash or to be sold to generate cash.

A fair value measurement of a liability would assume that the liability would be transferred to the market participant and not settled with the counterparty.<sup>21</sup>

### Theoretical approaches to PSA frameworks

Broadly, we can discern two different accounting methods as reference frames that have an impact upon the determination of elements of financial statements, recognition and measurement criteria. These are the revenue-expense-led approach and the asset and liability-led approaches. The former represents a dynamic view and the latter a static view. These views may have an influence on the contents of conceptual frameworks (adapted from Biondi 2012 and 2013):

<b>Accounting views</b>	<b>Static</b>	<b>Dynamic</b>
<b>Method</b>	Stock method of accounting (assets-liabilities approach)	Flow method of accounting (revenues-expenses approach)
<b>Measurement</b>	Fair value	Historical cost
<b>Focus</b>	Net worth of the entity at a specific moment in time	Resource outflows and inflows Resources mobilised and utilised by the activities (matching)

*Table 5.3: Comparison of the static and dynamic views*

In the **revenue-expense-led approach**, the income statement is emphasised. Furthermore, the prudence and realisation principles are applied, and it is transaction-based and uses historical costs rather than fair value measurement.

<sup>21</sup> GASB (2015).

The **asset and liability-led approach** emphasises the balance sheet. Neutrality rather than prudence is emphasised. Furthermore, because fair values and market values are used, holding gains and losses are recognised.

In order to create a consistent and coherent framework, there are arguments for not mixing the two different approaches. When we take into consideration specific public sector characteristics, arguments favour the revenue-expense-led approach. However, many consider this to be a controversial statement and, at the same time, may emphasise that public sector entities should follow as much as possible the private sector approach, which has been developing in the direction of the asset and liability-led approach emphasising the balance sheet.

Some argue that the revenue-expense-led approach is better than the asset and liability-led approach choice for the public sector. According to Biondi, a dynamic entity view is better than a static proprietary view in the public sector.<sup>22</sup>

These different approaches create discussion, for instance, about the recognition and valuation of fixed assets in governments. One argument for the revenue-expense model is that public sector assets are often maintained only to provide social benefits. In business accounting, all assets are kept for reasons of economic benefit and one can argue that therefore recognising and valuing fixed assets in the public sector should not be copied from the IFRS. In the public sector, most of the property and equipment is not intended to yield economic benefits, especially regarding heritage assets, of which the economic objectives are very limited.

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<sup>22</sup> Biondi (2012), p. 611.

<b>Accounting views</b>	<b>Private sector applications</b>	<b>Public sector applications</b>
<b>Primary users of GPFs Especially GPFs</b>	Owners, investors and creditors	Citizens and their representatives (parliaments and other representative bodies) Resource providers and service recipients – as secondary users
<b>Purpose and objectives</b>	Decision usefulness regarding buying/selling/ holding equity and debt instruments, lending decisions	Discharge of liability for accountability purposes, also prospective financial and non-financial information for prospective decision-making purposes
<b>Statement emphasised</b>	Balance sheet	Income statement
	Net worth of entity	Balance of budget
<b>Accounting method</b>	Stock method of accounting	Dynamic method of accounting
<b>Measurement</b>	Current value	Historical cost

*Table 5.4: Summary*

## 5. Conclusion

In this chapter, we have described the normative approach containing several principles and conventions of accounting developed for the for-profit sector. Then we analysed how we may interpret these conventions and principles in the context of tax-financed public sector organisations. We also analysed how the accounting theories and principles are reflected in the possible conceptual frameworks of public sector financial accounting. The analysis shows that principles and concepts in conceptual frameworks for the public sector cannot be directly taken from the corresponding private sector principles and concepts.

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## **Discussion topic**

- What is your judgement of the two different approaches presented here: the revenue-expense-led approach (income statement emphasised) vs. the asset and liability-led approach (balance sheet emphasised), and their suitability for government accounting?

**CHAPTER 6**  
**DIFFERENT PERSPECTIVES IN PUBLIC SECTOR**  
**ACCOUNTING HARMONISATION:**  
**IFRS, GFS AND IPSAS**

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**SUMMARY**

In order to compare financial information across companies, organisations, and public entities, accounting standards and accounting practices have to be harmonised. For this purpose, first, the International Financial Reporting Standards (IFRS) have been developed for the preparation of general purpose financial statements of profit-oriented entities. However, some governments also have based their national public accounting standards on IFRS. Second, the Government Finance Statistics (GFS) provide statistics on financial operations, financial position and liquidity situation, especially of the general government sector, and enable analysis of fiscal statistics. Third, public sector accounting should be harmonised at the global level by adopting the International Public Sector Accounting Standards (IPSAS). This chapter describes these three different perspectives in public sector harmonisation and refers to challenges associated with accounting harmonisation.

**KEYWORDS**

Public sector accounting, accounting harmonisation, IFRS, IPSAS, GFS

## 1. Introduction

In general, accounting harmonisation is associated with greater international comparability of financial information. When accounting practices are harmonised, multinational companies are able to prepare and consolidate financial statements without considering different national accounting practices. Furthermore, operations from multinationals can be easier understood, for example, by the administrations of developing countries. Relatedly, international accountancy firms and tax authorities benefit from a harmonised measurement of foreign incomes. Next to transparency and usability, accounting harmonisation is advantageous for the use of decision-making instruments such as investment appraisal or performance management, due to its ease of use and comparability. Having these benefits of accounting harmonisation in mind, this chapter aims to describe different perspectives of accounting harmonisation and related challenges. International accounting harmonisation is realised by applying international accounting standards and regulations on statistical reporting, such as the **International Financial Reporting Standards (IFRS)**, the **Government Finance Statistics (GFS) Manual 2014** and the **International Public Sector Accounting Standards (IPSAS)**. Referring to high levels of government debt and fiscal pressure, transparent and comparable financial information is especially important for public sector entities.

This chapter has the following **aims**:

- Giving reasons why accounting harmonisation is important.
- Describing different perspectives of public sector accounting (PSA) harmonisation (i.e. IFRS, GFS, IPSAS) and linking them to their significance in PSA.
- Outlining challenges associated with PSA harmonisation.

The chapter is structured as follows: **Section 2** illustrates harmonisation efforts of the private sector accounting system and describes the IFRS in

more detail. **Section 3** concentrates on GFS, explains the purposes of GFS and the differences between GFS and IPSAS. **Section 4** gives an overview on harmonisation in PSA, refers to the IPSAS standards and introduces the EPSAS standards project. **Section 5** concludes by summarising the different perspectives in PSA harmonisation.

## **2. Harmonisation of the private sector accounting system**

The emergence of IFRS has begun with the establishment of the International Accounting Standards Committee (IASC) in 1973. At that time, there have been major differences in national accounting laws and standards between the founding member states of the IASC (Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland, and the United States of America), so that financial information was not fully comparable for international investors and other user groups. Therefore, the IASC Agreement and Constitution aimed to develop and publish basic accounting standards and to promote their worldwide acceptance.<sup>1</sup> Even though the IASC (which later became the International Accounting Standards Board; IASB) was restructured several times and confronted with conflicting national interests throughout its history, its original mission of advancing private sector accounting harmonisation still remains unchanged. The current IFRS Foundation Constitution specifies the objectives of developing a single set of principle-based, high-quality, understandable, enforceable and globally accepted financial reporting standards and to promote the worldwide use and rigorous application of those standards.<sup>2</sup>

Since the formation of the IASC, different jurisdictions reacted in different ways and speeds to the prospect of a single set of globally accepted financial reporting standards. The 2002 decision of the EU to require IFRS for the preparation of consolidated financial statements of

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<sup>1</sup> Camfferman and Zeff (2015), pp. 8-9.

<sup>2</sup> IFRS Foundation (2018a), para 2.

listed companies within all member states starting from 2005 can be seen as a milestone and important stimulus for other nations outside the EU to make similar commitments to international financial reporting.<sup>3</sup> As of April 2018, already 144 out of 166 profiled jurisdictions require the use of IFRS for at least a subset of their domestic public companies.<sup>4</sup>

**International Financial Reporting Standards** (IFRS) are standards and interpretations published by the International Accounting Standards Board (IASB). IFRS are designed for the preparation of general purpose financial statements of profit-oriented entities (e.g. entities engaged in commercial, industrial, financial and similar activities). The overall objective of IFRS is to provide financial information about the reporting entity that is useful for the economic decision making of a wide range of different user groups, including investors, creditors, employees or the interested public at large. To achieve this objective, the fair presentation principle (or true and fair view) demands that the financial statements shall present fairly the financial position, financial performance and cash flows of the reporting entity. The Board presumes that full compliance with IFRS will usually result in a fair presentation. The term IFRS has to be interpreted broadly and is used to indicate the whole body of literature published by the IASB, including:

- the **Conceptual Framework** (CF) for Financial Reporting which describes the objectives and general principles for the preparation of general purpose financial statements. The main purpose of the CF is to assist the IASB in developing new standards by providing a consistent foundation of clearly articulated principles and concepts. Furthermore, the CF is designed to assist financial statement preparers in developing consistent accounting policies in case no specific standards apply for certain transactions or other events. Finally the CF also assists all parties (e.g. users, preparers and auditors) to understand and correctly interpret the standards.

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<sup>3</sup> Camfferman and Zeff (2015), p. 56.

<sup>4</sup> IFRS Foundation (2018b). For a comprehensive overview about which companies have to follow IFRS in different jurisdictions see Pacter (2017), pp. 29-177.

- the **International Financial Reporting Standards (IFRS)** as issued by the IASB and International Accounting Standards (IAS) as issued by the IASC which set out the main requirements in regard to recognition, measurement, presentation and related disclosures dealing with certain transactions and events that are important in preparing general purpose financial statements. Usually, the standards are supplemented by various annexes, like Illustrative Examples, Implementation Guidance and the Basis for Conclusions, which give further insights into the reasoning of the IASB and the interpretation of specific accounting guidelines.
- the **interpretations** by the IFRS Interpretations Committee and its predecessor the Standing Interpretations Committee (SIC) which give authoritative guidance on reporting issues that would otherwise likely lead to divergent practices or unacceptable treatments. Although interpretations are drafted by the IFRS IC, they must be approved by the IASB in order to be adopted.

In fulfilling its objective of creating a single set of globally accepted financial reporting standards, the IFRS Foundation identified the need to develop an **organisational framework** that ensures transparency in developing and maintaining accounting regulations as well as establishing structures for effective communication and involvement of its constituency. Therefore, the IFRS Foundation Constitution<sup>5</sup> sets out an organisational framework of different institutions involved in developing and maintaining IFRS (see Figure 6.1):

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<sup>5</sup> IFRS Foundation (2018a).

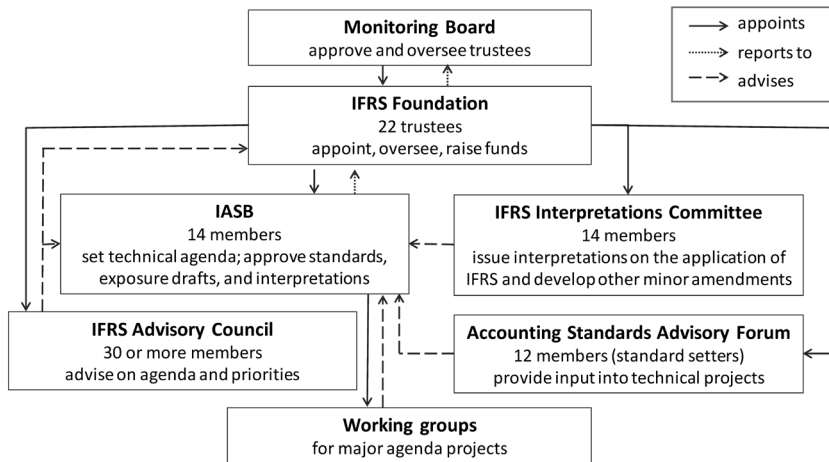


Figure 6.1: Organizational framework of the IFRS Foundation and related institutions  
(Source: IFRS Foundation, 2018a)

The **IFRS Foundation** is comprised of 22 trustees, which are tasked primarily with the governance of the IASB and its related institutions. The trustees are required to be financially knowledgeable individuals from a variety of different professional backgrounds and have to reflect an overall geographical balance. The main duties of the trustees are to appoint members of the IASB, the International Financial Reporting Interpretations Committee (IFRIC), the IFRS Advisory Council and the Accounting Standards Advisory Forum (ASAF) and to establish and amend their operating procedures. Furthermore, the IFRS Foundation shall establish and maintain appropriate financing relations and review broad strategic issues affecting financial reporting standards.

The **Monitoring Board** provides a formal link between the trustees and public authorities. The main responsibilities of the Monitoring Board are to approve the appointment of trustees and to review and advice the trustees on the fulfilment of their responsibilities.

The **IASB** is comprised of 14 members, which, as a group, shall represent the best available combination of technical expertise and relevant professional experience, including preparers, users, auditors, academics and market or financial regulators. The Board has full responsibility for all technical matters, including developing and pursuing its technical agenda,

preparation and issuing of IFRS, Exposure Drafts (ED) and Discussion Papers (DP). In fulfilling these tasks, the Board has full discretion over project assignments and can form working/advisory groups to support their work on major projects.

The objectives of the **IFRS IC** are to interpret the application of IFRS and to provide timely guidance on any financial reporting issues which are not specifically addressed by the standards. Users of IFRS can refer financial reporting issues to the Interpretations Committee, which can then either decide that the issue will be addressed by issuing an interpretation or by proposing an amendment to an existing IFRS or that the issue can be solved by the correct reading of the existing standard (therefore an interpretation or amendment is not needed).

The **IFRS Advisory Council** provides a forum for the participation of 30 (or more) individuals and organisations interested in international financial reporting. The main objectives of the Council include giving advice to the Board on agenda decisions and priorities and informing the Board about the views of Council members on major standard-setting projects.

The **Accounting Standards Advisory Forum** (ASAF) was established with the objective to increase the involvement of national standard setters in the development of IFRS. The main purpose of ASAF is to support the standard-setting process by providing the IASB with technical advice and feedback on major standard-setting projects.

As the IASB is a private sector standard-setter it has no legal authority to prescribe the mandatory use of IFRS in any jurisdiction. Therefore, countries that want to adopt IFRS have to implement an **endorsement mechanism** that mandates or permits the use of IFRS. Throughout the history of the IASB, different countries made different commitments regarding international financial reporting reaching from a full adoption of IFRS as issued by the Board, over adopting a modified version of IFRS, to developing national accounting standards that are substantially converged with IFRS (for an overview of different endorsement mechanisms in different jurisdictions refer to Pacter, 2017). In 2002, the European Parliament (EP) (by approving EC No. 1606/2002) decided to require the use of IFRS for the consolidated financial statements of all listed companies in



the EU starting from 2005.<sup>6</sup> However, in order to maintain legislative power the EU authorities decided to implement an endorsement mechanism to assess each new IFRS in regard to the criteria specified in the IAS Regulation and in regard to European interests.<sup>7</sup> Therefore, only the IFRS as adopted by the EU have to be mandatorily applied for the preparation of consolidated financial statements by listed companies in the EU.

The **EU endorsement mechanism** (see Figure 6.2) starts with the publication of a new IFRS/IFRIC (or amendment) by the IASB. The new standard is then assessed by technical experts within the European Financial Reporting Advisory Group (EFRAG). EFRAG is a private association that is tasked with providing advice to the European Commission (EC) on whether a new IFRS/IFRIC should be endorsed. The three main endorsement criteria EFRAG has to consider are:

- if the new standard fulfils the “true and fair view” principle,
- if the standard is conducive to the European public good and
- if the standard meets the four qualitative criteria of understandability, relevance, reliability and comparability.

Although the ultimate reason for establishing EFRAG was providing endorsement advice, the technical experts of EFRAG also serve the purpose to consult and provide the European perspective on financial reporting issues to the IASB.<sup>8</sup>

Based on the endorsement advice given by EFRAG, the EC can submit a draft regulation to the Accounting Regulatory Committee (ARC). The committee is comprised of representatives from all EU member states and is chaired by the EC. If the ARC opinion on the proposal is positive, the EC submits the draft regulation to the EP and the Council for a three-month scrutiny period. If there are no objections from the EP or the Council, the proposed standard will be adopted and published in the official journal.<sup>9</sup>

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<sup>6</sup> For further information refer to Camfferman and Zeff (2015), pp. 57-65.

<sup>7</sup> European Commission (2000), pp. 7-8.

<sup>8</sup> Van Mourik & Walton, 2018, pp. 10-13.

<sup>9</sup> Council Decision 1999/468/EC Article 5a(3).

However, if the ARC disagrees with the proposal, the EC has to submit the proposal to the Council and to forward it simultaneously to the EP. If the Council envisages the adoption or does not act within two months, the proposal has to be submitted to the EP, which has another two months to oppose the proposal. If the EP does not oppose, the proposal has to be adopted (regardless of the opposing ARC vote). However in any case, if the EP or the Council opposes with the draft submitted by the EC, the draft shall not be adopted and the Commission may submit an amended or new draft to the Committee.<sup>10</sup> Although by applying these endorsement procedures the EU can adopt a modified version of IFRS, in practice, these modifications will be limited to rare cases, as otherwise IFRS as adopted by the EU would not be comparable to full IFRS.

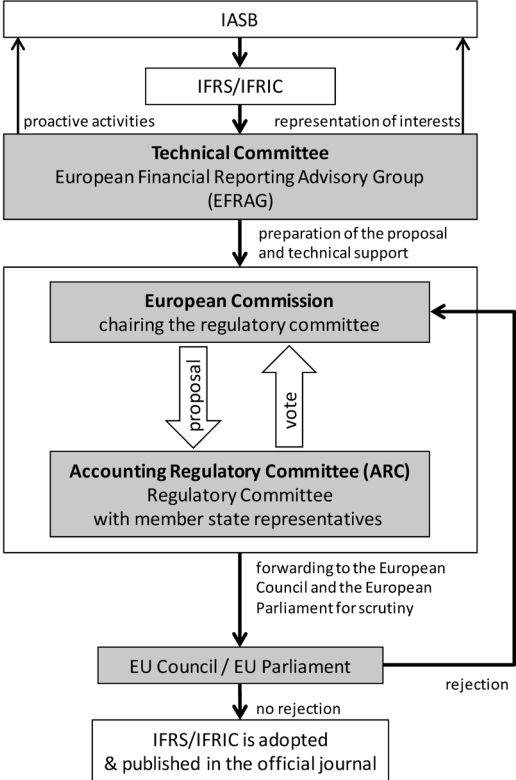


Figure 6.2: EU endorsement mechanism  
(Based on Oversberg, 2007, p. 1599f.; Pellens et al., 2017, p. 83)

<sup>10</sup> Council Decision 1999/468/EC Article 5a(4).

Even though IFRS can be seen as an important and successful tool for achieving the objective of private sector accounting harmonisation, there are still several challenges to overcome in the future:

- Even though the CF is designed to provide a consistent foundation for further standard setting, several requirements in the standards are actually not in line with aspects of the CF and with other standards, leading to **inconsistencies in financial reporting**.
- Complexity and extensive disclosure requirements make financial reports based on IFRS **more error prone** as compared to national accounting guidelines. This issue is of particular importance considering that there are no globally accepted enforcement mechanisms in place to ensure full compliance with IFRS requirements.
- IFRS often include estimates based on the judgement of financial statement preparers. This leads to considerable **management discretion** and reduces the reliability of financial reports.
- Finally, IFRS is still **lacking international acceptance**. Even though a large number of jurisdictions has made public commitments to IFRS as the single set of globally accepted financial accounting standards, IFRS are still not applied in several notable economies (e.g., China, India, Japan and the United States), which does not imply that IFRS are not important in these countries, as they are, for example, granting access to the stock markets. Furthermore, several countries only apply modified versions of IFRS, which decrease international comparability and, therefore, limit the objective of international accounting harmonisation.

### 3. Harmonisation of the Government Finance Statistics

**Government Finance Statistics** (GFS) encompass statistics that enable to analyse financial operations, financial position and liquidity situation over time. GFS provide financial statistics in a consistent and systematic manner,

and should reflect decisions, taken on the interpretation of the European System of National and Regional Accounts (ESA 2010). They are developed by the International Monetary Fund (IMF), and especially relevant for the general government sector of the public sector (Figure 6.3).

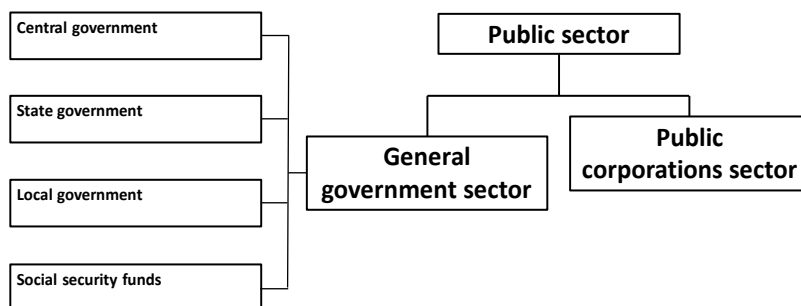


Figure 6.3: Structure of the public sector

The **general government sector** comprises non-market producers creating output for individual and collective consumption. They are financed by compulsory payments from units belonging to other sectors. The sector's main functions consist of satisfying collective needs (e.g., defense) and household's needs (e.g., state health care). In order to finance these needs, it redirects money, goods and services among units (e.g., redistribution of national income). The general government sector can be divided into:

- Central government: Responsibilities cover the whole economic territory of a country;
- State government: Separate institutional units responsible for exercising various government functions;
- Local government: Provision of services to local residents;
- Social security funds: Includes all social security units, regardless of the level of government.

In 1970, “A Manual on Government Finance Statistics” was drafted to collect first comments of government, central banks, central statistic offices etc. Based on their feedback, “A Manual on Government Finance Statistics 1986” (GFSM 1986) was published that provides a guidance to compile GFS.

This manual is, however, no direct alignment with other macroeconomic statistics. In 2001, the “Government Finance Statistics Manual 2001” (GFSM 2001) was published to accomplish harmonisation with standards of other internationally recognised macroeconomic statistic guidelines. The “Government Finance Statistics Manual 2014” (GFSM 2014) was adapted to up-dated statistic manuals, the System of National accounts 2008 (SNA 2008) and two specialised manuals (BPM6 and MFSM).

The **GFSM 2014** outlines the GFS framework and contains guidelines for presenting fiscal statistics. In addition, the Manual covers the economic and statistical reporting principles. The Manual is harmonised with other macroeconomic statistical guidelines (e.g., System of National Accounts 2008, Balance of Payments and International Investment Position Manual 6, Monetary and Financial Statistics Manual) and explains the relationship of GFS to internationally accepted accounting standards such as IPSAS.

Table 6.1 summarises the **differences of GFS and IPSAS**. To illustrate some differences, GFS aims at evaluating the outcomes of fiscal policy decisions, the impact on the economy, and the national and international outcomes. In contrast, IPSAS aim at evaluating financial performance and financial position, enhancing management accountability, and improving decision making. Next to different aims, GFS and IPSAS differ in terms of the reporting entity. The statistical reporting unit is *an institutional unit, defined as an entity that is capable, in its own right, of owning assets, incurring liabilities, and engaging in economic activities in its own name*<sup>11</sup>. Although the reporting entity is an institutional unit, the focus of GFS is on a group of units such as a subsector. The reporting entity for financial statements represents an economic entity, defined as a group of entities that includes one or more controlled entities.<sup>12</sup>

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<sup>11</sup> IMF (2014), p. 343.

<sup>12</sup> IMF (2014), p. 341-343.

	<b>GFS</b>	<b>IPSAS</b>
<b>Objectives</b>	Evaluate the outcome and the economic impact of fiscal policy decisions	Evaluate financial performance and position to hold management accountable and to inform decision-making institutions
<b>Reporting entity</b>	Institutional units and sectors	Government or other public sector organisation, program or identifiable activity
<b>Recognition criteria</b>	Economic events	Past events with probable outflows
<b>Valuation (measurement)</b>	Current market prices	Fair value, historical cost and other bases
<b>Revaluations</b>	Record all revaluations and changes	Realized and unrealized gains and losses

*Table 6.1: GFS versus IPSAS (IMF (2014), pp. 341 ff.)*

In the following, the **GFSM implementation plan** is outlined. Government activities are supposed to be presented in the framework of a government balance sheet (accrual accounting). The following key steps have to be considered when implementing accrual accounting and GFSM:<sup>13</sup>

- (1) Take stock: Review existing source data, approve classifications according to international guidelines and improve existing recording methods;
- (2) Adopt new presentation: Rearrange existing data to the GFSM framework, identify and plan how to fill data gaps;
- (3) Improve coverage: Expand coverage to include all relevant institutional units and transactions;

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<sup>13</sup> Jones (2013), p. 3 ff.

- (4) Compile Financial Balance Sheet: Add data on financial assets and liabilities;
- (5) Estimate non-cash items: Add data on receivable and payable accounts, etc.;
- (6) Estimate other economic flows: Add data on holding gains/losses and other volume changes;
- (7) Compile full balance sheet: Add data on nonfinancial assets.

With regard to the **implementation of the GFS framework**, some countries are not able to compile the full GFS framework, for example, due to their economic situation. The implementation of the fully integrated GFS framework takes time and resources. Most countries have to adapt their underlying accounting system in order to compile the GFS framework, applying accrual basis for reporting and the classifications of the GFS framework.

Harmonising GFS also involves numerous **challenges** that restrain from comparing data across countries in an economic and monetary union (e.g., EU).<sup>14</sup> First, additional guidelines might be provided for regional arrangements such as “rulings” or “fiscal policy rules” on specific transactions, aggregates, or balancing items (e.g., Manual on Government Deficit and Debt of the EU). Second, existing guidelines on concepts and definitions might be clarified in order to avoid misinterpretations and solve practical problems. Third, it is not always clear which units belong to the general government sector so that more detailed guidelines for the classification and sectorisation of units are necessary in order to provide comparable data. Furthermore, it should be transparent which units are included and which are not part of GFS. Fourth, harmonisation is challenged by different times of recording economic events across countries. Whereas some countries apply the cash basis of accounting, others adopt the accrual basis of accounting. Although there is a trend towards accrual accounting,<sup>15</sup>

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<sup>14</sup> IMF (2014), p. 339.

<sup>15</sup> IFAC/CIPFA (2018), p. 4.

there are various mixed accounting systems. Finally, the measurement of gross and net debt has to be comparable across all countries of an economic and monetary union so that national definitions have to be adapted to international agreed definitions of debt.

#### **4. Harmonisation of the public sector accounting system**

The public sector is reforming its accounting system due to several reasons. The first aim is to provide a fair view of public finances. This is related to assessing the full costs of government operations. A new accounting style is associated with enhanced transparency and accountability, strategic resource management, and improved awareness and management of costs. In general, public management should be modernised by introducing a performance culture. Besides, financial crises and high levels of public debts underline the importance of harmonised accounting standards to provide timely and reliable financial and fiscal data and enable complete and comparable financial reporting.

Figure 6.4 gives an overview on **government debts** as percentage of gross domestic product (GDP) in European countries. It is shown that most European countries exceed the Maastricht criteria, as they display government debts of more than 60 percent of GDP. Furthermore, the figure indicates great heterogeneity between member countries. Whereas Estonia, Luxembourg, or Bulgaria have comparatively low levels of government debt, Greece, Italy, and Portugal are heavily indebted countries.



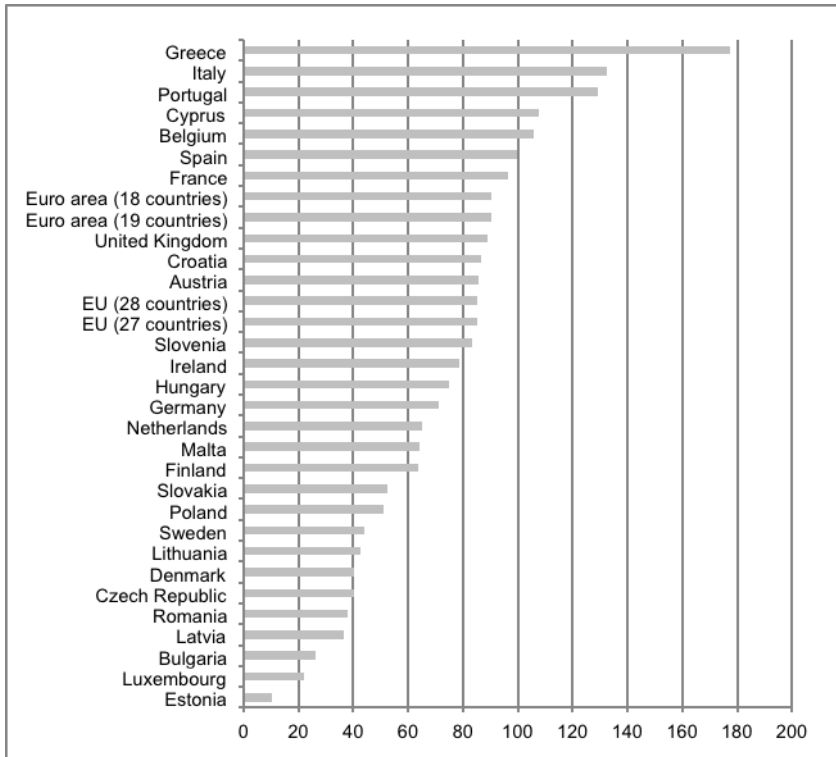


Figure 6.4: Government debt in % of GDP in Europe, 2016 (Eurostat, 2017)

A more “true and fair view” of government finances should be provided by **applying accrual-based accounting standards**. Accrual-based accounting means that transactions are budgeted or recognised in the financial reports at the time at which the underlying economic event occurs, regardless of when the related cash is received or paid. Assets and liabilities are then budgeted or reported in a balance sheet. In contrast, cash-based accounting means that transactions are budgeted or recognised in the financial reports only when cash is received or paid.

73 % of OECD countries (national government) and 35% of EU countries currently use accrual-based accounting for annual financial reports. For example, Austria, Finland, or the United Kingdom are among those countries. 9 % of OECD countries and 32% of EU countries use cash transitioning to accrual, which means that some transactions are budgeted or recognised in the financial reports using the cash basis and some

transactions on accrual basis. 18 % of OECD countries as well as 18% of EU countries use cash basis such as Germany.<sup>16</sup>

The accounting basis for annual financial reports, however, differs from the preparation basis for budgets of national governments. The great majority of countries use cash as a preparation basis of budgets (e.g., Germany, Portugal, Greece), whereas only 29 % use accruals (e.g., Austria, UK, Switzerland). 9 % of countries use cash transitioning to accruals (i.e. Sweden, Finland, Estonia).<sup>17</sup>

These great differences in accounting bases for annual financial reports and preparation bases for budgets are linked to the status of accrual reforms. 57% of countries have already completed reforms (e.g., Austria, Finland, UK, Switzerland), 22% have ongoing reform efforts, 12 % are planning an accrual reform, and 9 % do not plan an accrual reform.<sup>18</sup>

Furthermore, there are large differences concerning the type of standards used. Only 3 % of OECD countries use IPSAS standards, 57 % use national standards, and 28 % use national standards based on IPSAS. The remaining countries use other standards such as national standards based on IFRS.<sup>19</sup>

**Chapter 7** refers to IPSAS, their use and spread in more detail.

There are **numerous challenges of implementing public sector accounting reforms**:<sup>20</sup>

- Adapting existing laws and regulations
- Adapting the IT systems to the new requirements
- Identification and valuation of assets and liabilities as part of the opening balance sheet
- Developing guidance and training material
- Preparing consolidated financial statements
- Preparing financial statements in a timely manner

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<sup>16</sup> OECD/IFAC (2017),13; IFAC/CIPFA (2018), p. 2.

<sup>17</sup> OECD/IFAC (2017), p. 20.

<sup>18</sup> OECD/IFAC (2017), p. 27.

<sup>19</sup> OECD/IFAC (2017), p. 24.

<sup>20</sup> OECD/IFAC (2017), p. 30.

- Preparing for audit requirements and addressing audit qualifications
- Estimating, monitoring, and controlling the costs of the reform

Next to harmonising public sector accounting by IPSAS, there are recent public sector reform efforts especially in Europe. In more detail, EU member states intend to implement a set of accrual-based standards, namely the **European Public Sector Accounting Standards**, shortly **EPSAS**. Similar to IPSAS, EPSAS should strengthen the harmonisation of accounting standards and stimulate transparent, credible and comparable financial statements. Furthermore, the accountability and decision-making should be improved at the macro level and at the entity level.<sup>21</sup> **Chapter 14** outlines in more detail the European efforts for PSA, describes EPSAS and also refers to challenges and risks of EPSAS implementation.

## 5. Conclusion

The increasing use of IFRS standards illustrates efforts toward standardisation of accounting over the last two decades. This development results in an improved comparability of financial statements across firms, which in turn supports decision-making of investors and capital market decision-making. The current debt situation in EU member states and fiscal pressures call for a reform of PSA in Europe. The public sector is thus following the reform path of the private sector in implementing accrual accounting practices into public sector accounting regimes. At the global level, harmonisation of public sector accounting should be realised by adopting the IPSAS, a welldeveloped set of accounting standards for use by public sector entities. In Europe, the EPSAS are currently developed in order to harmonise public sector accounting in EU member states and create a uniform accrual-based accounting system for use by all public entities in the EU.

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<sup>21</sup> PwC (2014), pp. 4 ff.

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## **Discussion topics**

- Why is public sector accounting harmonisation important?
- Discuss how the member states of the European Union can achieve accounting harmonisation.
- Discuss the conceptual differences between IFRS and IPSAS.

## CHAPTER 7

### IPSAS: HISTORY – SPREAD – USE

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#### SUMMARY

A great diversity of accounting and financial reporting methods challenge the comparison of financial information among countries or across government levels in the public sector. In striving for transparency and accountability, International Public Sector Accounting Standards, shortly IPSAS, aim to provide an accurate and fair view of financial positions, financial performance and cash flows. The IPSAS are developed by the IPSAS Board (IPSASB) with the aim of improving the quality of financial reporting at a global level and providing comparable financial information. By now, the international standard-setting Board has developed 42 accrual-based standards and one cash-based standard. Approximately 80 countries and organisations apply IPSAS, however, to different extents. IPSAS can be implemented either directly or indirectly through national standards. As the first of four chapters about IPSAS in this book, this chapter aims to give an introduction to IPSAS by describing the history of IPSAS and elaborating on its spread and use. Two case examples are provided to illustrate the implementation process of IPSAS. First, Austria has implemented IPSAS-like accrual accounting. Second, Germany does not apply IPSAS so that the reasons for refusing to adopt IPSAS are outlined. Finally, findings from empirical studies on IPSAS are summarised.

#### KEYWORDS

IPSAS, international accounting, accounting harmonisation

## 1. Introduction

In recent years, traditional cash-based accounting systems have been moved towards accrual-based accounting systems with the aim of providing more accurate information about the financial situation of a public entity and of increasing transparency and accountability.<sup>1</sup> Next to providing a true and fair view of the financial situation, the assets and the revenues, financial statements should be comparable to other countries and other government levels. This requires international accounting harmonisation. The International Public Sector Accounting Standards (IPSAS) are developed with the aim of harmonising public sector accounting (PSA) at the international level.

Therefore, this section focuses on IPSAS and it has the followings **aims**:

- Providing an overview on the evolution of the IPSAS and the role of the IPSASB in the development of international comparable PSA standards.
- Describing what are IPSAS, which benefits are associated with the use of IPSAS, and which countries and organisations have adopted IPSAS.
- Explaining the implementation process of IPSAS and illustrating the implementation process by providing a case example.

The chapter is structured as follows: **Section 2** illustrates the evolution of international harmonisation of PSA standards and focuses on the institutions responsible for the development of IPSAS. In **Section 3**, IPSAS are described in detail and the benefits of adoption are discussed. **Section 4** concentrates on the spread of IPSAS and refers to the accounting practices of European countries. **Section 5** gives an overview on the implementation process of IPSAS by distinguishing the section-specific and the sector-neutral approach. **Section 6** illustrates the implementation process of IPSAS by the Austrian case example and gives reasons for refusing to implement IPSAS by

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<sup>1</sup> IFAC/CIPFA (2018), pp. 2-5.

referring to the German case example. **Section 7** summarises findings from empirical research on IPSAS. **Section 8** concludes by discussing the benefits and challenges of IPSAS.

Further chapters in this textbook continue the explanations on IPSAS by addressing the IPSASB Conceptual Framework (Chapter 8), the IPSAS concept of General Purpose Financial Reporting (Chapter 9), selected public sector specific IPSAS (Chapter 10) and an IPSAS case study (Chapter 11).

## 2. Evolution of IPSAS

The IPSAS are developed by the **International Public Sector Accounting Standards Board**, shortly IPSASB. The strategic objective of the IPSASB is to enhance public financial management and knowledge on a global level by increasing the adoption of accrual-based IPSAS. The Board intends to achieve this aim by developing high-quality public sector financial reporting standards, publishing practice guidelines and studies, and raising awareness of IPSAS and the benefits of their adoption. The IPSASB consists of 18 members and includes representatives from ministries of finance, government audit institutions, public practice and academia. 15 out of 18 members are nominated by the Board of IFAC, and the remaining three members are appointed as public members. Membership is usually for three years, and can be renewed for a further three-year term.<sup>2</sup>

The IPSASB is supported by the **International Federation of Accountants** (IFAC). Originally, the IFAC, which was established in 1977 in New York with the idea of supporting international harmonisation of accounting, has launched a **Public Sector Committee**, shortly PSC, in 1986. This committee was intended to publish studies and research papers on PSA. In 1996, the so-called 'Standards Project' that aims for formulating and issuing the IPSAS was established. Finally, in 2004, the Public Sector Committee has changed the name to IPSASB.

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<sup>2</sup> IPSASB (2016).



The purposes of the IPSASB are manifold. First, the IPSASB aims at developing high-quality accounting standards for use in public sector entities. Second, in accordance with the mission of IFAC, it intends to enhance the quality of the public financial reporting on a global level. Third, the IPSASB aims at improving the financial engineering and reporting of public entities. Finally, it plans a convergence of national and international public standards of accounting.

Since 1997, the IPSASB has developed 42 IPSAS, three Recommended Practice Guidelines (RPG), an IPSAS standard for reporting under the cash basis of accounting, and a conceptual framework. The next paragraph describes the IPSAS in more detail.

### **3. IPSAS: Concept and Overview**

The **International Public Sector Accounting Standards**, shortly IPSAS, are a set of mainly accrual-based standards that should provide a uniform global basis for the preparation of annual financial statements in the public sector. IPSAS are based on the International Financial Reporting Standards, shortly IFRS, that are mainly used in the private sector. Although IPSAS are based on IFRS, there are some differences between the accounting standards. First, the terminology and references have to be adapted to characteristics of the public sector. Second, the convergence of IPSAS with IFRS is limited, as there are no IFRS standards available for specific requirements of the public sector as addressed in more detail in Chapters 10 and 11. For example, in the public sector, there are special kinds of transactions that do not exist in the private sector (e.g., income from taxes, transfer between public sector entities). This reminds us of great differences between private sector and public sector accounting, which are highlighted in Chapter 3.

The application of IPSAS is expected to have various benefits:

- **Monitoring of government debt and liabilities for their economic implications:** The introduction of IPSAS intends to reduce economic uncertainties and significant threats posed by inappropriately managed debt. A full disclosure of all assets, liabilities and contingent

liabilities is vital for assessing the true economic implications of public sector financial management. The disclosure of liabilities might encourage government leaders to make decisions that focus on long-term sustainability. For example, this refers to the disclosure of long-term obligations of government such as pension obligations.

- **Transparency and accountability in public sector finances:** In accordance with the idea of IPSAS, governments have to provide accurate and complete information on expenditures and transactions. This information focuses on both short-term and long-term impacts of decision making. Transparent financial reporting can improve public sector decision making and make governments more accountable to their citizens.
- **Enhancing citizen trust in government:** The application of IPSAS also influences citizen-government relation, as citizens are affected by government's financial management decisions. Transparent financial reporting thus can help governments to regain or increase citizen trust in government.

Currently, the IPSAS encompass 42 accrual-based standards and one cash-based standard. Table 7.1 gives an overview on the individual standards and relates them with the IFRS. Once more, it becomes evident that IFRS cannot be simply translated to IPSAS. Instead, the characteristics of public sector accounting have to be taken into account. For example, there are no corresponding IFRS to IPSAS 22, IPSAS 23, IPSAS 24 and for the Cash Basis IPSAS.

<b>IPSAS</b>	<b>Title</b>	<b>Corresponding IFRS</b>
IPSAS 1	Presentation of Financial Statements	IAS 1
IPSAS 2	Cash Flow Statements	IAS 7
IPSAS 3	Accounting Policies, Changes in Accounting Estimates and Errors	IAS 8
IPSAS 4	The Effects of Changes in Foreign Exchange Rates	IAS 21
IPSAS 5	Borrowing Costs	IAS 23
IPSAS 6	Consolidated and Separate Financial Statements (superseded by IPSASs 34-38)	IAS 27
IPSAS 7	Investments in Associates (superseded by IPSASs 34-38)	IAS 28
IPSAS 8	Interests in Joint Ventures (superseded by IPSASs 34-38)	IAS 31

IPSAS 9	Revenue from Exchange Transactions	IAS 18
IPSAS 10	Financial Reporting in Hyperinflationary Economies	IAS 29
IPSAS 11	Construction Contracts	IAS 11
IPSAS 12	Inventories	IAS 2
IPSAS 13	Leases	IAS 17
IPSAS 14	Events After the Reporting Date	IAS 10
IPSAS 15	Financial Instruments: Disclosure and Presentation (superseded by IPSASs 28-30)	IAS 32
IPSAS 16	Investment Property	IAS 40
IPSAS 17	Property, Plant and Equipment	IAS 16
IPSAS 18	Segment Reporting	IAS 14
IPSAS 19	Provisions, Contingent Liabilities and Contingent Assets	IAS 37
IPSAS 20	Related Party Disclosures	IAS 24
IPSAS 21	Impairment of Non-Cash-Generating Assets	No directly corresponding IFRS
IPSAS 22	Disclosure of Financial Information about the General Government Sector	No corresponding IFRS
IPSAS 23	Revenue from Non-Exchange Transactions (Taxes and Transfers)	No corresponding IFRS
IPSAS 24	Presentation of Budget Information in Financial Statements	No corresponding IFRS
IPSAS 25	Employee Benefits (will be superseded by IPSAS 39)	IAS 19
IPSAS 26	Impairment of Cash-Generating Assets	IAS 36
IPSAS 27	Agriculture	IAS 41
IPSAS 28	Financial Instruments: Presentation	IAS 32/IFRIC 2
IPSAS 29	Financial Instruments: Recognition and Measurement	IAS 39/IFRIC 9/IFRIC 16
IPSAS 30	Financial Instruments: Disclosure	IFRS 7
IPSAS 31	Intangible Assets	IAS 38/SIC 32
IPSAS 32	Service Concession Arrangements – Grantor	Mirror to SIC 12
IPSAS 33	First-time Adoption of Accrual Basis IPSASs	(IFRS 1)
IPSAS 34	Separate Financial Statements	IAS 27 (amended 2011)
IPSAS 35	Consolidated Financial Statements	IFRS 10
IPSAS 36	Investments in Associates and Joint Venture	IAS 28 (amended 2011)
IPSAS 37	Joint Arrangements	IFRS 11
IPSAS 38	Disclosure of Interests in Other Entities	IFRS 12
IPSAS 39	Employee Benefits	IAS 19 (issued 2011)
IPSAS 40	Public Sector Combinations	(IFRS 3)
IPSAS 41	Financial Instruments	IFRS 9
IPSAS 42	Social Benefits	No corresponding IFRS
Cash Basis IPSAS	Cash Flow Statement	No corresponding IFRS

*Table 7.1: Overview on IPSAS*  
*Source: Müller-Marqués Berger (2018), Deloitte (2019).*

#### 4. Spread of IPSAS: Who is using IPSAS?

The aim of developing the IPSAS was to provide a **standard for accounting practices** in public sector entities on a **global level**. Accordingly, the IPSASB is aiming for an international use of IPSAS. Currently, approximately 80 countries and several international organisations apply IPSAS. In terms of application of standards, different compliance levels have to be considered. Whereas some organisations fully apply IPSAS, which means that they make use of all the 42 standards, others only partly apply the standards (i.e. pick single standards or they are applied in a modified way). In addition, various countries align their national accounting standards to IPSAS, however, to different degrees. Furthermore, the application of IPSAS can differ among government levels (i.e. the central, state and local level).

In general, we can observe an international trend towards accrual accounting, which is in line with the visions of the IPSASB. Table 7.2 gives an overview on current accounting practices of European countries. As illustrated in the table, numerous countries apply accrual accounting and various countries use IPSAS as a basis (e.g., Austria, Estonia, and Lithuania). Furthermore, several European countries are using modified cash accounting (e.g., Greece, Italy, and Slovenia). Finally, some countries like the Netherlands are in a process of transiting to accrual accounting only recently.

Next to differences in accounting practices among countries, there are intra-country variations when it comes to accounting. For example, Austria applies IPSAS at the central level. However, currently, the state and local government level do not apply accrual accounting but cash accounting. As far as Germany is concerned, cash accounting is applied at the central level. To the contrary, local governments mainly apply accrual accounting. In summary, there are still great differences in accounting practices among countries and government levels.

Country	Accrual accounting		Modified cash accounting		Cash accounting	
	IPSAS/ IFRS	Other	IPSAS/ IFRS	Other	IPSAS/ IFRS	Other
Austria	x					
Belgium		x				
Bosnia			x			
Bulgaria						x
Czech Republic			x			
Denmark		x				
Estonia	x					
Finland		x				
France		x				
Germany						x
Greece				x		
Hungary				x		
Iceland				x		
Ireland						x
Italy				x		
Kosovo						
Lithuania	x					
Luxembourg						x
The Netherlands						x
Macedonia						x
Moldavia		x				
Poland				x		
Portugal	x					
Romania				x		
Serbia					x	
Slovakia			x			
Slovenia				x		
Spain	x					
Sweden	x					
Switzerland	x					
Turkey	x					
Ukraine				x		
United Kingdom	x					

*Table 7.2: Accounting Practices of European Countries:  
Current financial reporting basis and financial reporting framework*

*Source: IFAC/CIPFA (2018): 2018 Status Report*

*Notes: "IPSAS/IFRS" for countries that are directly or indirectly adopting IPSAS/IFRS or at least using IPSAS/IFRS as a reference point. No data available for Albania, Croatia, Kosovo, Latvia and Norway*

With regard to **developing countries**, most African countries apply cash accounting practices, whereas numerous Asian and Latin American countries plan an IPSAS reform.<sup>3</sup> For developing countries, the implementation of IPSAS is of high importance, as institutions such as the World Bank require governments to implement IPSAS in return for financial support. In contrast, developed countries have already implemented national accounting standards, and thus have lower ambitions to implement IPSAS<sup>4</sup>. While many developing countries such as Kenya or Madagascar have still not adapted to IPSAS, there are others, for example, Uganda, which have already implemented IPSAS. It should be noted that the adoption of IPSAS means to undergo a fundamental and expensive change in financial administration and culture, which especially for developing countries can be a challenge. The question about how IPSAS can be implemented by a country is answered in the next section.

## **5. Implementation process of IPSAS**

As already outlined, there is an international trend towards accrual accounting, although there are also other views as discussed in Chapter 2. However, accrual accounting is not equitable to applying IPSAS, and there are numerous reasons why to link accrual accounting legislation to IPSAS:

- Enhancing comparability of financial information among countries, across government levels, and being in accordance with international organisations (e.g. European Commission, OECD).
- Improving comparability of financial information between the public and private sector.
- Facilitating the consolidation of financial statements.
- Making use of the knowledge accumulated by the IPSASB.

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<sup>3</sup> Christiaens et al. (2015).

<sup>4</sup> Chan (2006), p. 6.

When it comes to implementing IPSAS, countries can either **directly adopt them or adopt them through national standards**. First, most international organisations such as the OECD, IMF, UN or NATO have implemented IPSAS directly. The implementation of IPSAS means changing an existing law (e.g. law on public sector financial reporting), and taking IPSAS as a legal basis. Although the IPSASB encourages full endorsement of IPSAS in order to ensure comparability, countries also partially adopt IPSAS. For example, Switzerland has implemented IPSAS on the federal level, while the extent of implementation on the cantonal level varies. Second, IPSAS can be adopted through national standards - the implementation method most countries choose. Adoption through national standards means that IPSAS act as a basis for national standards and country-specific adaptations such as terms and definitions are made. There are two main approaches on how to adopt IPSAS through national standards:<sup>5</sup>

Sector-specific approach: In terms of the sector-specific approach, a separate set of national standards is used by the public sector. In particular, large countries such as the USA, Canada or South Africa make advantage of this approach due to various benefits:

- Specific aspects of governmental accounting will be observed (e.g. non-exchange transactions, non-cash generating assets).
- Opportunity to make adaptations to each jurisdiction's needs.
- Facilitate the implementation of international standards.

Still, on the contrary, this approach needs a high level of coordination effort.

Sector-neutral approach: With respect to the sector-neutral approach, there is only one set of national standards for application in both the private and public sector. This approach is thus also called "transaction neutral", and is applied in e.g. Australia and New Zealand. The central advantages of this approach are as follows:

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<sup>5</sup> Bergmann (2009), pp. 110-112.

- Enhanced comparability and understandability of financial information.
- Mobility of the workforce involved.
- Efficiency in standard-setting.
- High quality of standards.

In spite of these benefits, the approach is known for a highly complex standard-setting process. Furthermore, non-financial aspects and specificities of PSA might be neglected due to the sector-neutral standards.

## 6. IPSAS implementation: Case examples

To illustrate the implementation process in more detail, two case examples are provided in the following. First, the change in the accounting system in Austria is described as a country where IPSAS have been implemented. Second, the arguments of a country refusing to implement IPSAS are outlined by referring to Germany.

**Austria** has decided to adapt the public sector accounting system and change toward an accrual accounting system in the 2000s<sup>6</sup>. In aiming for better information for budget decision making, an indirect approach to implement IPSAS was chosen. Although a full compliance with the IPSAS was not intended, they were considered as a reference point. Austria applies 20 IPSAS fully, five partially, and does not apply 7 out of the then 32 standards.<sup>7</sup> National standards were prepared directly by the Ministry of Finance, and the legal drafts of the standards were finalised in cooperation with the Court of Audits.

Austria adapted the accounting system to IPSAS basis in a two-step reform process (see Figure 7.1), whereas the IPSAS adoption was only one part of an overall reform that also addressed budgeting: In 2009, a medium-term expenditure framework with legally binding expenditure ceilings

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<sup>6</sup> Schauer (2016).

<sup>7</sup> OECD/IFAC (2017).



for the next four years was developed, and ministries got more flexibility through the possibility to create financial reserves without appropriation. This means that funds that are left at the end of the year can be taken into the next year.

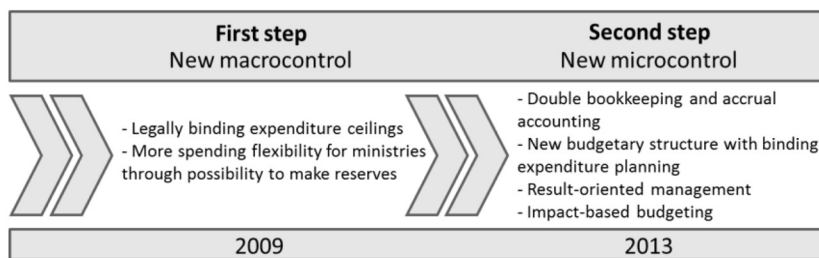


Figure 7.1: Austria - Two-step reform process

In 2013, the accounting system was adjusted to double-entry bookkeeping and accrual accounting. In addition, a new budgetary structure with binding expenditure planning was implemented. With the 2013 reform, outcome-oriented management and performance budgeting became core principles of Austrian financial administration. In practice, this means that the Austrian budget has been divided into categories, subcategories, global budgets and detail budgets. The division into categories, subcategories and global budgets is based on affairs (topic-oriented), while the division into detail budgets is based on the administrative departments. The expenditure planning for the total budget, the categories, the subcategories and the global budgets is set by law, while the detail budgets are binding for internal administrative processes.<sup>8</sup>

Contrary to Austria, **Germany** is still reluctant to implement accrual accounting in general and IPSAS in particular, at least at the central level. Similar to Austria, Germany is a federal state so that three government levels have to be distinguished (i.e. central, state and local). As explained in section 4, there are differences between government levels in terms of accounting. This means that governmental accounting is not comparable across German government levels. Consequently, harmonisation of

<sup>8</sup> Schauer (2016).

governmental accounting at federal and central state levels has been intended from 2010 onwards. However, the implementation of accrual accounting is challenging, as the Finance and Personnel Statistics Law requires cash-based information. States with accrual accounting systems thus have to report cash basis information for finance statistics purposes also. Currently, only three federal state governments (i.e. Bremen, Hamburg and Hessen) have implemented accrual-based accounting systems so far.<sup>9</sup>

Another reason for Germany's reluctance are high costs associated with the implementation of IPSAS (expected up to 2.3 billion Euro).<sup>10</sup> Besides that, it is being criticised that IPSAS are not suitable for key functions of public sector accounting, for example, taxing and social welfare, and that they are too complex. German officials also question whether it makes sense to assess the value of unsaleable assets like streets or pedestrian ways.<sup>11</sup> Supporters of IPSAS are worried about Germany's restraint, as they argue that a powerful country like Germany could be a role model for other countries to implement IPSAS.

## 7. Empirical Studies on IPSAS adoption

A number of scholars have already investigated the emergence of international accounting harmonisation in the public sector. First, there are various papers having investigated why governments or organisations decide to adopt IPSAS. Referring to European countries, studies found that a government's decision to adopt IPSAS is influenced by a desire for *high-quality financial information*. For example, an international survey among accounting officials from American and European countries found that governments decide to adopt IPSAS due to *international comparability* and improved *quality of financial reporting systems*.<sup>12</sup> Findings from

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<sup>9</sup> Müller-Marqués Berger and Heiling (2015).

<sup>10</sup> KPMG (2019).

<sup>11</sup> Deloitte (2012).

<sup>12</sup> Brusca and Martínez (2016).

another multi-country study indicate that accounting experts appreciate the facilitation of the *consolidation of financial statements*.<sup>13</sup>

Scholars have also examined why governments refuse to adopt IPSAS. Antipova and Bourmistrov (2013) explain a lack of accounting harmonisation by *path dependency* in accounting tradition. According to Oulasvirta (2014), Finland does not apply IPSAS due to a *lack of pressure to change*. Findings from Christiaens et al. (2015) indicate that the *fear of losing standard-setting authority* holds countries back from IPSAS adoption. *Costs* of implementation and adapting the national accounting standards to IPSAS are a further hampering factor.<sup>14</sup>

Second, studies have examined the effectiveness of IPSAS adoption. Based on survey data from 29 National Accounting Standard Setters (NASS) in Continental European, Anglo-American and Scandinavian countries, Bolívar and Galera (2016) conclude that fair value accounting (FVA) increases the usefulness of government financial statements for information users. Although the adoption of FVA is associated with higher costs, it improves government financial statements in terms of understandability, transparency, and accountability. In terms of harmonisation of public sector accounting in the EU, Pontoppidan and Brusca (2016) found that, instead of *international* accounting harmonisation, EU member states are prone to *regional* governance, meaning that European Public Sector Accounting Standards (EPSAS) are developed (for more details please see **Chapter 14**).

## 8. Conclusion

With the aim of harmonising public sector accounting at a global level, the IPSASB has been developing International Public Sector Accounting Standards, shortly IPSAS, from 2004 onwards. The application of a common set of public sector accounting standards by public sector entities

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<sup>13</sup> Christiaens et al. (2015).

<sup>14</sup> Brusca and Martínez (2016).

aims at implementating an accrual-based accounting system, achieving comparability and consistency of financial information both among countries and across government levels, and improving accounting information for better decision-making. Applying IPSAS is associated with a higher level of transparency in government accounting and financial reporting that in turn positively relates to accountability and oversight control. Due to higher quality of financial information, decision-making processes and assets and liability management is assumed to be improved. Enhanced government financial statistical information further benefits the recognition of risks, opportunities, cost awareness and efficiency.

Next to various benefits associated with the evolution of a common set of public sector accounting standards at a global level, numerous challenges should not be neglected. Implementing IPSAS is associated with an organisational change so that innovation barriers such as negative attitudes toward change (e.g., resistance to change), a lack of tangible resources including IT platforms or financial capacities, and insufficient task knowledge and experience on how to implement a new accounting system can challenge a successful adoption. Nevertheless, international reporting on basis of IPSAS provides an opportunity to increase the quality of financial reporting results, enhance international comparability and improve decision making by government.

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- MANES ROSSI, Francesca; CAPERCHIONE, Eugenio; COHEN, Sandra, and BRUSCA, Isabel (2019) – Financial Management and Public Sector Accounting in an Age of Reforms: Developments and Changes in Public Sector Financial Management. In ONGARO, Edoardo (ed.): *Public Administration in Europe* (pp. 235-246). Palgrave Macmillan, Cham.
- ONGARO, Edoardo, & VAN THIEL, Sandra (Eds.) (2018) – The Palgrave handbook of public administration and management in Europe. Palgrave Macmillan.
- SCHUMESCH, Patrice, DE LAET, Jan, & DE GREEF, Anton (2012) – IPSAS in a nutshell-from principles to practice. PwC.

## **Discussion topics**

- What is the nature of the harmonisation of accrual accounting?
- What are the benefits of IPSAS?
- How to cope with organisational reluctance in applying IPSAS?

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**CHAPTER 8**  
**IPSAS CONCEPTUAL FRAMEWORK AND**  
**VIEWS ON SELECTED NATIONAL FRAMEWORKS**

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**SUMMARY**

This chapter is about conceptual frameworks in public sector accounting, particularly addressing the IPSAS conceptual framework. While taking this as a reference, the chapter also offers brief views on selected national frameworks from a group of European countries—namely the UK, Finland, Austria, Germany and Portugal—, as illustrative examples of how conceptual frameworks can approximate or diverge from that of IPSASB.

The explanations enable an understanding of the role of a conceptual framework underlying public sector accounting standards, as well as the main issues normally included in it.

**KEYWORDS**

financial information, users, qualitative characteristics, elements of financial statements, measurement criteria



## 1. Introduction

The beginnings of accounting conceptual frameworks (CFs) may be found in the 1930s in the USA, originating in the accounting profession. A clear attempt to reach an accounting theory was the American Accounting Association 1966 “*A Statement of Basic Accounting Theory*” (ASOBAT)<sup>1</sup>. However, it was not before 1973, with the creation of the Financial Accounting Standards Board (FASB), that accounting conceptual frameworks began to be discussed and developed across countries, starting from the Anglo-Saxon world.

FASB’s CF, started in 1973, was the major and most complete one, comprising several statements on a wide range of financial accounting and reporting matters (e.g., objectives of financial reporting, qualitative characteristics of accounting information, elements of financial statements, recognition and measurement in financial statements, and presentation of financial statements). This work has inspired others, such as those from the Accounting Standards Committee in UK, and more recently, that from the International Accounting Standards Board (IASB).

As to public sector accounting (PSA), the origins of its CFs come from the USA as well, being derived from those of business accounting, at least in the last forty years. Separating between federal accounting and governmental accounting for state and local level, the latter followed, since the 1930s, principles and standards issued by a national council (currently the Governmental Accounting Standards Board – GASB). However, at the beginning of the 1980s, FASB, which was concerned explicitly with business organizations, started to concern itself with nonbusiness organizations too, issuing a statement on the objectives of financial reporting by nonbusiness organizations, conflicting with GASB’s responsibilities<sup>2</sup>. Nowadays, GASB focuses on state and local government accounting, including non-for-profit public sector units. Since its establishment in 1984, GASB has initiated its own CF, starting from the FASB’s framework; currently, some important

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<sup>1</sup> Jones (1992).

<sup>2</sup> Jones (1992).

pronouncements are GASB Concept Statements no. 1 (1987), no. 4 (2007) and no. 6 (2014). At the federal level, there is the Federal Accounting Standards Advisory Board (FASAB) *Handbook of Federal Accounting Standards and Other Pronouncements* (2012), including the Statements of Federal Financial Accounting Concepts no.1 to no.7.

While, in principle, there should be only one commonly accepted (financial) accounting theory, historically derived from practice, it is acknowledged that, even within business accounting, developing a single generally accepted accounting CF is not easy. Additionally, considering that accounting is to be a purposive activity, aimed at producing and reporting information that must be useful for somebody to do something,<sup>3</sup> the development of accounting CFs has been based on approaches considering the users of financial accounting reports and their needs,<sup>4</sup> which, in turn, are determined by the context where they act. Environment is deemed to determine the objectives of accounting information and consequently other dimensions of the accounting CF.<sup>5</sup>

This explains why, although based on business accounting, specific CFs (as standards) have been especially derived and developed for PSA. Even those who argue for 'one single world of accounting' recognize that there might be context specifics determining PSA particularities, hence requiring its CF to reflect differences (e.g., different concepts and different interpretations of principles), at least at a detailed level, from the one for financial accounting overall.

Accordingly, though deriving from the IASB's CF, the IPSASB (2014) published a specific CF for PSA, considering the following public sector specific characteristics<sup>6</sup>:

- The primary objective of delivering public services – rather than to make profits and generate a return on equity for investors; requires

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<sup>3</sup> Jones and Pendlebury (2010).

<sup>4</sup> Jones (1992).

<sup>5</sup> Vela Bargues (1992).

<sup>6</sup> See IPSASB (2014, preface).

- information beyond financial position, financial performance and cash flows, to properly evaluate the performance of public sector entities;
- Non-exchange transactions (e.g., taxes and grants) – the involuntary and compulsory nature of major contributions makes accountability an overriding purpose of GPFs;
  - A budget to be accomplished – considering the budget as an instrument of public policy and a law, GPFs must report on the budget (public policies) accomplishment;
  - Nature of the programs and longevity of the public sector – financial statements have to be complemented with information allowing the assessment of sustainability in the long run, and the going concern principle cannot be assessed only by the net financial position;
  - Nature and purpose of public sector assets and liabilities – there are infrastructure and other public domain assets (e.g., heritage, military assets) difficult to measure and with no market; entities assume certain liabilities in order to provide a public service (e.g., the provision of social benefits);
  - The regulatory role of public sector entities – in order to safeguard public interest or bring the market to function; judgment is required to evaluate whether the regulatory role creates assets or liabilities;
  - Relationship to statistical reporting – public sector accounts, namely concerning the General Government Sector, are input for the National Accounts and Government Financial Statistics – convergence is needed but differences remain.

In the European context, some diversity can be found regarding public sector accounting CFs. While the UK is IFRS-based (e.g., *The Government Financial Reporting Manual – FreM*, revised on an annual basis), in Continental countries there are some IPSASB's adopters (e.g., Spain, Portugal, France and Austria), whereas others are based on deeply-rooted national traditions, even though some concepts of the IPSASB's might be adopted (e.g., Germany and Finland).

This chapter continues discussing the definition and role of a CF and the authority of the IPSASB's CF over the standards or recommended

practice guidelines. It follows by presenting and explaining the main topics addressed in the IPSASB's CF. In a first part, the objectives, users and qualitative characteristics of the GPFR information are introduced; and in a second part, the definitions, recognition and measurement criteria for the elements within the financial statements are discussed. Finally, it presents a comparative-international analysis of the principal topics/concepts included in the frameworks of a group of European countries (Austria, Finland, Germany, Portugal and the UK) taking the IPSASB's CF as a benchmark.

## **2. The role of the CF *versus* the public sector accounting standards**

The literature has presented several definitions for a CF in accounting, emphasizing different elements, either focusing on its contents, or on its purposes.<sup>7</sup> However, commonalities point to a definition of a CF that, in the first place, embraces accounting objectives that will guide the establishment of fundamental principles and key concepts, which, in turn, will be followed by more procedure-oriented standards.

The IPSAS CF presents a definition as a basic theoretical structure addressing the main elements of the financial statements, which

establishes the concepts that underpin general purpose financial reporting [...] by public sector entities that adopt the accrual basis of accounting.<sup>8</sup>

These concepts are assets, liabilities, revenue, expenses, net financial position, ownership contributions and ownership distributions, for which the CF also outlines recognition and measurement criteria to be considered overall in the standards. The CF also defines the objectives and main users of GPFRs, and the qualitative characteristics of financial information.

The IPSAS CF applies to GPFRs of governments at all levels, as well as to other public sector entities.

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<sup>7</sup> Vela BARGUES (1992).

<sup>8</sup> IPSASB (2014, CF 1.1).

Historically, because accounting theory has developed from practice,<sup>9</sup> CFs follow the standards, and not the opposite. Therefore, reasons for the existence of accounting CFs include the need to have harmonized concepts – a common explicit theoretical reference (set of concepts and principles based on postulates or premises) capable of giving coherence to accounting practices, and on which rules (standards) and recommendations must rest – and to give legitimacy to the standards themselves and to the work of standard-setters.<sup>10</sup>

Therefore, the CF is not a standard, as it does not offer (binding) guidance for recognizing, measuring, presenting and disclosing specific transactions or topics. These authoritative requirements are for the IPSAS, and in cases of conflict between these and the CF, the standards requirements prevail.<sup>11</sup>

Overall, the main purposes and importance of a CF in PSA may be summarized as:

- To support *preparers* of the financial statements, in the application of (accrual-based) PSA standards (e.g., IPSAS and future EPSAS) and in the accounting treatment of topics that become relevant as a matter of the standards;
- To help in forming opinion about the adequacy of the financial statements to the standards (*auditors'* perspective);
- To support *users* in the interpretation of the information within the financial statements prepared by public sector entities; and
- To offer PSA *standard-setters* the proper concepts needed to prepare PSA standards.

CFs are accounting theory, and hence, conventionally concerned with financial accounting. They do not address management accounting, because they are concerned with accounting for external providers of finance<sup>12</sup>;

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<sup>9</sup> Jones and Pendlebury (2000).

<sup>10</sup> Jones (1992); Jones and Pendlebury (2000).

<sup>11</sup> IPSASB (2014, CF 1.2-1.3).

<sup>12</sup> Jones and Pendlebury (2000).

they do not embrace budgeting either, perhaps because budget theory has much to do with political science and also with economics, particularly public finance, which do not seem so attractive for accounting theorists (academics/researchers) and even less for professionals.

Nevertheless, in some jurisdictions, like in Portugal, there was a need to create a CF also for budgetary (cash-based) accounting and reporting, defining specific principles and terms – some terms with a similar designation in financial accounting have different meanings in budgetary accounting – e.g., revenue/expenditure, current/non-current, financial assets/liabilities<sup>13</sup>.

The IPSAS CF does not refer particularly to budgetary reporting. However, as explained in other chapters, the scope of GPFs admittedly embraces information and statements to report also on how budgets have been accomplished.

### **3. The IPSAS CF – part I**

The IPSAS CF is nowadays the only one existent at an international level, with wider geographic scope and resorting to the CFs from FASAB, GASB and specially that of IASB, as sources of inspiration. Therefore, the remainder of this chapter concentrates on the IPSAS CF as the main international benchmark.

Like the IPSAS, the CF is not obligatory, as the IPSASB does not have enforcement power; to be in force, IPSAS must be formally and/or legally adopted by each country or jurisdiction. Moreover, as explained, standard requirements supersede CF principles.

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<sup>13</sup> See Decree-Law 192/2015 – NCP 26, PORTUGAL, DECRETO-LEI n°192/2015, of 11 September, Sistema de Normalização Contabilística para as Administrações Públicas (SNC-AP).

### **3.1. Objectives and main users of financial reporting within the public sector**

Most of the CFs for national governments developed during the 1980s used a user/user needs approach, implying that the objectives of GPFs, hence their usefulness, have been determined by the users' needs, considering integral and differential approaches.<sup>14</sup> Some criticisms have been made, in regard to the fact that the users and needs considered are, in reality, potential; they do not result from empirical studies, but rather from assertions and normative approaches.<sup>15</sup> The lack of 'verifiability' is

(...) symptomatic of a continuing problem with the user/user needs approach of financial reporting theory: we are still not clear that a substantial number of users exist.<sup>16</sup>

Due to the difficulties in identifying who the real users of public sector GPFs are, ultimately, one could say that, in a democratic regime, everyone in the population could be assumed to be a user or potential user of the accounts of public sector organizations. This, however, would create serious problems in identifying their information needs and defining statements in order to satisfy them. Still, in democratic contexts, there is a governmental duty to be publicly accountable, so accountability is an implicit objective of public sector GPFs, regardless of who the users are and what their needs might be.<sup>17</sup>

Given that GPFs in the public sector seem to be particularly oriented to external users, decision-making needs have been added and explicitly considered in CFs, also derived from business accounting.

Nevertheless, users' needs (GPFs purposes) for accountability and decision-making seem to be rather controversial within the public sector

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<sup>14</sup> Jones and Pendlebury (2000).

<sup>15</sup> Jones (1992); Rutherford (1992).

<sup>16</sup> Jones and Pendlebury (2000, p. 138).

<sup>17</sup> Jones and Pendlebury (2000).

context. For example, Jones (1992, p.260) explains that the 'accountability' notion should somehow have implicit the 'decision-making':

(...) accountability must imply some purpose for some external user and that, however casual the decision might be, the purpose must lead to a decision: if the accountee is entirely passive, accountability surely must be an empty notion.

Moreover, even if

There is no difficulty in identifying parties who are unequivocally external to a public sector organisation who might in principle be users of financial reports (e.g., *taxpayers, voters, service recipients, investors*). (...) There is, however, a difficulty in identifying the decisions which a rational actor falling within one of these classes might seek to take by employing the general purpose statements of any government unit. [italics provided]<sup>18</sup>

Rutherford (1992) argues that there are no rational reasons to consider that citizens, even as voters and taxpayers, are indeed users of information for decision making, although it might be admissible that certain experts, such as the *media* and policy analysts, are users of public sector financial information on their behalf. However, in the context of control and accountability, the author admits a variety of intermediate users who might be considered internal from one perspective and external from another. Politicians in central government are an example: they are internal users as decision-makers within the government on the one hand, but they are external users while exerting their oversight role on lower-level governments or agencies. Parliamentarians are another example: in principle, they are capable of demanding any information they want; nonetheless, in practice, they exert a limited power of control, making them act as external users, using the financial reports of government and public sector entities at large for the purposes of assessing accountability and general compliance with the legislation (e.g., budgetary restrictions).

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<sup>18</sup> Rutherford (1992, p. 267).



Getting around these controversies, the IPSASB has followed a normative and prescriptive approach while addressing the objectives and users of GPFs. Accordingly,

The objectives of financial reporting by public sector entities are to provide information about the entity that is useful to users of GPFs for accountability purposes and for decision-making purposes.<sup>19</sup>

Several (potential) users are considered, distinguishing between primary users and others, as in Table 8.1.

Primary users	Other users
<ul style="list-style-type: none"> <li>• <b>Service recipients</b> and their representatives</li> <li>• <b>Taxpayers</b> and their representatives</li> <li>• <b>Resource providers</b> (investors/markets, donor agencies,...)</li> </ul>	<ul style="list-style-type: none"> <li>• Government statisticians</li> <li>• Analysts and financial advisors</li> <li>• <i>Media</i></li> <li>• Regulators and oversight bodies</li> <li>• Audit institutions and control bodies (e.g., General Audit Office; Court of Audit,...)</li> <li>• Parliamentary or government committees</li> <li>• Public interest and lobby groups and others (e.g. rating agencies; entity management,...)</li> </ul>

*Table 8.1: Users of GPFs*  
*Source: IPSASB (2014, CF 2)*

The main users of GPFs in the public sector

do not possess the authority to require a public sector entity to disclose the information they need for accountability and decision-making purposes.<sup>20</sup>

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<sup>19</sup> IPSASB (2014, CF 2.1).  
<sup>20</sup> IPSASB (2014, CF 2.4).

Politicians are the representatives of service recipients, taxpayers and citizens at large. They are assumed to make extensive and ongoing use of GPFs when acting in that capacity.<sup>21</sup>

In view of the above discussion, questions may arise about whether all those considered by the IPSASB are, in reality, users of GPFs in the public sector, or whether they are only ‘addressees’ or stakeholders. Given that the discussion about financial information users and their needs is a recurring topic in the accounting field, recently there has been another attempt to shed some light on the matter, particularly addressing the use by politicians.<sup>22</sup>

Despite the lack of empirical evidence, the IPSASB assumes the following as the main information needs of users of GPFs in the public sector:<sup>23</sup>

1. Performance (accomplishment of operational and financial objectives; resource management; compliance with regulation and laws);
2. Liquidity and solvency of the entity;
3. The sustainability of the entity’s service delivery and other operations over the long term;
4. Whether resources are used economically, efficiently, effectively and as intended;
5. Whether the volume and cost of services provided during the reporting period are appropriate;
6. Whether levels of taxes or other resources raised are enough to maintain the volume and quality of services;
7. How current operations are being funded (taxes, borrowing, other sources...); and
8. Future funding needs and sources.

While 1 to 3 are common to both service recipients and resource providers, 4 to 6 are more specific to the former and 7 and 8 to the latter.

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<sup>21</sup> IPSASB (2014, CF 2.4).

<sup>22</sup> See, for example, Jorge et al. (2016) and other authors in that issue.

<sup>23</sup> IPSASB (2014, CF 2).

### 3.2. Main accounting principles

There are main accounting principles constituting important postulates or assumptions in PSA, the interpretation of which might be different from that in business accounting. Even if generally developed in other chapters, these principles – **accrual**, **going concern** and **substance over form** – are addressed here, within the IPSAS perspective.

Like in business accounting, in PSA under IPSAS the **accrual regime** prevails in financial accounting – transactions are recognized when they occur (and not when cash or equivalent is received or paid); transactions and events are recorded and recognized in the financial statements of the periods to which they relate. Elements to be recognized are assets/liabilities, expenses/revenue and net assets/equity.<sup>24</sup> Still, the application of the matching concept required under this principle is problematic in public sector organizations, questioning the meaning of the deficit/surplus in the financial performance statement and raising a need to consider non-financial performance reporting as a complement.

Unlike IFRS-based business accounting, under IPSAS, a cash regime might also be used in financial accounting. Within most European countries, this prevails in budgetary accounting, recognizing transactions only when cash or equivalent is received or paid; statements provide information on sources of cash raised during the period, the purposes for which cash was used, and the balance at the reporting date. Elements to be recognized are cash expenditure – payments, and cash revenue – receipts.<sup>25</sup>

Still, overall, budgetary accounting is not a synonym of cash accounting; in fact, budgetary accounting might also be accrual-based (e.g., in UK and Austrian central government, and in German local government), and in accrual-based reporting there is cash-based information too, such as in the cash-flow statement.

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<sup>24</sup> IPSASB (2018, IPSAS 1.7).

<sup>25</sup> IPSASB (2018, Cash Basis IPSAS 1.2.2).

Another important principle is the **going concern**, by which

Financial statements must be prepared on a going concern basis, unless there is an intention to liquidate the entity or to cease operating, or if there is no realistic alternative but to do so.<sup>26</sup>

While this appears to be similar to business accounting, a different interpretation is required in the public sector context: instead of considering financial viability issues (essentially reflected in the net financial position), a long-term perspective of financial sustainability must be considered, pointing to continuity in public service provision.

As in businesses, material uncertainty might raise doubts about an entity's ability to continue. Yet, in the public sector, not only tests of liquidity and solvency are important, but other (non-financial) issues (e.g., power to levy taxes, multi-year funding agreements, merging, restructuring, etc.) are, too, so the going concern relates to the ability of maintaining public service provision as expected.

Finally, there is the **substance-over-legal-form** principle, by which

Information that faithfully represents an economic or other phenomenon depicts the substance of the underlying transaction, other event, activity or circumstance – which is not necessarily always the same as its legal form.<sup>27</sup>

The legal form is associated to ownership that may lead, e.g., to the legal property of assets.

While this has been a generally accepted accounting principle in business accounting, in the public sector it is not, as such. The legality principle is linked to traditional PSA; therefore, it has prevailed in some jurisdictions, like in Portugal, although substance over legal form was considered applicable in particular cases (e.g., financial leases and public domain assets). As a general principle underlying IPSAS, it has significant implications in jurisdictions where the legality principle used to override

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<sup>26</sup> IPSASB (2018, IPSAS 1.38).

<sup>27</sup> IPSASB (2014, CF 3.10).

(e.g., Portugal). An IPSAS-based accounting system implies economic control criteria to prevail over ownership and legal-based control criteria, hence, as it was significant changes in asset recognition in countries where the legality principle used to prevail.

### **3.3. Qualitative characteristics (and main constraints) of the financial information**

In order to be useful, information included in GPFs of public sector entities must contain certain attributes. The IPSAS CF explains that these qualitative characteristics are: **relevance, faithful representation, understandability, timeliness, comparability, and verifiability**,<sup>28</sup> with no particular hierarchy of importance. The IPSAS CF vastly develops these issues,<sup>29</sup> which may be summarized as follows.

Financial and non-financial information is said to have relevance when it ‘makes a difference’ in achieving the objectives of financial reporting. In order to be relevant, information must have confirmatory value, predictive value, or both, the confirmatory and predictive roles of information being interrelated (e.g., historical information helps to make judgments about the future). Materiality establishes the quantitative threshold for relevance.

Information must be a faithful representation of the economic and other phenomena that it purports to represent. The presentation of the phenomena must be neutral (neither biased, nor intentionally selected), complete (without material omissions) and as free from error as is possible.<sup>30</sup> Free from error does not mean complete accuracy in all respects; instead, it means there are no errors or omissions individually or collectively material in the description of the phenomenon.

Faithful representation also implies depicting the substance of the underlying transaction, using prudence while making judgments needed

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<sup>28</sup> IPSASB (2014, CF 3.2).

<sup>29</sup> IPSASB (2014, CF 3).

<sup>30</sup> IPSASB (2014, CF 3.14).

under conditions of uncertainty (e.g., in making estimates, such that assets or revenue are not overstated, and liabilities or expenses are not understated); these judgments might not be so neutral.

To be useful, information must also be understood by the users, implying a certain balance between complexity and simplicity, and using plain language; understandability may be enhanced by comparability. Users are assumed to have reasonable knowledge about the entity and be able to read its financial information.

Information must be made available before it loses its capacity to be useful; if it is delayed, relevance might be jeopardized, so timeliness is a critical quality of financial information. Still, some items may continue to be useful for long periods after the reporting date.

Information must also be comparable (in time and in space), allowing users to identify similarities and differences between two sets of phenomena. Comparability differs from consistency and uniformity (same accounting principles/policies), although consistency is required to assure comparability.

Finally, information must be verifiable, to help ensuring that it faithfully represents the economic and other phenomena that it purports to represent. Also referred to as 'supportability',<sup>31</sup> verifiability means that information must be supported by evidence, allowing independent observers to reach a consensus that it appropriately reflects the entity's reality. Verification may be done directly (e.g., counting cash), or indirectly (e.g., calculating the carrying amount of inventory).

There are issues constraining the attainment of the above qualitative characteristics, and, as also acknowledged by the IPSAS CF, the balance between them is not easy, as they sometimes conflict. Figure 8.1 illustrates this.

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<sup>31</sup> IPSASB (2014, CF 3.26).

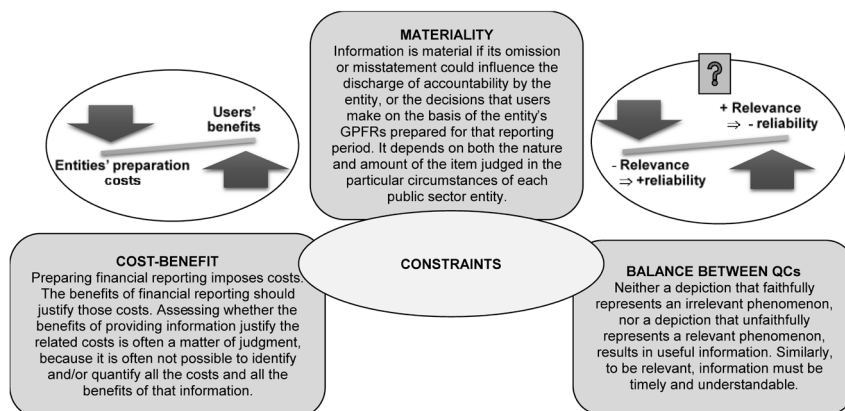


Figure 8.1: Qualitative characteristics (QCs) – balance and constraints  
 Source: IPSASB (2014, CF 3.32-3.42)

## 4. The IPSAS CF – part II

This section explains the principal elements of the financial statements, and their recognition and measurement criteria, as in the IPSAS CF.<sup>32</sup>

### 4.1. Elements of the financial statements

Financial statements are demonstrations representing the financial and economic reality of a public sector entity. Main financial statements are: statement of financial position, statement of financial performance, cash flow statement, statement of changes in net assets, and notes (*IPSAS 1 – Presentation of financial statements* and *IPSAS 2 – Cash Flow Statements*). Overall, they reflect the financial effects of transactions and other events, by grouping them into broad classes which share common economic characteristics – these are called elements of financial statements.

Demonstrating the entity's financial position includes: assets (plus other resources), liabilities (plus other obligations), ownership contributions

<sup>32</sup> IPSASB (2014, CF 5 to 7).

and ownership distributions. Other resources and other obligations refer to deferred outflows and inflows, respectively. The 'net financial position' presented in this statement, also called Balance Sheet, is

(...) the difference between assets and liabilities after adding other resources and deducting other obligations recognized in the statement of financial position. Net financial position can be a positive or negative residual amount.<sup>33</sup>

Revenue and expenses are the elements to demonstrate the entity's financial performance, in a statement where the bottom line is the (accrual-based) deficit or surplus.

Recognizing items in these elements means incorporating them in the amounts displayed on the face of the appropriate financial statements, in accordance with the criteria established in the CF.<sup>34</sup> Overall, recognition criteria require that the item satisfies the definition of the element, and that it can be measured with reliability.

Therefore, understanding the definitions of each type of element of the financial statements in the public sector setting is critical, as these identify recognition criteria.

An **asset** is defined as a resource presently controlled by the entity as a result of a past event, with service potential or the ability to generate economic benefits.<sup>35</sup>

Consequently, as in the private sector, also considering the substance over legal form, ownership is not a requirement for an asset to be recognized in a public sector entity. Controlling the resource, instead, is critical, meaning the entity has the ability: to use the resource (or direct other parties on its use) so as to derive the benefit of the service potential or economic benefits embodied in it; or to determine the nature and the way other entities make use of the economic benefits generated by the resource.<sup>36</sup>

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<sup>33</sup> IPSAS (2014, CF 5.28).

<sup>34</sup> IPSASB (2014, CF 6).

<sup>35</sup> IPSASB (2014, CF 5.6-5.7).

<sup>36</sup> IPSASB (2014, CF 5.11-5.12).



A past transaction is also a requirement leading to the present control of an asset; it may result from internal development, an exchange (e.g., purchase) or non-exchange transaction (e.g., donation or the exercise of sovereign tax powers).<sup>37</sup>

The service potential is the distinctive factor in the definition compared to business accounting, given that many assets in the public sector do not generate economic benefits. It refers to the asset's capacity to provide services that contribute to achieving the entity's objectives, without necessarily generating net cash inflows or equivalents for the entity (e.g., recreational, heritage, community, and defense assets),

(...) which are held by governments and other public sector entities, and which are used to provide services to third parties. Such services may be for collective or individual consumption.<sup>38</sup>

Still, some assets also generate future economic benefits, i.e., cash or equivalent inflows (or a reduction in cash or equivalent outflows), derived from an asset's use in the production and sale of services (e.g., water provision), or from the direct exchange of an asset for cash or other resources.<sup>39</sup>

A **liability** is a present obligation of the entity for an outflow of resources, which results from a past event.<sup>40</sup> It has to be a binding obligation (either legally or non-legally), regarding which an entity has little or no realistic alternative to avoid an outflow of resources; therefore, it implies an outflow of resources from the entity for it to be settled, and it is always towards a third party. It may be originated by an exchange or a non-exchange transaction. The past event leading to the present obligation might be more or less straightforward to identify, depending on whether an arrangement has a legal form and is binding, or not.<sup>41</sup> For example, an

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<sup>37</sup> IPSASB (2014, CF 5.13).

<sup>38</sup> IPSASB (2014, CF 5.9).

<sup>39</sup> IPSASB (2014, CF 5.10).

<sup>40</sup> IPSASB (2014, CF 5.14).

<sup>41</sup> IPSASB (2014, CF 5.15-5.26).

invoice coming from a contract with a supplier undoubtedly generates a present obligation; however, a legal suit in court may require the entity to assess whether there will be a liability – the outflow might not be certain yet and/or might not be reliably measured.

Therefore, a legal obligation, enforceable in law (even if it may arise from a variety of legal constructs), gives rise to a liability. But, a non-legal (though binding) obligation, because the party to whom the obligation exists cannot take legal (or equivalent) action to enforce settlement, only gives rise to a liability under certain conditions. These are:<sup>42</sup>

- The entity has indicated to other parties that it will accept certain responsibilities;
- The entity has created a valid expectation of those other parties that it will discharge those responsibilities;
- The entity has little or no realistic alternative to avoid settling the obligation arising from those responsibilities.

Accordingly, in a government setting, political promises do not give rise to these types of obligations.

**Ownership contributions and distributions**, for (from) the net financial position, are inflows (outflows) of resources to an (from the) entity, contributed by (distributed to) external parties in their capacity as owners, which establish or increase (return or reduce) an interest in the Net Financial Position of the entity.<sup>43</sup>

Although these notions are more related to business accounting, they may also apply in public sector organizations, e.g., in business-type government entities with shareholders, applying PSA standards. The figure of ‘the owner’ and ownership interests may arise when one entity contributes resources to provide another entity with the capacity to start operational activities. This is the case in public hospitals in Portugal, which

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<sup>42</sup> IPSASB (2014, CF 5.23).

<sup>43</sup> IPSASB (2014, CF 5.33-5.37).

are companies under the business law, owned by the government and subject to the public sector accounting system.

In the public sector, contributions to, and distributions from, entities are sometimes linked to the restructuring of government [or of public sector organizations] and will take the form of transfers of assets and liabilities rather than cash transactions.<sup>44</sup>

Ownership distributions may derive from: a return on investment; a full or partial return of investment; or a return of any residual resources, in the event of the entity being wound up or restructured.<sup>45</sup>

**Revenue** and **expenses** are, respectively, increases or decreases in the net financial position of the entity, other than increases or decreases arising from ownership contributions or distributions.<sup>46</sup>

The entity's surplus or deficit for the period is the difference between revenue and expenses reported in the statement of financial performance (also called Income Statement). Revenues and expenses are distinct from cash flows, and their matching to ascertain the surplus or deficit is rather debatable in the public sector, as will be discussed in Chapter 9.

Revenues and expenses arise from exchange and non-exchange transactions, or from other events, such as: changes in prices and unrealized increases and decreases in the value of assets and liabilities; the consumption of assets through depreciation; and erosion of service potential and ability to generate economic benefits through impairments.<sup>47</sup>

Recognizing an item in the financial statements, apart from fulfilling the definition, requires attach a monetary value to it. This process entails

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<sup>44</sup> IPSASB (2014, CF 5.36).

<sup>45</sup> IPSASB (2014, CF 5.37).

<sup>46</sup> IPSASB (2014, CF 5.29-5.32).

<sup>47</sup> IPSASB (2014, CF 5.31).

selecting an appropriate measurement basis, ensuring that the measurement is sufficiently relevant and faithfully representative.<sup>48</sup>

## 4.2. Measurement criteria

Measuring implies determining the monetary amounts to be used in the valuation of the elements to be recognized in the financial statements, by selecting specific measurement bases.

Regarding the objectives of measurement, the IPSASB instructs that an entity must select measurement bases that most fairly reflect its **cost of services, operational capacity and financial capacity**, and are useful in holding the entity to account and for decision-making purposes.<sup>49</sup> These measurement bases must also provide information that meets the qualitative characteristics.

The CF does not propose a single measurement basis (or combination of bases) for all transactions, events and conditions; instead, it provides guidance on the selection of a measurement basis for assets and liabilities, based either on the **historical cost** or **current value**, and may be **entry (recognizing) values** or **exit (derecognizing) values**. From this range of criteria, each IPSAS then specifies which basis is to be specifically used.

### *Entry values and Exit values*

- For **assets**, *entry values* essentially reflect the cost of purchase/acquisition (e.g., historical cost and replacement cost); *exit values* reflect the economic benefits from sale, or the amount that will be derived from use of the asset (e.g., net selling price and value in use).
- For **liabilities**, *entry values* relate to the transaction under which an obligation is received or the amount that an entity would accept to assume a liability; *exit values* reflect the amount required to fulfil

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<sup>48</sup> IPSASB (2014, CF 6.7-6.8).

<sup>49</sup> IPSASB (2014, CF 7.2-7.4).

an obligation or the amount required to release the entity from an obligation.

**Observable and Unobservable Measures**

- Certain measures may be classified according to whether they are observable in an ‘open, active and orderly market’ (e.g., market value/fair value), or instead need to be calculated (e.g., value in use).
- Observable measures are likely to be more understandable and verifiable than unobservable measures; they may also be more faithfully representative of the phenomena they are measuring.

As displayed in Figure 8.2, there is a large variety of measurement bases suggested. And even if within each standard the options may be reduced, it is a fact that there is too much flexibility and diversity, which jeopardizes the comparability claimed for the IPSAS.

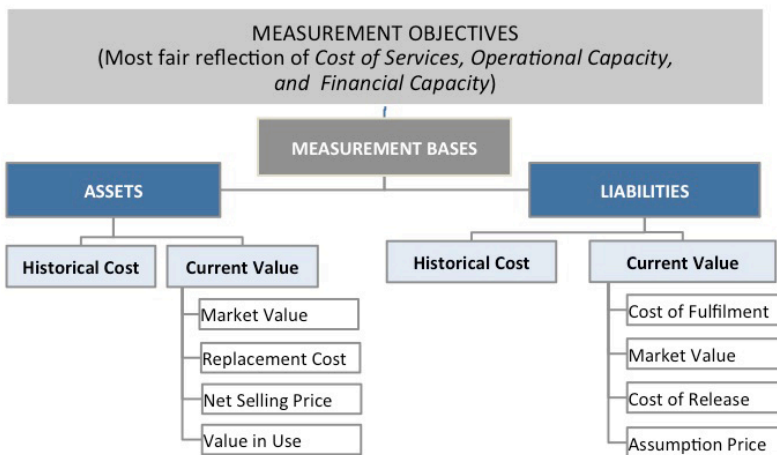


Figure 8.2: Measurement criteria  
Source: IPSASB (2014, CF 7)

Figure 8.2 shows different criteria regarding the current value of assets and liabilities, though some are mirrored concepts.

Replacement cost in assets is equivalent to the assumption price in liabilities; both are entry criteria, and they may be the most suitable for reflecting either the financial or the operational capacity of the entity, being

the amount the entity would pay for the asset and would be willing to accept for the liability.

Likewise, net selling price for assets pairs with cost of release for liabilities; both are exit criteria, and they reflect respectively the amount the entity can obtain from selling the asset (less costs of sale) and the amount the entity would be willing to pay to immediately 'get rid of' the obligation. Contrary to the market value (in business accounting called 'fair value'), which may be an exit or entry criteria, these criteria do not require an open, active and orderly market or the estimation of a price in such a market. Because of this requirement, market value is eventually the least likely applied criterion, as for many assets in the public sector there is no market, and even less so for liabilities.

Value in use as an exit value for assets, is often complex to obtain, as it implies calculating the net present value of cash flows generated by the assets or, for non-cash generating assets, calculating the remaining service potential (frequently using replacement cost as a surrogate). Its complexity makes it inappropriate to reflect the entity's costs of services and reduces its usefulness in assessing its operational and financial capacity.

Historical cost, an entry criterion both for assets and liabilities, is probably the most suitable for reflecting the entity's cost of services.

## **5. Comparative analysis of different CFs**

This section presents a summarized comparative-international analysis involving the different CFs of several European countries – Austria, Finland, Germany, Portugal and the UK – taking the one from the IPSASB as reference. These are illustrative examples on how national CFs may approximate or diverge from that of the IPSASB.

The issues to be compared are financial statements (FS) objectives and main users (Table 8.2), main accounting principles (Table 8.3), FS elements and recognition criteria (Table 8.4), and measurement criteria used in financial accounting (Table 8.5). These tables were prepared based on Brusca et al. (2015) with some additions from the countries' CFs.

Countries	FS objectives	FS main users
<b>IPSASB</b>	<ul style="list-style-type: none"> <li>Provide financial information about an entity (or an activity) for accountability and decision-making purposes</li> </ul>	<ul style="list-style-type: none"> <li>Citizens (services recipients and taxpayers), their representatives (politicians in Parliament) and other resource providers (e.g., investors)</li> <li>Oversight authorities and statistics authorities</li> </ul>
<b>Portugal</b>		
<b>UK</b>	<ul style="list-style-type: none"> <li>Provide financial information about the reporting entity or reportable activity, to permit users to assess the stewardship and accountability of management for the resources entrusted to the entity</li> </ul>	<ul style="list-style-type: none"> <li>Parliament, as representative of the public as well as the voter of resources; other users include the entity's management board, the entity's audit committee, and the taxpayer</li> <li>Investors, lenders and other creditors</li> </ul>
<b>Austria (CGov)</b>	<ul style="list-style-type: none"> <li>Provide financial information about an entity (or an activity) for accountability and decision-making purposes</li> </ul>	<ul style="list-style-type: none"> <li>Citizens and Parliament</li> <li>Other resource providers (e.g., investors)</li> <li>Supreme auditing and statistics authorities</li> </ul>
<b>Austria (R&amp;LGov)</b>	<ul style="list-style-type: none"> <li>Provide information about the entity budget accomplishment for accountability purposes</li> </ul>	<ul style="list-style-type: none"> <li>Citizens and Central Government</li> <li>Supreme auditing and statistics authorities</li> </ul>
<b>Finland</b>	<ul style="list-style-type: none"> <li>Accountability purpose overrides the provision of information for decision-making</li> <li>Accountability for service performance and budget compliance</li> </ul>	<ul style="list-style-type: none"> <li>Citizens and Parliament</li> <li>Supreme auditing and statistics authorities</li> </ul>
<b>Germany (IF accrual-based accounting)</b>	<ul style="list-style-type: none"> <li>Accountability purpose</li> <li>Financial information aiming at comparability and intergenerational equity</li> </ul>	<ul style="list-style-type: none"> <li>Parliaments</li> <li>Citizens</li> <li>Supreme auditing and statistics authorities</li> </ul>

Table 8.2: FS objectives and main users

Table 8.2 evidences fewer differences in users than in objectives, both between countries and compared to IPSASB. Regarding the objectives, in Finland and Germany, accountability is clearly the main purpose, while in UK providing information for decision-making is not explicitly an objective.

In the case of Austria, one must distinguish between central (CGov) and regional and local governments (R&LGov); while central government has going ahead with a considerable reform introducing accruals (IPSAS-based) even in the budget, at the regional and local level there is yet a lot of heterogeneity, with most entities still using essentially budgetary cash-based accounting and reporting. These different accounting systems have determined the FS objectives and users.

In the case of Germany, the reform has followed a bottom-up process, starting in local governments (municipalities), many already using accrual accounting, but not IPSAS. At federal and state (*Länder*) levels, in 2009 a reform also started and in 2016 new legislation was passed<sup>50</sup>, given the option to use either cameralistic (budgetary cash accounting and single entry) or accrual-accounting (but not IPSAS).

Currently, only two states (Hesse and North-Rhine Westfalia) use accruals and double entry, plus two city states – Hamburg and Bremen. The government at federal (central) level still uses essentially modernized (extended) cameralistic accounting, meaning cameralistics including product-oriented extensions such as expenditure-revenue data for single reports and budgets (performance budgeting), KPIs built on a comprehensive cost and activity accounting system, and capital account. Therefore, the line in the table applies only IF entities use accrual-based accounting, which might not happen in several states, the federation (ongoing) and smaller municipalities, who still use cameralistic accounting.

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<sup>50</sup> GERMANY, Governmental Accrual Accounting Standards (GAAS) [Standards staatlicher Doppik; SsD]; pursuant to section 7a and section 49a of the Budgetary Principles Act (HGrG); Resolution of 29 November 2016 of the committee pursuant to section 49a HGrG (to be updated on a yearly basis).



Countries	Main accounting principles
<b>IPSASB</b>	<ul style="list-style-type: none"> <li>• Accrual regime, substance over legal form, going concern</li> <li>• No explicit references to bookkeeping, but double entry might be assumed</li> <li>• No references to budgetary accounting, only to reporting budgetary (cash or accrual-based) information within the accounts (IPSAS 1 and IPSAS 24)</li> </ul>
<b>Portugal</b>	<ul style="list-style-type: none"> <li>• Accrual regime, substance over legal form, going concern in financial accounting</li> <li>• Cash and commitments regime in budgetary accounting and reporting</li> <li>• Double entry bookkeeping in both budgetary and financial accounting</li> </ul>
<b>UK</b>	<ul style="list-style-type: none"> <li>• Accrual regime, substance over legal form, going concern and true and fair view (IASB's CF)</li> <li>• Parliamentary accountability, and regularity</li> <li>• Cash basis with accrual-based additions in annual budgets; accrual-based three-year budgets</li> <li>• No references to bookkeeping, but double entry might be assumed</li> </ul>
<b>Austria</b>	<ul style="list-style-type: none"> <li>• Central government – accrual-based accounting (IPSAS-based) and budgeting (double entry); substance over legal form, going concern</li> <li>• Regional and local government – cash- and commitment-based single entry budgetary accounting</li> </ul>
<b>Finland</b>	<ul style="list-style-type: none"> <li>• Accrual regime (double entry), matching and revenue realization in financial accounting</li> <li>• Budgetary accounting is accrual-based for exchange transactions and cash-based for non-exchange revenues; non-exchange expenditures are commitment-based</li> <li>• Budgetary bookkeeping is single entry, but double entry is used to cross-check with the financial accounts</li> <li>• Prudence</li> </ul>
<b>Germany (IF accrual-based accounting)</b>	<ul style="list-style-type: none"> <li>• Accrual-based regime (double entry), continuity/going concern, substance over legal form, realization of gains and losses, prudence (conservatism), aiming at true and fair view in financial accounting</li> <li>• Central and state level: no reference to budgeting; mostly cash and commitments regimes (single entry) are in place</li> <li>• Local level: accrual and cash-based budgeting</li> </ul>

*Table 8.3: Main accounting principles*

IPSAS endorse accrual accounting, despite the existence of a cash-based IPSAS – *Financial reporting under the Cash Basis of Accounting*.

In Table 8.3, Portugal, in spite of being an IPSAS adopter, is the only country where budgetary accounting and reporting is cash and commitment-based, with double entry. Regional and local governments in Austria appear

to be similar, but in fact they have traditional single entry cash-based budgetary accounting. In the other countries (as in the IPSASB framework), an accrual basis is admitted, even in the budget: accrual-based budgets and budgetary accounting exist in the central government in UK, Austria and Finland, and may be an option in Germany. In this country, in the local government, although some small municipalities in specific federal states still use only cameralistic (cash and single entry budgetary) accounting, the majority of those using accrual accounting also prepare an accrual-based budget, in addition to the cash-based one.

A striking feature is that conservatism (prudence) seems to be a clearly prevailing principle in the CFs of Germany or Finland, reflected in the following tables.

Countries	FS elements	Recognition criteria
<b>IPSASB</b>	<ul style="list-style-type: none"> <li>Assets, liabilities, ownership contributions, ownership distributions (net financial position)</li> <li>Revenues, expenses (deficit/surplus)</li> </ul>	Under the accrual regime: <ul style="list-style-type: none"> <li>Fulfilling the definition – economic control</li> <li>Be measured with reliability</li> <li>Recognition of events after the reporting date (if referred to the reporting date)</li> </ul>
<b>Portugal</b>		
<b>UK</b>		
<b>Austria (CGov)</b>		
<b>Austria (R&amp;LGov)</b>	<ul style="list-style-type: none"> <li>Receivables/payables; Receipts/payments</li> </ul>	<ul style="list-style-type: none"> <li>Realization principle (commitment or cash-flows)</li> </ul>
<b>Finland</b>	<ul style="list-style-type: none"> <li>Assets and liabilities, but focus on revenues and expenses (<i>income statement-led approach</i>)</li> </ul>	<ul style="list-style-type: none"> <li>Realization principle for exchange transactions</li> <li>Cash and short-term liability for non-exchange transactions</li> <li>Measurement reliability ensured under the cost convention</li> </ul>
<b>Germany (IF accrual-based accounting)</b>	<ul style="list-style-type: none"> <li>Assets, liabilities, deferred revenues/expenses, ownership contributions, ownership distributions (net financial position)</li> <li>Revenues, expenses (deficit/surplus)</li> </ul>	<ul style="list-style-type: none"> <li>Fulfilling the definition – economic control</li> <li>Be measured with reliability (historical cost principle)</li> <li>Recognition of events after the reporting date (if incurred before reporting date)</li> <li>Realization principle</li> </ul>

Table 8.4: FS elements and recognition criteria

Table 8.4 shows that IPSAS-follower countries emphasize the elements within the main financial statements, the exception being Austria for regional and local government (R&LGov), which, as mentioned, has essentially cash-based budgetary accounting.

Finland has an explicit focus on revenue and expenses, the annual reporting following what is called an *income statement-led approach*. The prevalence of the historical cost convention and the realization principle again evidences more conservatism in Finland and in Germany.

The German CF explicitly makes reference to deferred revenues (received in current year and perceived in the following) and expenses (paid in current year and incurred in the following), which also exist in the Balance Sheet of the IPSASB, Portugal, the UK and Austria, but they are not explicitly defined in their CFs.

Countries	Measurement criteria (financial accounting)
<b>IPSASB</b>	Historical cost convention, but fair value is allowed for certain assets and liabilities, as well as amortized cost; non-current assets may be revaluated, depreciated and subject to impairment review
<b>Portugal</b>	Historical cost convention, but fair value is allowed for certain assets and liabilities, as well as amortized cost; non-current asset revaluation is NOT allowed, but they are depreciated and subject to impairment review
<b>UK</b>	Historical cost convention, but fair value is allowed for certain assets and liabilities, as well as amortized cost; non-current assets may be revaluated, depreciated and subject to impairment review (IFRS-based)
<b>Austria</b>	Historical cost convention, but fair value is allowed for certain assets and liabilities, as well as amortized cost; non-current asset revaluation is NOT allowed, but they are depreciated and subject to impairment review
<b>Finland</b>	Historical cost convention and conservatism (prudence) Securities and other financial assets may be measured at estimated market value if lower than cost; liabilities use face value, but if indexed, might be adjusted higher; non-current assets revaluation may be allowed for some assets (e.g., land), which are NOT depreciated BUT subject to impairment review
<b>Germany (IF accrual-based accounting)</b>	Historical cost convention; market value occasionally admitted under conservatism (prudence) – if lower than costs for assets, or if higher than settlement amount for certain liabilities (e.g., provisions), or subject to a reversal of impairment (maximally to amortized cost if impairment would not have incurred); non-current assets revaluation is NOT allowed, but they are depreciated and subject to impairment review

Table 8.5: Measurement criteria used in financial accounting

As expected, Table 8.5 displays (again) more prudent measurement criteria in Finland and in Germany, with no references to fair value and market value admitted for use in exceptional cases only. However, while Finland allows for revaluation of non-current (non-financial) assets in some cases, such is not allowed in Portugal, Austria and Germany. In the case Portugal, a legal instruction from the central government is required, so that revaluation can be authorised.

## **6. Conclusion**

While closely following the IPSAS CF, and referring to this as much as possible, this chapter addressed CFs overall, namely their contents in the public sector setting; objectives and users, and qualitative characteristics of financial information; elements of financial statements, and their recognition and measurement criteria.

It discussed the importance of a CF as an accounting theory, when standards derive from practice – there is a need to have a common theoretical basis to give consistency to practices. Standard-setters might have also used CFs to legitimize their own activities.

The chapter likewise explained that CFs for PSA have derived from those in business accounting, but they have been adapted due to context specifics that may entail different users and users' needs of public sector organizations' financial information.

Accountability is an almost natural purpose of GPFRs of public sector entities in democratic regimes, but the IPSASB establishes that decision making is also an important purpose. Some more critical literature has raised questions not only about who the real users of public sector entities' financial statements are, but also about their needs, underlining the fact that most of the CFs have adopted prescriptive and normative, rather than empirical, approaches.

Qualitative characteristics of financial information are also a part of a CF. Those attributes are crucial to determine the usefulness of that information; however, balancing between them is not an easy task, as they often conflict.

As to the elements of financial statements, although similarities can be found to those in business accounting, again public sector context specifics require particularities in the definitions, impacting on their recognition, and specially on their measurement criteria.

Finally, despite the international reference of the IPSAS CF, not all countries necessarily follow this, as they do not follow IPSAS. Countries with very deep-rooted accounting national traditions, such as Germany and Finland, tend to diverge from the IPSASB's perspective – even if some of their principles and concepts may approach this, a more conservative posture is clear.

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## Discussion topics

- What is the role of a CF compared to that of PSA standards?
- What are the main objectives and who are the main users of financial (and budgetary) information reported by public sector entities, according to the different CFs presented in this chapter (comparative-international perspective)?
- What are the main recognition criteria for assets, liabilities, expenses and revenues, according to the different CFs presented in this chapter (comparative-international perspective)?
- Distinguish the main criteria which can be used to measure assets, liabilities, expenses and revenues within the financial statements, according to the different CFs presented in this chapter (comparative-international perspective).

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**CHAPTER 9**  
**REPORTING COMPONENTS**  
**AND RELIABILITY ISSUES**

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**SUMMARY**

This chapter deals with financial reporting in the public sector, taking IPSAS as reference. Some examples of the reporting components of specific countries are presented. Finally, issues relating to the reliability of the information included in financial reports are also addressed. Regarding the latter, the chapter particularly refers to the role of financial reporting in promoting transparency and accountability in the public sector, and the importance of auditing to ensure fair presentation and regularity of the public sector accounts, ultimately impacting on citizens' trust in public sector managers and politicians.

**KEYWORDS**

IPSAS, reporting entity, financial statements, non-financial information, transparency, auditing



## 1. Introduction

In democratic regimes, the disclosure of financial information by governments at all levels, as well as by public sector entities at large, is crucial to the promotion of transparency and increased accountability. General Purpose Financial Reports (GPFRs) are deemed to be an important means of conveying financial information to a large variety of users and stakeholders, potentially interested in such information for the purposes of accountability and decision-making (see Chapter 8).

GPFRs are financial reports intended to meet the information needs of users who are unable to require the preparation of financial reports tailored to meet their specific information needs<sup>1</sup>.

This is why they are labeled ‘general purpose’. Even if there are users who may have the power to require public sector entities to prepare information for their specific needs, GPFRs are not developed to respond to these, but to needs supposedly common to several types of users (mostly external to the entity), who are expected to be generally satisfied with those reports.

As this chapter will explain, GPFRs comprise several statements and different types of financial and non-financial information. Similar to the business sector, in the public sector the limit of transactions and other events to be reported in the GPFRs is determined by users’ information needs, taking into account the objectives sought for the financial reporting. In these objectives, public sector context specificities must be taken into account.

Accordingly, this chapter starts by presenting an overview of the public sector financial reporting setting. Then, it addresses the notion of the reporting entity and the scope of the financial reporting, taking the IPSAS CF as a benchmark.

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<sup>1</sup> IPSASB (2014, CF 1.4).

The second part explains the format and contents of the main financial statements within IPSAS 1 and IPSAS 2, closing out with a comparative international analysis introducing the main financial statements prepared in several European countries (Austria, Finland, Germany, Portugal and the UK), taking the IPSAS as a benchmark.

The last part addresses financial reporting reliability-related issues, briefly referring to the role of financial reporting in the improvement of public sector entities' transparency and the importance of auditing.

## **2. The context of GPFR**

The following sections particularly refer to the public sector financial reporting environment with multiple stakeholders, and its scope, including examples of complementary statements. The notion of reporting entity is also explained, although this chapter addresses individual accounts only and does not address consolidated accounts.

By financial reporting one means periodical accounts, generally, the annual accounts. Therefore, other non-financial special reports, such as performance reporting, are not addressed.

### **2.1. Public sector (budgetary and financial) reporting setting**

Figure 9.1 illustrates the setting of governments and public sector entities' financial reporting, showing a variety of individuals and bodies as stakeholders to whom those entities report.

Despite the focus on financial issues, those addressees point to a scope of GPFR in the public sector generally wider than in the business sector, namely embracing non-financial and budgetary information (concerning the budget accomplishment).

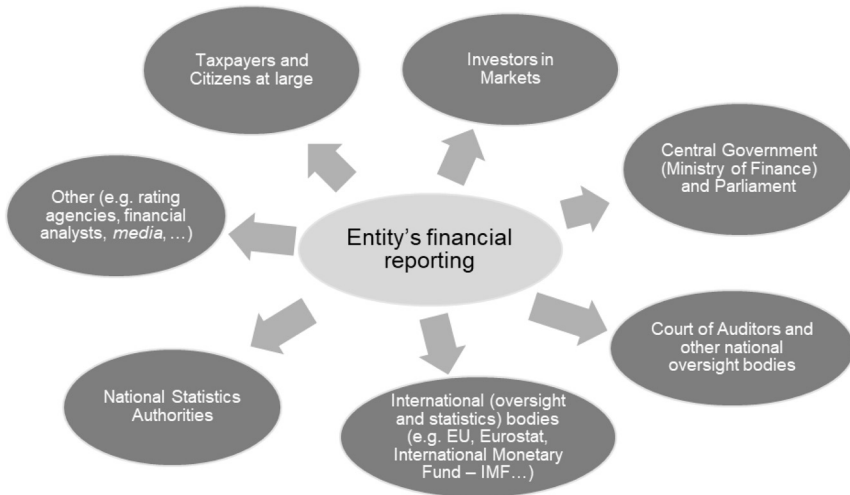


Figure 9.1: Setting of public sector entities' financial reporting

The widely diverse nature of the stakeholders presented for the public sector financial reporting may lead them to give importance to different issues and different types of information within the GPFR; there might also be some specificities – e.g., Government Financial Statistics use information from GPFR as input to prepare macro/supranational reporting.

But, in spite of the likelihood of diversified information needs among these individuals and organizations, considering the ‘general purpose’, GPFR under IPSAS assumes that such needs can be harmonized and summarized in accountability and decision-making purposes<sup>2</sup>, with no predominance of one over the other.

As to the reporting process, i.e., the bureaucratic procedures and specific practices, while some derive from legal requirements related to monitoring processes (e.g., guidance to report to the ministries, Courts of Audit, the EU or the Eurostat), others derive from transparency practices, often not resulting from any legal requirement, but are voluntary in character. In the former case, the role of the legislator in each country or jurisdiction may be a critical factor determining the reporting practices. This then may lead to differences depending on the countries and on the addressees, users or

<sup>2</sup> IPSASB (2014, CF 4).

stakeholders in the reporting process. Yet, regardless of whether reporting procedures follow legal requirements or voluntary transparency practices, including online information disclosure, the two above-stated main objectives of GPFR continue to be asserted.

## 2.2. Reporting entity

The IPSAS CF defines a reporting entity as

(...) a government or other public sector organization, program or identifiable area of activity (...) that prepares GPFRs.<sup>3</sup>

It may comprise two or more separate entities that present GPFRs as if they were a single entity, in this case constituting a 'group reporting entity'.<sup>4</sup>

Independently of having legal/juridical personality or not (it may only be an administrative unit), a public sector entity is a reporting entity if it has the responsibility or capacity to raise or deploy resources, acquire or manage public assets, incur liabilities, or undertake activities to achieve service delivery objectives. Additionally, there are service recipients or resource providers dependent on GPFRs of that entity to have information for accountability or decision-making purposes.<sup>5</sup>

Therefore, legal personality is not a requirement to be a reporting entity in accounting terms, but this entity must have operational autonomy; it may be an identifiable area of activity within a government or organization. For example, the education and the health sectors in a central government, or the education, research and social services areas in a university, are reporting entities allowing for segment reporting.

An interesting example happened in Portugal, where in 2015, during the process of reforming public sector accounting towards IPSAS, the 'State Reporting Entity' was created, endorsing Whole-of-Government Accounts. This is not a legal entity, but an 'abstract' reporting entity, recording

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<sup>3</sup> IPSASB (2014, CF 4.1).

<sup>4</sup> IPSASB (2014, CF 4.2).

<sup>5</sup> IPSASB (2014, CF 4.2-4.7).

transactions and other events related to the Portuguese State as a sovereign entity, as there are agencies acting on its behalf, such as the Taxation Authority, the Directorate-General of the Budget, the Directorate-General of the Treasury and Finance or the Agency for the Management of Public Debt. Such transactions are, e.g., general revenue (taxes), liabilities (public debt) and State assets. This entity has an ‘all-encompassing’ GPFR, comprising financial (accrual-based), as well as budgetary (cash-based) information, prepared according to both an IPSAS-based public sector accounting system and the Portuguese Budgetary Framework Law.

### **2.3. The scope of financial reporting: financial and non-financial information**

According to the IPSASB, in governments or public sector entities, GPFR encompasses the following **financial statements** as main components<sup>6</sup>:

- Statement of financial position (***Balance Sheet***);
- Statement of financial performance (***Income Statement by nature and/or by function***);
- Statement of **changes in the Net Assets/Equity**;
- **Cash Flow Statement**;
- **Comparison of budget and actual amounts** (when budgets are published), either as an additional financial statement, or as a budget column in the financial statements; and
- **Notes**.

However, users often need additional information

(...) to better understand, interpret and place in context the information presented in the financial statements (...).<sup>7</sup>

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<sup>6</sup> IPSASB (2018, IPSAS 1.21).

<sup>7</sup> IPSASB (2014, CF 2.17).

Therefore, GPFR should disclose further financial and non-financial information enhancing, complementing and supplementing the financial statements<sup>8</sup>, namely about:

Compliance with approved budgets and other authority governing its operations;

Service delivery activities and achievements during the reporting period; and

Expectations regarding service delivery and other activities in future periods, and the long term consequences of decisions made and activities undertaken during the reporting period, including those that may impact expectations about the future.<sup>9</sup>

Usually, this additional explanatory information is included in the Notes, which also comprise a summary of significant accounting policies and further disclosures according to the requirements of each IPSAS. However, it may also be included in separate reports within the GPFRs.

For the public sector, as addressed in previous chapters, it is particularly interesting to have additional information about compliance with public budgets.

Referring to *IPSAS 24 – Presentation of Budget Information in Financial Statements*, IPSASB explains:

(...) entities are typically subject to budgetary limits in the form of appropriations or budget authorizations (or equivalent), which may be given effect through authorizing legislation. GPFR by public sector entities may provide information on whether resources were obtained and used in accordance with the legally adopted budget.<sup>10</sup>

A comparison of budget to actual amounts usually consists of a separate statement when budgets are not accrual-based.

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<sup>8</sup> IPSASB (2014, CF 2.29).

<sup>9</sup> IPSASB (2014, CF 2.17).

<sup>10</sup> IPSASB (2018, IPSAS 1.24).

It is equally important to disclose

(...) additional information to assist users in assessing the performance of the entity, and its stewardship of assets, as well as making and evaluating decisions about the allocation of resources. This may include details about the entity's outputs and outcomes in the form of (a) performance indicators, (b) statements of service performance, (c) program reviews, and (d) other reports by management about the entity's achievement over the reporting period.<sup>11</sup>

Finally, public sector entities must also disclose in the GPFR information about compliance with legislative, regulatory or other externally-imposed regulations.<sup>12</sup>

The above-mentioned statements present financial information in different perspectives, but complementing and linking between each other.<sup>13</sup> While the Balance Sheet reflects the entity's financial position at the end of the period, the Income Statement shows the entity's financial performance over the period, leading to a certain surplus/deficit; in addition, the Cash Flow Statement displays the main cash sources (e.g., taxes, sales, borrowing, ...) and applications (e.g., purchases, investments, debt repayment, ...) during the period. The net surplus/deficit coming from the Income Statement is part of the Net Assets, and the cash and cash equivalents at the bottom of the Cash Flow Statement are included in the current assets, on the Balance Sheet.

Information about the **financial position** should enable users to identify the resources of the entity and claims on those resources at the reporting date. Information about the **financial performance** should allow for assessments about whether the entity has acquired resources economically, and used them efficiently and effectively to achieve its service delivery objectives. Finally, information about the **cash flows** should support assessments of financial performance, e.g., the entity's liquidity and solvency, and compliance with spending mandates; indicate how the

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<sup>11</sup> IPSASB (2018, IPSAS 1.25).

<sup>12</sup> IPSASB (2018, IPSAS 1.26).

<sup>13</sup> See, e.g., Van Helden & Hodges (2015).

entity raised and used cash during the period, including its borrowing and repayment of borrowing; and also provide information about the likely amounts and sources of cash inflows needed in future periods to support service delivery objectives.<sup>14</sup>

In summary, Figure 9.2 shows a scope of the GPFR that goes beyond that encompassed by the financial statements<sup>15</sup> and is generally broader than in the private sector, especially due to budgetary reporting information.

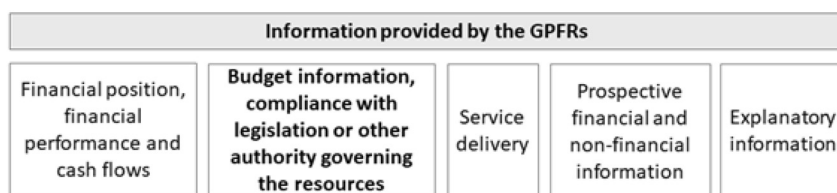


Figure 9.2: The scope of financial reporting in the public sector

Because approved budgets are public, budgetary information

(...) is used to justify the raising of resources from taxpayers and other resource providers, and establishes the authority for expenditure of resources.<sup>16</sup>

Therefore, it is important to disclose the accomplishments of the budgets finally approved.

(...) information that assists users in assessing the extent to which revenues, expenses, cash flows and financial results of the entity comply with the estimates reflected in approved budgets, and the entity's adherence to relevant legislation or other authority governing the raising and use of resources, is important in determining how well a public sector entity has met its financial objectives.<sup>17</sup>

Prospective and long-term information is also particularly important, given the longevity of governments and public sector programs, which

<sup>14</sup> IPSASB (2014, CF 2.14-2.16); Jones & Pendlebury (2010); Van Helden & Hodges (2015).

<sup>15</sup> IPSASB (2014, CF 2.29).

<sup>16</sup> IPSASB (2014, CF 2.18).

<sup>17</sup> IPSASB (2014, CF 2.21).



determine the ‘going-concern’, given that financial consequences of many decisions in the present may only become clear many years later.

Information within GPFR must be presented in comparative terms, particularly in relation to the preceding period, even regarding explanatory non-financial information.<sup>18</sup>

Finally, financial statements are usually presented annually, but the reporting period can be longer or shorter than the economic year. When this is the case, the entity shall disclose the period financial statements relate to, and why it is not annual, highlighting the fact that some amounts in the statements might not be comparable.<sup>19</sup>

#### **2.4. Complementary statements to the GPFR: budgetary reporting and management accounting reporting**

Although there are several commonalities, GPFR components in the public sector tend to differentiate across jurisdictions, as will be presented later in this chapter, namely reflecting different accounting and reporting traditions and priority purposes.

Portugal offers a noteworthy example of complementary statements to be included in the GPFR, other than the most common financial statements. According to the IPSAS-based *Sistema de Normalização Contabilística para as Administrações Públicas* (SNC-AP), GPFR also comprises:

##### **BUDGETARY REPORTING STATEMENTS (cash-based)**

- Budgetary performance statement
- Revenue budgetary execution statement
- Expenditure budgetary execution statement
- Statement of the execution of the Multiannual Investment Plan (PPI)
- Notes to the budgetary statements

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<sup>18</sup> IPSASB (2018, IPSAS 1.21g), 1.53).

<sup>19</sup> IPSASB (2018, IPSAS 1.66-1.68).

and MANAGEMENT ACCOUNTING REPORTING STATEMENTS (accrual-based)

- Income statement by functions/activities
- Income by products sold or services delivered in the period
- Costs by activities, including information of under-activity variances
- Production costs by products and services delivered, including variances
- Environmental expenses and revenues
- Non-incorporated expenses
- (...)

The *budgetary performance statement* has nothing to do with performance-based budgets but instead reports on the way the budget execution is performed, leading to a budgetary deficit or surplus.

Management accounting is seen as in the business sector (deriving from cost accounting), although in the public sector, the budget (especially if performance-based, as in Finland) and budgetary reporting might be also seen as management accounting. Information about management and cost accounting was found important to report (if not as main statements, at least in the Notes) – e.g., it is important for citizens to realize the cost of services provided compared to what they actually pay. However, management accounting statements differ from the entity's Management Reporting.

All these statements have standardized models to be used by all entities following the new accounting and reporting system (SNC-AP).

### **3. GPFR components; comparative analysis**

This section follows IPSAS 1 and IPSAS 2 especially, explaining in some detail each of the GPFR main components according to the IPSASB (2018). The comparative-international analysis involves several European countries, the IPSASB serving as a benchmark.

### 3.1. GPFR components according to the IPSASB

When preparing the financial statements, several overall considerations must be taken into account.<sup>20</sup>

It is assumed that if one entity's financial statements are IPSAS compliant, they will provide a fair presentation of the entity's financial position, financial performance and cash flows.<sup>21</sup> Moreover, the entity's ability to continue as a 'going concern' (see Chapter 8) must be assessed when preparing the financial statements; if this is in question, such must be disclosed.<sup>22</sup>

Other important issues, which are bases for presentation of the financial statements, relate to:

- Consistency of Presentation

The presentation and classification of items in the financial statements shall be retained from one period to the next unless (...) it is apparent, following a significant change in the nature of the entity's operations or a review of its financial statements, that another presentation or classification would be more appropriate...<sup>23</sup>

This consistency is important to allow for comparability<sup>24</sup>.

- Materiality and Aggregation

Each material class of similar items shall be presented separately in the financial statements. Items of a dissimilar nature or function shall be presented separately, unless they are immaterial.<sup>25</sup>

Usually, immaterial elements appear in the statements aggregated in a residual line called «other».

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<sup>20</sup> IPSASB (2018, IPSAS 1.27-1.58).

<sup>21</sup> IPSASB (2018, IPSAS 1.27-1.37).

<sup>22</sup> IPSASB (2018, IPSAS 1.38-1.41).

<sup>23</sup> IPSASB (2018, IPSAS 1.42).

<sup>24</sup> IPSASB, 2014.

<sup>25</sup> IPSASB (2018, IPSAS 1.45).

– Offsetting

Assets and liabilities, and revenue and expenses, shall not be offset unless required or permitted by an IPSAS.<sup>26</sup>

Offsetting means some form of compensation of the amounts presented, which should be avoided, because it can lead to misrepresentations. Figures in the financial statements must be presented separately in ‘gross amounts’, as much as possible. For example, offsetting payables with receivables regarding a supplier, can hide information, not showing the real substance of the transaction.

– and, Comparative information<sup>27</sup>, as previously explained.

IPSAS 1 and IPSAS 2 require minimum contents to be presented on the face of the financial statements, but each jurisdiction can choose different detail, formats and presentation, as the models suggested in the standards are merely indicative.

However, a universally accepted requirement is that all financial statements must be clearly identified<sup>28</sup>, displaying prominently the following:

- (a) The name of the reporting entity or other means of identification, and any change in that information from the preceding reporting date;
- (b) Whether the financial statements cover the individual entity or the economic entity;
- (c) The reporting date or the reporting period covered by the financial statements, (...);
- (d) The presentation currency (...); and
- (e) The level of rounding used in presenting amounts in the financial statements.<sup>29</sup>

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<sup>26</sup> IPSASB (2018, IPSAS 1.48).

<sup>27</sup> IPSASB (2018, IPSAS 1.53-1.58).

<sup>28</sup> IPSASB (2018, IPSAS 1.61-1.65).

<sup>29</sup> IPSASB (2018, IPSAS 1.63).

## Statement of financial position

Regarding the statement of financial position (designated in some jurisdictions as *Balance Sheet*), IPSAS 1 requires the following minimum elements to be presented on its face:

- (a) Property, plant and equipment;
- (b) Investment property;
- (c) Intangible assets;
- (d) Financial assets (excluding amounts shown under (e), (g), (h) and (i));
- (e) Investments accounted for using the equity method;
- (f) Inventories;
- (g) Recoverables from non-exchange transactions (taxes and transfers);
- (h) Receivables from exchange transactions;
- (i) Cash and cash equivalents;
- (j) Taxes and transfers payable;
- (k) Payables under exchange transactions;
- (l) Provisions;
- (m) Financial liabilities (excluding amounts shown under (j), (k) and (l));
- (n) Non-controlling interest, presented within net assets/equity; and
- (o) Net assets/equity attributable to owners of the controlling entity.<sup>30</sup>

Items (a) to (i) belong to Assets, while (j) to (m) belong to Liabilities. The Equity results from the difference between Assets (including other resources) and Liabilities (including other obligations) (see Chapter 8). In the public sector, the Equity would be better called 'Net Assets', but it must not be confused with net values presented on the assets side. Within the Net Assets/Equity, especially in consolidated accounts, it is important to present separately the part belonging to the entity and that belonging to non-controlling interests ((o) and (n) above). The latter may be zero in cases where the entity participation in the capital of other entities is 100%, e.g.,

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<sup>30</sup> IPSASB (2018, IPSAS 1.88).

when a municipality wholly owns a municipal business company, there are no non-controlling interests.

An entity may decide to present greater or lesser detail in the statement of financial position (additional items or subclassifications), judging the appropriateness of that to its operations.<sup>31</sup>

Table 9.1 presents the model suggested in IPSAS 1 for the statement of financial position.<sup>32</sup> Comparability is visible by presenting the amounts of the previous year.

<b>Public Sector Entity—Statement of Financial Position</b>		
<b>As at December 31, 20X2</b>		
(in thousands of currency units)		
	20X2	20X1
<b>ASSETS</b>		
<b>Current assets</b>		
...	X	X
	X	X
<b>Non-current assets</b>		
...	X	X
	X	X
<b>Total assets</b>	X	X
<b>LIABILITIES</b>		
<b>Current liabilities</b>		
...	X	X
	X	X
<b>Non-current liabilities</b>		
...	X	X
	X	X
<b>Total liabilities</b>	X	X
<b>Net assets</b>	X	X
<b>NET ASSETS/EQUITY</b>		
...	X	X
<b>Total net assets/equity</b>	X	X

Table 9.1: Statement of financial position according to IPSAS 1

A distinction between current and non-current assets and liabilities is important to be considered<sup>33</sup>, as they remain in the entity's balance sheet, respectively, for short (1 year) or for medium-to-long term periods of time (continuity), with differing impacts on the entity's financial balance.

<sup>31</sup> IPSASB (2018, IPSAS 1.91-1.93).

<sup>32</sup> See IPSASB (2018, IPSAS 1 Implementation Guidance).

<sup>33</sup> IPSASB (2018, IPSAS 1.70-1.75).

Additionally, assets are broadly presented in order of liquidity, whereas liabilities are broadly presented in order of settlement.

A current asset must satisfy any of the following criteria:

- (a) It is expected to be realized in, or is held for sale or consumption in, the entity's normal operating cycle;
- (b) It is held primarily for the purpose of being traded;
- (c) It is expected to be realized within twelve months after the reporting date; or
- (d) It is cash or a cash equivalent (...), unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.<sup>34</sup>

A current liability must satisfy any of the following criteria:

- (a) It is expected to be settled in the entity's normal operating cycle;
- (b) It is held primarily for the purpose of being traded;
- (c) It is due to be settled within twelve months after the reporting date; or
- (d) The entity does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date (...). Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.<sup>35</sup>

All other assets and liabilities are classified as non-current.

Examples of current assets are (available) cash, receivables, pre-payments, and inventories; payables, short-term borrowing and employees' benefits are examples of current liabilities. Non-current assets are generally capital assets, such as infrastructure, buildings and equipment, financial investments and intangibles; non-current liabilities are, long-term borrowing and payables, provisions, and employees' benefits, for example.

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<sup>34</sup> IPSASB (2018, IPSAS 1.76).

<sup>35</sup> IPSASB (2018, IPSAS 1.80).

The model for the statement of financial position suggested in Table 9.1 highlights the Net Assets, evidenced as the difference between Assets and Liabilities. However, this difference needs to be detailed. When an entity has no share capital, as is the case of governments and most public sector entities, the detail of the items in the Net Assets/Equity must be disclosed, showing separately:

- (a) Contributed capital, being the cumulative total at the reporting date of contributions from owners, less distributions to owners;
- (b) Accumulated surpluses or deficits [including the surplus/deficit of the current period];
- (c) Reserves, including a description of the nature and purpose of each reserve within net assets/equity; and
- (d) Non-controlling interests.<sup>36</sup>

The presentation of this detail must ensure that the ‘Total Net Assets’ equals the amount resulting from the residual difference between Total Assets and Total Liabilities.

## **Statement of financial performance**

The statement of the financial performance displays how the entity was able to generate an accrual-based deficit/surplus from revenues obtained and expenses incurred in the period. As in the previous statement, this designation is again IPSAS language, but it is perhaps most commonly known as *Income Statement*. However, perhaps the reason why this label was set aside was an attempt to differentiate from business accounting, where the main goal is to highlight the ‘income’, anticipated as profit.

As for the statement of financial position, IPSAS 1 also suggests minimum line items to be presented on the face of the statement of financial performance, presenting the following amounts for the period:

- (a) Revenue;

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<sup>36</sup> IPSASB (2018, IPSAS 1.95).



- (b) Finance costs;
- (c) Share of the surplus or deficit of associates and joint ventures accounted for using the equity method;
- (d) Pre-tax gain or loss recognized on the disposal of assets or settlement of liabilities attributable to discontinuing operations; and
- (e) Surplus or deficit.<sup>37</sup>

Therefore, likewise, an entity may decide to present greater or lesser detail in this statement (namely additional line items and revenue subclassifications), when such presentation is relevant to a better understanding of its financial performance.<sup>38</sup> As in the Balance Sheet, comparability is evidenced by presenting the amounts of the previous year.

Two different presentations are allowed for the statement of financial performance, the difference basically concerning the way expenses are presented – by *nature* (origin) or by *function* (destination). In any case, expenses are deducted (between brackets) from revenue, as in Tables 9.2 and 9.3.<sup>39</sup>

Public Sector Entity—Statement of Financial Performance for the Year Ended		
December 31, 20X2		
<b>(Illustrating the Classification of Expenses by Nature)</b>		
(in thousands of currency units)		
	20X2	20X1
<b>Revenue</b>		
(nature/origin of the revenues raised)	X	X
<b>Total Revenue</b>	X	X
<b>Expenses</b>		
(nature/origin of the expenses incurred)	(X)	(X)
<b>Total Expenses</b>	(X)	(X)
Share of surplus of associates	X	X
<b>Surplus/(deficit) for the period</b>	X/(X)	X/(X)
Attributable to:		
Owners of the controlling entity	X	X
Non-controlling interest	X	X
	X/(X)	X/(X)

Table 9.2: Statement of financial performance (by nature) according to IPSAS 1

<sup>37</sup> IPSASB (2018, IPSAS 1.102).

<sup>38</sup> IPSASB (2018, IPSAS 1.104-1.108).

<sup>39</sup> See IPSASB (2018, IPSAS 1 Implementation Guidance).

Public Sector Entity—Statement of Financial Performance for the Year Ended		
December 31, 20X2		
(Illustrating the Classification of Expenses by Function)		
(in thousands of currency units)		
	20X2	20X1
<b>Revenue</b>		
(nature/origin of the revenues raised)	X	X
<b>Total Revenue</b>	X	X
<b>Expenses</b>		
(function of the expenses incurred - program/purpose for which they are incurred)	(X)	(X)
<b>Total Expenses</b>	(X)	(X)
Share of surplus of associates	X	X
<b>Surplus/(deficit) for the period</b>	X/(X)	X/(X)
Attributable to:		
Owners of the controlling entity	X	X
Non-controlling interest	X	X
	X/(X)	X/(X)

Table 9.3: Statement of financial performance (by function) according to IPSAS 1

An entity may select the presentation that faithfully provides representative and more relevant information.<sup>40</sup> In some jurisdictions and/or for some smaller entities (e.g., in Portugal), only the statement by nature is obligatory.

While in the statement of financial performance by nature, no allocations of expenses to functional classifications are necessary, in the statement by function, expenses are presented according to the program or purpose for which they were made.<sup>41</sup>

This [latter] method can provide more relevant information to users (...), but allocating costs to functions may require arbitrary allocations and involves considerable judgment.<sup>42</sup>

<sup>40</sup> IPSAS (2018, IPSAS 1.109).

<sup>41</sup> IPSASB (2018, IPSAS 1.112-1.113).

<sup>42</sup> IPSASB (2018, IPSAS 1.113).

Another problem is that, while functions might be useful for management purposes (e.g., to analyze which activities absorb more expenses), they may not be comparable across entities, which make this type of statement less useful, e.g., at central level to the government as a whole. Perhaps it is useful mainly as part of the management accounting reporting, as in Portugal.

Revenue in both models of the statement refers to the nature of the proceeds, e.g., from taxes, fines, fees, exchange transactions, and transfers and grants. Expenses by nature refer to the origin of the outlays, e.g., wages, supplies and consumables, transfers and grants, depreciation, impairment losses, and finance costs; whereas by function requires a reclassification according to the allocation of expenses, e.g., defense, public order, education, health, social protection, culture, housing, economic affairs, environmental affairs and finance costs.

The statement of financial performance (either by nature or by function) must also show the allocations of the surplus/deficit between the controlling entity and non-controlling interest for the period, if any.<sup>43</sup> This is particularly important within a public group. The amounts of the surplus/deficit for the period, as signed in the tables, must equal.

One question that can be raised concerns the meaning of the accrual-based deficit/surplus as a measure of financial performance or efficiency<sup>44</sup>, considering the controversy of applying the matching principle between revenues and expenses (see Chapter 8). Given that most revenue comes from taxes and grants, which do not link to the expenses incurred by the entity, the application of the matching principle underlying the meaning of the bottom line of the statement of financial performance becomes rather controversial. This has perhaps been behind many criticisms of this statement in public sector accounting, requiring the need to include service delivery and performance information in the GPFR, or even preparing a separate performance reporting.

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<sup>43</sup> IPSAS (2018, IPSAS 1.103).

<sup>44</sup> Jones & Pendlebury (2010).

## Statement of changes in Net Assets

The statement of changes in Net Assets displays the changes in the financial position of an entity, from one period to the other. For the purpose of comparability, two statements must be prepared – regarding the current and the previous year, reconciling the Net Assets items carrying amounts between the two reporting dates. The suggested model by IPSAS 1<sup>45</sup> is horizontal, with the Net Assets items in the columns and causes of their changes in the lines. It requires presenting the following information<sup>46</sup>, so that total recognized revenue and expense of the period are displayed<sup>47</sup>:

- Surplus/deficit for the period;
- Revenues and expenses for the period that, according to other IPSAS, are directly recognized in the Net Assets;
- Total of revenue and expenses for the period, adding the two previous items, separating between controlling entity and non-controlling interests;
- Eventual effects of changes in accounting policies and corrections of errors (according to IPSAS 3); and
- The amounts of transactions with owners acting as such, separating distributions to owners.

The importance of this statement in typical public sector entities and governments, which do not have share capital, is questionable. It does not seem so useful as in businesses, where the principle of shareholders' protection seems to override and the warranty to accomplish with this, in the last instance, is the equity. Therefore, it becomes important to understand the comprehensive profitability of the company and how equity has changed, but such importance is reduced in the public sector.

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<sup>45</sup> See IPSASB (2018, IPSAS 1 Implementation Guidance).

<sup>46</sup> IPSASB (2018, IPSAS 1.118-1.119).

<sup>47</sup> Like an 'extended' surplus/deficit, beyond what is presented in the Income Statement, resembling the comprehensive income in business accounting.

For this reason, it was not considered important to present here the model for this statement.

## **Cash Flow Statement**

The Cash Flow Statement<sup>48</sup> informs how the entity generated cash and cash equivalents and where they came from, and where and how these were applied, i.e., where the money came from and where it went. Prepared under the accrual basis regime, this statement also informs about the entity's cash needs for the period.<sup>49</sup>

The main concepts to be considered when preparing a Cash Flow Statement within IPSAS are:<sup>50</sup> cash (comprising cash on hand and demand deposits); cash equivalents (short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value); and cash flows (inflows/outflows of cash and cash equivalents).

Cash flows for a certain period are presented in this statement considering the classification as deriving from operating, investing and financing activities.<sup>51</sup> This classification

(...) allows users to assess the impact of those activities on the financial position of the entity, and the amount of its cash and cash equivalents. [It] may also be used to evaluate the relationships among those activities.<sup>52</sup>

According to IPSASB (2018, IPSAS 2.8),

Financing activities are activities that result in changes in the size and composition of the contributed capital and borrowings of the entity.

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<sup>48</sup> IPSASB (2018, IPSAS 2).

<sup>49</sup> Jones & Pendlebury (2010); Van Helden & Hodges (2015).

<sup>50</sup> IPSASB (2018, IPSAS 2.8).

<sup>51</sup> IPSASB (2018, IPSAS 2.18).

<sup>52</sup> IPSASB (2018, IPSAS 2.19).

Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

Operating activities are the activities of the entity that are not investing or financing activities.

Cash flows from **operating activities** are critical, as they relate to the operational capacity of the entity, to repay obligations and to make additional investments, without needing external resources. Operational activities should be the main source of cash for most public sector entities. In particular, they indicate the extent to which the operations of the entity are funded by taxes (directly or indirectly) or by revenue raised from the recipients of goods and services provided by the entity.<sup>53</sup> Deriving from principal cash-generating activities, these flows include, among others:<sup>54</sup>

- Grants, transfers, etc., received, made by central government or other public sector entities;
- Cash payments to: other public sector entities to finance their operations, e.g., grants conceded (not including loans); suppliers for goods and services; to and on behalf of employees;
- Cash receipts and cash payments of an insurance entity for premiums and claims, annuities, and other policy benefits;
- Cash payments of local property taxes or income taxes (where appropriate) in relation to operating activities; and
- Cash receipts from: taxes, levies, and fines; charges for goods and services provided by the entity.

When an entity holds securities for dealing or trading purposes, they must be seen as similar to inventories for resale. Therefore, cashflows deriving from these securities are included in cash flows from operating activities. Also, some interest might be included in these cash flows, if they relate to transactions generating operating revenue or expenses.<sup>55</sup>

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<sup>53</sup> IPSASB (2018, IPSAS 2.21).

<sup>54</sup> IPSASB (2018, IPSAS 2.22).

<sup>55</sup> IPSASB (2018, IPSAS 2.23).

Issues concerning the matching principle can be raised here too, inasmuch as there is no real link between inflows and outflows.

As to cash flows from **investing activities**, they

(...) represent the extent to which cash outflows have been made for resources that are intended to contribute to the entity's future service delivery. Only cash outflows that result in a recognized asset in the statement of financial position are eligible for classification as investing activities.<sup>56</sup>

Examples of cash flows deriving from investing activities include, among others:<sup>57</sup>

- Cash payments/receipts to acquire/from selling property, plant, and equipment, intangibles, and other long-term assets;
- Cash payments to acquire/from the sale of equity or debt instruments of other entities and interests in joint ventures (other than for those considered cash or equivalents or held for trading purposes);
- Cash advances and loans made to other parties (other than advances and loans made by a public financial institution); and
- Cash receipts from the repayment of advances and loans made to other parties (other than advances and loans of a public financial institution).

One issue that can be questioned regards the requirement that an investment cash outflow has to result in an asset recognized on the Balance Sheet. In the public sector, there might be cash outflows to pay immaterial investments (e.g., investments in democratic structures, citizen participation, or culture) not capitalized as assets according to the IPSAS CF.

Cash flows from **financing activities** essentially relate to borrowing (issuing and repaying), but also to ownership contributions and ownership distributions. Reporting about these cash flows is important, because they

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<sup>56</sup> IPSASB (2018, IPSAS 2.25).

<sup>57</sup> IPSASB (2018, IPSAS 2.25).

are useful in predicting claims on future cash flows by providers of capital to the entity.<sup>58</sup>

The following, among others, are examples of cash flows deriving from financing activities:<sup>59</sup>

- Cash receipts from issuing debentures, loans, notes, bonds and other short- or long-term borrowings;
- Cash repayments of amounts borrowed;
- Cash receipts/payments as contributions from an entity to another within a restructuring process; and
- Cash payments by a lessee for the reduction of the outstanding liability relating to a financial lease.

Given that the net cash flows of financing activities evidence the need for current and future cash flows, one may ask what the value added of this part of this statement is, with respect to the liabilities recognized on the Balance Sheet. What about the link to the statement of changes in the Net Assets? IPSASB's models for the financial statements seem to have downgraded these issues.

Investing and financing activities that do not require the use of cash or cash equivalents (e.g., an asset received as donation) are excluded from the cash flow statement, being included in other statements or in the Notes.<sup>60</sup>

IPSAS 2 provides illustrative examples for models of the statement to report the above cash flows. These models differ only in the way cash flows from operating activities are compiled. Accordingly, two methods are allowed:<sup>61</sup>

- Direct method, the use of which is recommended, whereby major classes of gross cash receipts and gross cash payments are disclosed; and

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<sup>58</sup> IPSASB (2018, IPSAS 2.26).

<sup>59</sup> IPSASB (2018, IPSAS 2.26).

<sup>60</sup> IPSASB (2018, IPSAS 2.54).

<sup>61</sup> IPSASB (2018, IPSAS 2.27-2.30).



- Indirect method, whereby the accrual-based surplus/deficit coming from the Income Statement is adjusted for the effects of transactions of a noncash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of revenue or expense associated with investing or financing cash flows.

The indirect method, although allowed, may be more open to inaccuracies and is harder to prepare and interpret. This is why the direct method is recommended. Table 9.4 displays the model suggested by IPSAS 2 for the Cash Flow Statement prepared using the direct method.

<b>Cash Flow Statement (For an Entity Other Than a Financial Institution)</b>		
<b>DIRECT METHOD Cash Flow Statement</b>		
<b>Public Sector Entity — (Consolidated) Cash Flow Statement for Year Ended</b>		
<b>December 31 20X2 (In Thousands of Currency Units)</b>		
	<b>20X2</b>	<b>20X1</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
<b>Receipts</b>		
...	X	X
<b>Payments</b>		
...	(X)	(X)
<b>Net cash flows from operating activities (1)</b>	<b>X</b>	<b>X</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchases...	(X)	(X)
Proceeds...	X	X
<b>Net cash flows from investing activities (2)</b>	<b>(X)</b>	<b>(X)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds...	X	X
Repayments...	(X)	(X)
<b>Net cash flows from financing activities (3)</b>	<b>X</b>	<b>X</b>
<b>Net increase/(decrease) in cash and cash equivalents (1)+(2)+(3)</b>	<b>X/(X)</b>	<b>X/(X)</b>
<b>Cash and cash equivalents at beginning of period (4)</b>	<b>X</b>	<b>X</b>
<b>Cash and cash equivalents at end of period (1)+(2)+(3)+(4)</b>	<b>X</b>	<b>X</b>

*Table 9.4: Cash Flow Statement according to IPSAS 2 (direct method)*

In Table 9.4, cash outflows are deducted (between brackets) from cash inflows; ‘proceeds’ are inflows. As in the other financial statements, being an illustrative model, entities can make adaptations to consider (after the net increase/(decrease) in cash), for example: value changes of cash equivalents; changes in the scope of consolidation; and effects of exchange rate variations, resulting from conversion of the financial statements in foreign currency.

One interesting example of adaptation comes from the Portuguese system SNC-AP: a reconciliation between cash and cash equivalents from financial accounting (accrual-based), with cash balance from the budget execution (cash-based), was added at the end of the model for the cash flow statement suggested in IPSAS 2.

The bottom-line of the cash flow statement – accumulated cash and cash equivalents at the end of the period (going to the Balance Sheet) resulting from the three types of activities, plus the accumulated amount at the beginning of the period – must be at least zero, indicating that the entity overall generated enough receipts to cover the payments.

## Notes

As highlighted, the Notes are very important to complement the financial statements and offer non-financial information; they might also include tables and other statements, disclosing information that is not presented on the face of the main financial statements. The financial statements must systematically refer to these Notes, e.g., by adding a column to indicate the number of each note (as happens in Portugal), according to the different standard applied. The Notes tend to follow the numbers of the standards. They must start by including a declaration of compliance with IPSAS and a summary of the main accounting policies applied.<sup>62</sup>

### 3.2. Comparative-international analysis: IPSAS as reference

This section offers a simplified comparative-international descriptive analysis, on the GPFR main components, involving several European countries and the IPSAS. Only individual/single accounts are considered, and not consolidated accounts.

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<sup>62</sup> IPSAS (2018, IPSAS 1.127-1.150).

<b>GPFR components (annual accounts)</b>							
<b>Countries</b>	<b>Financial Statements</b>						
<b>IPSASB</b>	<ul style="list-style-type: none"> <li>• Statement of financial position</li> <li>• Statement of financial performance (nature and function)</li> <li>• Statement of changes in net assets/equity</li> <li>• Cash flow statement</li> <li>• A comparison of budget and actual amounts either as a separate additional financial statement or as a budget column in the financial statements</li> <li>• Notes</li> </ul>						
<b>Portugal (C&amp;LGov)</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><b>Financial Statements</b></th> <th style="text-align: center;"><b>Budgetary Statements</b></th> <th style="text-align: center;"><b>Management Accounting Statements</b></th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>• Balance sheet</li> <li>• Income statement</li> <li>• Cash flow statement</li> <li>• Statement of changes in equity</li> <li>• Annex (notes)</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• Budgetary performance statement</li> <li>• Revenue budgetary execution statement</li> <li>• Expenditure budgetary execution statement</li> <li>• Statement of the execution of the Multiannual Investment Plan (PPI)</li> <li>• Notes to the budgetary statements</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• Income statement by functions/activities</li> <li>• Income by products sold or services delivered in the period</li> <li>• Costs by activities, including information of under-activity variances</li> <li>• Production costs by products and services delivered, including variances</li> <li>• Environmental expenses and revenues</li> <li>• Non-incorporated expense</li> <li>• (...)</li> </ul> </td> </tr> </tbody> </table>	<b>Financial Statements</b>	<b>Budgetary Statements</b>	<b>Management Accounting Statements</b>	<ul style="list-style-type: none"> <li>• Balance sheet</li> <li>• Income statement</li> <li>• Cash flow statement</li> <li>• Statement of changes in equity</li> <li>• Annex (notes)</li> </ul>	<ul style="list-style-type: none"> <li>• Budgetary performance statement</li> <li>• Revenue budgetary execution statement</li> <li>• Expenditure budgetary execution statement</li> <li>• Statement of the execution of the Multiannual Investment Plan (PPI)</li> <li>• Notes to the budgetary statements</li> </ul>	<ul style="list-style-type: none"> <li>• Income statement by functions/activities</li> <li>• Income by products sold or services delivered in the period</li> <li>• Costs by activities, including information of under-activity variances</li> <li>• Production costs by products and services delivered, including variances</li> <li>• Environmental expenses and revenues</li> <li>• Non-incorporated expense</li> <li>• (...)</li> </ul>
<b>Financial Statements</b>	<b>Budgetary Statements</b>	<b>Management Accounting Statements</b>					
<ul style="list-style-type: none"> <li>• Balance sheet</li> <li>• Income statement</li> <li>• Cash flow statement</li> <li>• Statement of changes in equity</li> <li>• Annex (notes)</li> </ul>	<ul style="list-style-type: none"> <li>• Budgetary performance statement</li> <li>• Revenue budgetary execution statement</li> <li>• Expenditure budgetary execution statement</li> <li>• Statement of the execution of the Multiannual Investment Plan (PPI)</li> <li>• Notes to the budgetary statements</li> </ul>	<ul style="list-style-type: none"> <li>• Income statement by functions/activities</li> <li>• Income by products sold or services delivered in the period</li> <li>• Costs by activities, including information of under-activity variances</li> <li>• Production costs by products and services delivered, including variances</li> <li>• Environmental expenses and revenues</li> <li>• Non-incorporated expense</li> <li>• (...)</li> </ul>					

	<b>CENTRAL GOVERNMENT (CGov)</b>		<b>LOCAL GOVERNMENT (LGov)</b>
<b>UK</b>	<p><b>Financial Statements</b></p> <ul style="list-style-type: none"> <li>• Statement of comprehensive net expenditure</li> <li>• Statement of financial position</li> <li>• Statement of changes in taxpayer's equity</li> <li>• Statement of cash flows</li> <li>• Notes</li> </ul>	<p><b>Budgetary Statements</b></p> <p>Statement of Parliamentary departments:</p> <ul style="list-style-type: none"> <li>• Comparison of outturn against the supply estimate voted by Parliament in respect of each budgetary control limit (accrual-based)</li> <li>• Net cash requirement, with a comparison of the outturn against voted supply estimate (cash at departmental level)</li> <li>• Statement of administration costs incurred, with a comparison of the administration costs limit</li> </ul>	<p><b>Financial Statements</b></p> <ul style="list-style-type: none"> <li>• Comprehensive income and expenditure statement</li> <li>• Movement in reserves statement</li> <li>• Statement of financial position</li> <li>• Cash flow statement</li> <li>• Notes</li> </ul>
<b>Germany (IF accrual-based accounting)</b>	<p><b>Financial Statements</b></p> <ul style="list-style-type: none"> <li>• Statement of financial position</li> <li>• Statement of financial performance</li> <li>• Cash flow statement</li> <li>• Statement of changes in equity (net position)</li> <li>• Notes</li> </ul>	<p><b>Budgetary Statements</b></p> <ul style="list-style-type: none"> <li>• Operating statement by functions/activities both on accrual and on cash basis</li> </ul>	
<b>Austria</b>	<p><b>CENTRAL GOVERNMENT</b></p> <ul style="list-style-type: none"> <li>• Balance sheet</li> <li>• Statement of financial performance (accrual-based budgetary execution statement)</li> <li>• Statement of cash flow (accrual-based budgetary execution statement)</li> <li>• Notes</li> </ul>		<p><b>REGIONAL AND LOCAL GOVERNMENTS</b></p> <ul style="list-style-type: none"> <li>• Budgetary execution (cash and commitment-based) statements</li> <li>• LGov – cash flow statement for calculating the Maastricht 'result'</li> <li>• Notes</li> </ul>
<b>Finland</b>	<p><b>Financial Statements</b></p> <ul style="list-style-type: none"> <li>• Balance sheet</li> <li>• Income sheet</li> <li>• Cash flow statement</li> <li>• Notes</li> </ul>		<p><b>Budgetary Statements</b></p> <ul style="list-style-type: none"> <li>• Statements of budgetary outturn</li> </ul> <p>N LGov: current budget outturn, investment budget outturn, income statement plan outcome and cash flow statement plan outcome</p> <p>N CGov: a combined budget outturn report</p>

Table 9.5: GPFER main components – comparative-international analysis

Table 9.5, while showing a diversity scenario, also shows some convergence, at least apparent.

In fact, although the names of the statements might be similar, and their contents, in some jurisdictions, be close to those required in IPSAS, it is unlikely that the formats are those suggested by the IPSASB, as the models in IPSAS are merely indicative. Financial statements in each of the countries appear to reflect different accounting traditions and the importance given to be more or less close to the reporting model within business accounting, to facilitate consolidation.

Therefore, there are countries, like Finland and Germany, where main financial statements appear to be similar to IPSAS, but in fact they are not IPSAS adopters; so, GPFR seems to have the same components as in IPSAS, but the elements are presented differently in each statement (also following different principles – see Chapter 8). On the other hand, there are other countries that, despite being IPSAS followers, have made further important adaptations of the GPFR in IPSAS (sometimes close to IFRS), to consider the specificities of the public sector. These are the cases of UK, Portugal and Austria.

The UK, while not adopting IPSAS directly, adopts IFRS, which are adapted and constantly updated to the public sector scenario – both at central and at local government level, some statements reflect this, e.g. ‘statement of changes in the taxpayers’ equity’ and ‘movement in reserves statement’. This country also included budgetary statements in the GPFR for both levels of government, but at the local level they are not standardized. At the central level, budget-to-actual comparisons include both accruals and cash figures, reflecting what was designated as ‘resource-based budgeting’.<sup>63</sup>

As explained in section 2.4, in Portugal, GPFR has three main sets of statements: to the IPSAS and accrual-based financial statements, budgetary cash-based reporting statements and management accounting accrual-based reporting statements were added, as presenting seminal information to be disclosed in the public sector setting.

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<sup>63</sup> Jones & Pendlebury (2010); Van Helden & Hodges (2015).

Austria is an IPSAS adopter at the central government level, while at regional and local government level, financial reporting has remained essentially cash-based budgetary reporting. Despite the closeness to IPSAS, because the country uses accrual-based budgets and accrual-based budgetary execution statements, which is according to IPSAS 24, the statements prepared differ from the illustrative models suggested for those statements in IPSAS 1 and IPSAS 2.

Finland and Germany do not follow IPSAS, but in the public sector in these countries there is accrual-based financial reporting and, in some cases, even accrual-based budgetary reporting. In Finland, accruals in public sector accounting follow the national practice in business accounting, so the GPFR includes financial and budgetary reporting, within which the income sheet (central government) and the income statement (local government) assume especial relevance, as this statement reflects the execution of accrual and performance-based budgets, somehow also combining with cash figures. Germany is a more particular case, as accrual-based financial reporting exists effectively only in some states. In fact, accrual-based and double-entry accounting only recently became an option for federal and state governments (see Chapter 8). Still, federal government mainly uses modernized cameralistics, e.g., including performance budgeting. If accrual-based accounting is used, either in states or large municipalities<sup>64</sup>, budgetary reporting is both cash and accrual-based, given that budget accomplishments have to be reported by activities/programs – comparison budget-to-actual is made within the financial statements, namely in the statement of financial performance and in the cash flow statement.

#### **4. GPFR reliability issues**

This section briefly addresses transparency and auditing issues, relating to GPFR reliability, going beyond the IPSAS and the IPSASB.

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<sup>64</sup> Small municipalities basically continue using cameralistics (see Chapter 8).

## 4.1. GPFR and transparency

Transparency and accountability have become two key aspects of sound public governance. They are two related, although different, concepts. ‘Accountability’ means the obligation for public officials to report on the usage of public resources and the answerability of government to the public, to meet stated performance objectives. ‘Transparency’ refers to unfettered access, by the public and other stakeholders, to timely and reliable information on decisions and performance in the public sector. Probably the most widely discussed concept is that of accountability, which essentially relates to the obligation to explain and justify a certain conduct, for which information disclosure is indeed important.<sup>65</sup>

Democratic accountability requires governments to increase transparency, disclosing more budgetary and financial information to citizens and other stakeholders, promoting public expenditure scrutiny, and ultimately preventing corruption and the waste of public resources.

Consequently, budgetary and financial transparency, namely via disclosing GPFR, has become a pillar within public (financial) management reforms.

The importance of GPFR to promote transparency in the public sector is acknowledged by the IPSASB (2014, CF 1.4):

GPFRs are a central component of, and support and enhance, transparent financial reporting by governments and other public sector entities.

Transparency is, therefore, a prerequisite for accountability, as illustrated in Figure 9.3.<sup>66</sup> It is especially important in the public sector context, where principal-agent relationships prevail (citizens, investors and other stakeholders are principals, while politicians and public officials are the agents), and information needs arise from the opacity of public entities.

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<sup>65</sup> Lourenço et al. (2013); Jorge et al. (2012).

<sup>66</sup> Lourenço et al. (2013).

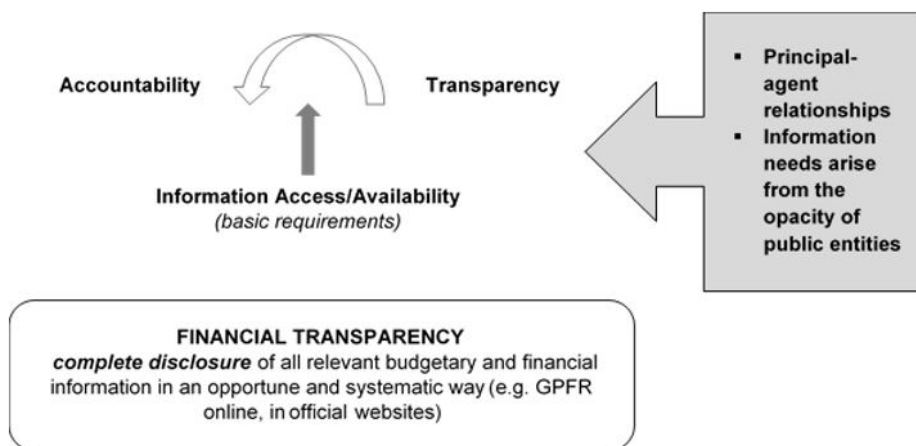


Figure 9.3: Transparency, accountability and financial information

The availability of financial information is critical for these objectives, hence GPFR must be accessible online to all (namely citizens, *media*, investors...), under the assumption of understandability. Access to government information is a perpetual concern of citizens – it helps to improve their trust in the public sector agents and engagement in the public sector affairs.

Online disclosure is nowadays a means resorted to by governments and public sector entities overall to enhance transparency and accountability. However, regarding the extension of the disclosure, one must bear in mind that more information does not necessarily increase transparency – information overload and (lack of) understandability may jeopardize transparency, ultimately hindering accountability.

## 4.2. The importance of auditing

Perhaps even more important than in business accounting, auditing is a fundamental part of public sector accounting<sup>67</sup>, inasmuch as it offers the reassurance that public resources are not misappropriated, and information

<sup>67</sup> Jones & Pendlebury (2010).



reported about that is reliable. Both internal and external auditing contribute to this reassurance.

One may say that citizens, namely via the Parliament, exercise democratic control over public (sector) accounts. However, this is not a professional control. Therefore, auditing professionals are needed to act in the public (citizens') interest.<sup>68</sup>

Regarding external auditing, Jones & Pendlebury (2010) refer to two broad types of external audits – financial and regularity audits, and performance audits. While the former focuses on the financial statements, the latter, which is also called 'value for money' auditing, addresses operational outputs and outcomes. However, the two types of auditing tend to be increasingly linked.

It is not possible to give an opinion on accrual-based financial statements without giving an opinion on the going concern status of the government, which is strictly a matter of performance. Neither is it possible, strictly, to give an opinion about propriety and probity without giving an opinion about outputs and outcomes.<sup>69</sup>

Therefore, as much as financial and performance auditing tend to be separated, the auditor's opinion on fair presentation and financial regularity increasingly requires assessing economy, efficiency and effectiveness.

Financial statement (GPFR) audits, are part of the financial and regularity auditing. GPFR audit ensures: 1) fair presentation (fighting exaggerating or underestimating certain figures in the reporting); and 2) financial regularity and legality (ensuring conformity with the law, namely the budget, and fighting fraud and corruption).

In the public sector, financial statement auditing is usually exercised by professional auditors, internal or external to the entities (e.g., auditing firms) and is based on professional pronouncements, namely auditing standards. The assurance of financial regularity and legality is also a very important role of auditing in the public sector context, usually carried out by oversight

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<sup>68</sup> Budding et al. (2015).

<sup>69</sup> Jones & Pendlebury (2010, p.133).

auditing bodies, namely Supreme Audit Institutions (SAI), such as Courts of Audit or General Audit Offices. Financial statement auditing aims at assessing conformity with accounting and reporting standards (financial matters), financial statements being audited at least once a year<sup>70</sup> for fair presentation, and producing the auditor's report. Regularity auditing (also called compliance auditing), aims at ensuring conformity with legal form, i.e. propriety and probity (explicit in the law) of records of transactions and of transactions themselves. As budgets are law, regularity audits also include assessing whether transactions conform to the budget or not.<sup>71</sup>

Even before the existence of financial statement auditing, auditing in governments and public sector entities overall already assessed the propriety of the transactions and the transactions records (were they proper?).

The propriety of spending and collection of income, the safeguarding of assets and the appropriateness of liabilities, as well as the accuracy and completeness of the records, are judged in the context of public money. (...) Propriety and probity mean the records of transactions have been found to be free of error and not fraudulent, and the transactions themselves have been neither wasteful nor extravagant.<sup>72</sup>

In this case, the auditor (usually a SAI) gives an opinion on whether or not transactions conform to the law. In financial statement auditing, the auditor's report is the

(...) auditor's opinion on whether or not the general purpose financial statements fairly present what they purport to present and conform to the law related to financial statements [i.e., the reporting standards].<sup>73</sup>

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<sup>70</sup> There are *ad-boc* audits, also related to financial matters, but these audits provide lower levels of assurance, merely 'attesting' – e.g., an auditor can certify grant claims (Jones & Pendlebury).

<sup>71</sup> Jones & Pendlebury (2010); Van Helden & Hodges (2015).

<sup>72</sup> Jones & Pendlebury (2010, p.132).

<sup>73</sup> (Jones & Pendlebury, 2010, p.132).

The auditor's opinion is published with the accounts (referring to the records of transactions and whether the recognition, measurement and disclosure criteria and requirements were properly applied to the specific context). Fair presentation can vary across jurisdictions, being expressed as 'presents fairly', 'true and fair view' and 'properly presents'.<sup>74</sup>

Overall, auditing and auditors should reveal whether the reported financial information is reliable or not, highlighting why (e.g., via *reservations* and *emphases* in the financial auditing reports) financial information cannot be trusted.<sup>75</sup>

Consequently, the citizens' trust (in the figures, hence in the public sector officials and politicians, as upper level decision-makers about the public resources entrusted to them) should be increased by auditing and auditors (or decreased, if unreliability is highlighted).

Financial auditing (...) will enhance the confidence of the intended users of (...) financial statements.<sup>76</sup>

External financial auditors may rely on some work of internal auditors, namely in assessing the systems used to record the transactions and produce the financial statements.<sup>77</sup>

## 5. Conclusion

This chapter made clear that, considering the setting of governments and public sector entities overall, the scope of the GPFR is different and broader than in businesses. Given that, in the public sector, budgets are commonly published, there is an additional requirement, compared to business enterprises, to, at least, report on the budget accomplishment. Moreover, reporting additional non-financial information, namely service

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<sup>74</sup> Jones & Pendlebury (2010).

<sup>75</sup> Jones & Pendlebury (2010).

<sup>76</sup> Van Helden & Hodges (2015, p. 185).

<sup>77</sup> Van Helden & Hodges (2015).

performance-related information, is an important complement to financial statements, inasmuch as the deficit/surplus reported in the Income Statement is questionable as a financial performance measure, due to problems relating to applying the matching concept between public revenue and expenses.

Another remark to be made is that, despite standardized models for the statements suggested in the IPSAS, these models, and even the components within GPFRR, may diverge across countries, including between those that are IPSAS-adherent; divergence is more striking in countries not following IPSAS. Countries' specificities and national accounting traditions are considered for this divergence, which may jeopardize the international harmonization sought in IPSAS for the GPFRR.

But, from the comparative-international analysis carried out, a commonality was identified: in all jurisdictions already using accrual-based accounting in the public sector, GPFRR presents financial (and budgetary) information in different perspectives – financial, economic, cash and budget execution (regardless of whether budgets are cash, commitment or accrual-based). Therefore, GPFRR seeks fair presentation of the financial position, performance, cash flows and budget accomplishment, of a government or a public sector entity.

Finally, GPFRR is generally acknowledged as a crucial means to promote transparency (and accountability), enhanced by the fact that financial statements are audited for reliability assurance, and may easily be made accessible online.

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## Discussion topics

- What is the scope of public sector entities’ financial reporting? What information may it embrace, generally going beyond that reported by business entities?
- What are the main financial (and possibly budgetary and management) accounting statements that are part of the GPFER of public sector entities, according to the different frameworks presented in the comparative-international analysis in this chapter? What are the main differences to the GPFER components within the IPSAS?
- What is the role expected for GPFER to have as a tool to improve public sector entities’ transparency, enhanced by the fact that those accounts are audited, both for legal form and fair presentation?

**CHAPTER 10**  
**OVERVIEW OF IPSAS ON PUBLIC SECTOR**  
**SPECIFIC TOPICS**

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**SUMMARY**

This chapter sets forth the IPSAS content by reviewing relevant norms. The hierarchy of IPSASB announcements and the set of IPSAS financial statements are briefly explained. Still, the focus of this chapter is on selected IPSAS referring to specific balance sheet items, namely property, plant and equipment (IPSAS 17, 21, 26), revenue from non-exchange transactions with the related recoverables (IPSAS 23) and service concessions and the related assets and liabilities (IPSAS 32). Each standard is summarized in brief and for each accounting field, definition, initial recognition and subsequent measurement is introduced.

**KEYWORDS**

Public sector specific standards, IPSAS, non-cash generating assets

## 1. Introduction and background

As IPSASs, their spread and use, and also objectives and users of IPSAS financial statements, have already been introduced in previous chapters of this book, this chapter directly turns to the delimitation of selected thematic areas of IPSASs. It was made clear that, in general, the IPSASB uses IFRSs as basis of reference for IPSAS development. However, for some public sector specific topics, there are no corresponding IFRS, so that the IPSASB pronounced self-standing IPSASs. These public sector specific standards are in the focus of this and the subsequent chapter: whereas Chapter 10 aims to introduce accounting for certain balance sheet items by using selected IPSAS, Chapter 11 reviews a case study that applies these standards. Therefore, the original texts of the standards and other pronouncements of the IPSASB are used.<sup>1</sup>

This section will provide some background to IPSASs, whereas in Section 2 the IPSASs selected for Chapters 10 and 11 are briefly derived. The main sections of this chapter will then explain the accounting rules for accounting for property, plant and equipment (PPE, Section 3), revenue from non-exchange transactions (Section 4) and service concessions from the perspective of the grantor (Section 5). The final section gives a short conclusion. Chapter 11 then proceeds with a case study corresponding to the IPSAS introduced here.

Before, however, the hierarchy of IPSASB pronouncements needs to be reviewed in order to clarify their degree of bindingness. Four levels of bindingness are distinguished as shown in Figure 10.1. In the first level, only the accrual-based standards and the annual improvements to IPSAS, if effective yet, or the cash-based standard are binding. If a specific economic transaction is not addressed in a corresponding IPSAS, on a second level, requirements of other IPSASs that deal with similar or related topics are to be used. If still fruitless, the Conceptual Framework (CF) can be consulted on level 3, to find information with respect to definitions, accounting criteria and measurement methods. If the accounting treatment of an economic

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<sup>1</sup> The chapters rely on the 2018 Handbook of IPSAS Pronouncements.

transaction cannot be handled by using the previously named sources, on the least binding level 4, pronouncements of other standard setters can be applied, if these are consistent with the IPSASB CF (e.g., those of the IASB or GASB); or (other) authoritative literature (including the IPSAS Preface); or accepted best practices in the public and private sectors (including IPSASB's Recommended Practice Guidelines – RPG) can be applied.


	<b>Binding</b>			
	Level 1	<b>IPSAS standards</b> <ul style="list-style-type: none"> <li>• 35 accrual-based standards or</li> <li>• 1 cash-based standard</li> </ul>		<b>Improvements to IPSAS</b> (on an annual basis)
	Level 2	Requirements of <b>other IPSAS standards</b> that deal with similar or related topics		
	Level 3	<b>Conceptual Framework (CF):</b> Definitions, recognition criteria, and measurement methods for assets, liabilities, revenue and expense		
<b>Non-Binding</b>	Level 4	<b>Releases of other standard setters</b> (e.g. IASB) consistent with the CF	(Other) Authoritative <b>Literature</b> (incl. IPSAS Preface)	Accepted <b>best practices</b> in the public and private sector (incl. Recommended Practice Guidelines; <b>RPG</b> )

Figure 10.1: Hierarchy of IPSAS Pronouncements

In total, 42 IPSASs have been published by the IPSASB, of which IPSAS 6, 7, 8, 15 and 25 have been superseded by other standards (as of September 2019). The majority of standards, namely twenty one, focus on specific balance sheet items. There are three general standards on accounting recognition and measurement and eighteen general standards on reporting.<sup>2</sup>

According to IPSAS 1.66, financial statements have to be presented by the reporting entities at least annually. A set of IPSAS financial statements consists of: a) a statement of financial position<sup>3</sup>, b) a statement of financial

<sup>2</sup> A list of standards and their focus can be downloaded from the lecture material.

<sup>3</sup> Also called balance sheet or statement of assets and liabilities.



performance<sup>4</sup>, c) a statement of changes in net assets/equity, d) a cash flow statement, e) a comparison of budget and actual amounts, and f) the notes (IPSAS 1.21). According to IPSAS 1.53 an entity shall, for all amounts reported in the financial statements, present comparative information at least in respect of the preceding period.

Further information, e.g. about the distinction between current and non-current items, is provided in Chapter 9.

## 2. Selected Public Sector Specific IPSASs

Most IPSASs are based on existing IFRSs.<sup>5</sup> However, for some accounting issues in the public sector there are no corresponding private sector norms. Thus, the following standards have been developed without an equivalent IFRS:

- IPSAS 21: Impairment of non-cash generating assets;
- IPSAS 22: Disclosure of financial information about the general government sector;
- IPSAS 23: Revenues from non-exchange transactions;
- IPSAS 24: Presentation of budget information in financial statements;
- IPSAS 32: Service concession arrangements: Grantor;
- IPSAS 40: Public sector combinations.

Also, to some extent, IPSAS 33 (First-time adoption of accrual basis IPSASs) can be seen as public sector specific IPSAS, as the transition from cash to accrual accounting is not addressed in IFRSs.

In the following, IPSASs 21, 23 and 32 will be considered as these are related to accounting for specific balance sheet items. A such, when introducing the impairment of non-cash and cash generating assets, IPSAS 21 and 26 are respectively used. When an entity receives resources and

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<sup>4</sup> Also known as statement of revenues and expenses or income statement, operating statement or profit and losses.

<sup>5</sup> See IPSASB (2018), Introduction to the IPSASB, p. 1.

provides no or nominal consideration, IPSAS 23 needs to be applied, i.e. when non-exchange transactions occur. Also service concessions are a typical transaction in the public sector, in which an operator uses an asset to provide a public service on behalf of a public entity (grantor), for a specified period of time, being compensated by the public entity. IPSAS 24 is partially also addressed in Chapter 4 on budgetary accounting and IPSAS 40 is referred to in Chapter 13. IPSAS 17 is not strictly public sector specific, but used here as an introduction to PPE accounting.

### **3. Accounting for property, plant and equipment**

This section introduces accounting for property, plant and equipment (PPE) and will refer to IPSAS 17 for the definition, recognition, initial and subsequent measurement of PPE, and IPSAS 21 and 26 for impairment.

#### **3.1. Definition of PPE**

According to IPSAS 17.13, PPE are defined as tangible (i.e. physical) assets for the purposes of production or supply of goods or services, administrative purposes or rental to others, which are expected to be used during more than one reporting period (i.e. as non-current assets). PPE also include specific public sector assets such as specialized military equipment and infrastructure assets (IPSAS 17.5). Some assets are out of scope of IPSAS 17, e.g. investment property (see IPSAS 17.6-8) for which other standards may apply (e.g. IPSAS 11, 13 or 16).

It is important to add that for heritage assets, IPSAS 17 can be voluntarily used (IPSAS 17.9). Basically, heritage assets are assets with a (1) cultural, environmental, educational or historical value, which are additionally characterised by (2) sale prohibitions or restrictions laid upon the assets, (3) the difficulty to estimate their useful lives, and (4) their irreplaceability. Typical examples are historical buildings, archaeological sites, nature reserves, and works of art (IPSAS 17.10). If heritage assets are accounted

for, the disclosure requirements for PPE of IPSAS 17 are mandatory, whereas the measurement requirements of IPSAS 17 can be complied with optionally. An IPSASB project for heritage accounting is currently under development; however, its proposed optional accounting treatment hinders comparability of financial statements.

The structure of PPE presentation in the statement of financial position is not explicitly prescribed by IPSAS. According to IPSAS 1.93, classes of assets have to be presented either in the financial statement or in the notes, depending on the size, nature and functions of the amounts (IPSAS 1.94). Examples for these classes are provided in IPSAS 17.52, such as land, operational buildings and administrative equipment. These classes are particularly relevant for initial and subsequent measurement such as using the revaluation model. Individually insignificant items (e.g., chairs or cutlery parts in a school) can be presented as an aggregate value according to IPSAS 17.18.

### **3.2. Recognition of PPE**

An item of PPE is to be recognized in the balance sheet if and only if: a future flow of economic benefits or service potential is expected from that item, and its cost or fair value can be measured reliably. In this context, reliable means free from material error and bias, so that the measurement faithfully represents what it purports or could reasonably be expected to represent. The reliance on the service potential, i.e. an asset's capacity to provide services that contribute to the entity's objectives (without necessarily generating net cash inflows) (IPSAS CF 5.8), is a public sector specific divergence of the IPSAS CF from the IASB CF (see also Chapter 8). In the private sector definition of an asset, only future flows of economic benefits in terms of cash flows determine an asset. This, however, is often not applicable in the public sector for, e.g., the majority of infrastructure assets such as streets or school buildings.

Also, the public entity needs control over the item, in order to recognize the item (IPSAS CF 5.11). This does not necessarily refer to legal ownership,

but economic ownership is relevant according to the “substance over form” principle (IPSAS CF BC 3.10, 3.15). The date of recognition thereby is the point in time of transfer of the economic ownership (= control), i.e. the date on which the risks and rewards pertaining to ownership get transferred. This generally corresponds to the acceptance of an asset.

### 3.3. Initial recognition of PPE

For the recognition of PPE in the accounts, the initial value is to be determined. According to IPSAS 17.26, measurement at recognition of PPE has to be undertaken at cost. In order to determine the cost, the way how the public entity gained control of the asset needs to be distinguished: (1) Acquisition of the asset can, on the one hand, be realised through either (1a) an exchange transaction or through (1b) a non-exchange transaction. Here, the acquisition or purchase costs need to be determined. On the other hand, (2) self-construction of an asset is also possible. Here, the costs, also called conversion or production or manufacturing costs<sup>6</sup>, are relevant (IPSAS 17.36). In the following, determination of the cost according to these three variants are explained:

**(1a)** Initial measurement of an item received by an **acquisition through an exchange transaction**, i.e. a typical purchase, is at cost (IPSAS 17.30). For determining the acquisition cost, three phases are distinguished (acquisition itself, use and end of useful life) of which each is important. The “acquisition cost” contains the sum of:

- 1) Purchase price (cash price equivalent) including non-refundable duties and purchase taxes less trade discounts and rebates,
- 2) Costs directly attributable to bring the item into service,
- 3) Costs of obligations for dismantling and removing the item and restoring the site at the end of the useful life, if recognized as provision (IPSAS 19), and
- 4) Optionally, borrowing costs of qualified assets (IPSAS 5).

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<sup>6</sup> According to IPSAS 12.20 ff, about Inventories.

As highlighted in 4), borrowing costs, i.e. interest or other expenses related to the borrowing of funds, can be optionally added to the initial value only, if the asset acquired meets the definition of a qualified asset. A qualified asset necessarily takes a substantial time to be ready for their intended use or sale (IPSAS 5.5), such as administrative buildings, hospitals and infrastructure assets.

In addition, also during the use of the item, a replacement of significant components can lead to additional costs. However, it is prohibited to capitalize general cost such as administration and other general overhead cost, cost of opening a new facility, introducing a new product, etc. (IPSAS 17.33). Particularly relevant are also costs that are expected to occur at the end of the useful life of the asset. For expected costs for dismantling and restoring, a provision needs to be recognized (IPSAS 19.22).<sup>7</sup> The provision is to be measured at the best estimate of the cost expected (IPSAS 19.44). If there is a large number of items of the asset type acquired, the expected value is determined by “weighting all possible outcomes by their associated probabilities” (IPSAS 19.47). If there is a continuous range of possible outcomes, the midpoint of the range is used, if each point in that range is as likely as any other (IPSAS 19.47). In order to assess the best estimate for a single obligation, the individual most likely outcome is used according to IPSAS 19.48. The present value of the initially estimated costs is then capitalized.

**(1b)** For an **acquisition through a non-exchange transaction**, i.e. an item acquired at no cost or at nominal cost<sup>8</sup> (IPSAS 17.29), the item is initially measured at fair value as at the date of acquisition (IPSAS 17.27). As such, according to IPSAS 23.44, an increase in assets (e.g. PPE) is recognized and, at the same time, a revenue (except to the extent a liability

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<sup>7</sup> “A provision shall be recognized when: (a) An entity has a present obligation (legal or constructive) as a result of a past event; (b) It is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation; and (c) A reliable estimate can be made of the amount of the obligation” (IPSAS 19.22).

<sup>8</sup> Nominal cost should not be mixed up with terms from economics. Nominal cost for such transaction means insignificant or symbolic cost.

may be recognized at the same time). This will be explained in more detail in section 4 of this chapter.

(2) If control for the asset is gained by **self-construction**, according to IPSAS 17.36 the cost has to be measured based on IPSAS 12.20 ff., which is the standard for inventories. The “construction cost” contains the sum of:

- 1) Costs directly related to the item (e.g. direct labour) include a systematic allocation of fixed and variable production overheads;
- 2) Costs directly attributable to bring the item into service;
- 3) Costs of obligations for dismantling and removing the item and restoring the site at the end of the useful life, if recognized as provision (IPSAS 19); and
- 4) Optionally, borrowing costs of qualified assets (IPSAS 5).<sup>9</sup>

According to IPSAS 12.26 and IPSAS 17.36, it is prohibited to capitalize some cost as, e.g., abnormal production costs, storage costs, and general administrative overheads.

### **3.4. Subsequent measurement of PPE**

After an asset has been initially recognized, its subsequent measurement is to be determined at the end of each following reporting period. According to IPSAS 17.42, public entities have the option to choose between (1) the cost model, and (2) the revaluation model, whereas the latter can only be applied if the asset’s fair value can be measured reliably. However, often, in the public sector the fair value is hardly measurable. The selected approach is to be applied to the entire class of PPE (IPSAS 17.51). Using the cost model, the asset is carried at its cost, less any accumulated depreciation and less any accumulated impairment losses (IPSAS 17.43). When the revaluation model is applied, the asset is carried at its revalued amount, i.e. its fair value

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<sup>9</sup> The cost components 3) and 4) have already been explained for the acquisition cost.

at the date of the revaluation, less any accumulated depreciation and less any accumulated impairment losses (IPSAS 17.44).

As such, for both methods for assets with a definite useful life, depreciation needs to be deducted. This is particularly relevant for the application of the widely used **(1) cost model**. Depreciation is an accounting technique of systematically allocating the expected depreciable amount of an asset, over its useful life (IPSAS 17.13), in order to reflect the reduction of the PPEs' future economic benefits or service potential due to wear, aging or other similar factors. Depreciation is even recognized, if the fair value is higher than the carrying amount of the asset, if the latter is not lower than the residual value (IPSAS 17.68). Consequently, the depreciable amount is the difference between the initial cost of an asset and its residual value. The useful life is the expected period of use or number of production units, i.e. the period of time of consumption of a specified portion of the asset's future economic benefits or service potential. Useful life can be shorter than the economic life of the asset, e.g. if the disposal of the asset is planned earlier. It is to be judged building on experiences with similar assets. The depreciation charge is an expenditure which is to be recognized in surplus or deficit (IPSAS 17.64).

For determining the depreciation, when applicable, the asset is to be broken down into its components, i.e. the initially recognized cost of the item is to be allocated to its significant parts and thereby an individual depreciation of those parts over the parts' useful lives takes place (IPSAS 17.59). This is also known as **component approach**. The significant parts or costs are to be assessed in relation to the total costs of the item. Therefore, the useful lives may differ between the components, so that e.g. of a road system, parts such as pavements, formation, curbs, channels, footpaths and bridges, and lighting are depreciated separately (IPSAS 17.60). A further example are the components of airplanes. Still, land and buildings are independent of the components approach as these are accounted for separately (as land has an unlimited useful life) (IPSAS 17.74).

In addition, the depreciation method needs to be determined. For each asset, the public entity has to select a method that best reflects the consumption of the future economic benefits or service potential (IPSAS

17.76). The method selected has to be applied consistently, given that the pattern of consumption remains as planned. IPSAS 17.78 proposes three depreciation methods, even though also other methods could be used:

- a) Straight-line method: an easy to use method with a constant charge over the useful life. The depreciation charge is calculated by dividing the depreciable amount by the useful life.
- b) Diminishing balance method: the depreciation charge decreased over the useful life, as it is accounted for by multiplying a previous reporting date's carrying amount with a constant percentage-based depreciation rate.
- c) Units of production method: the depreciation charge is based on the expected use or output of the asset by dividing the depreciable amount by the total units of production, multiplied by the production in the respective reporting period.

When the **(2) revaluation model** is applied for subsequent measurement of assets, the fair value at the date of the revaluation (= revalued amount) is to be determined (IPSAS 17.44 ff.). Thereby, the revalued amount of the item may even exceed the initial carrying amount. This fact is a remarkable difference to some other national accounting system, e.g. the German one. The fair value is usually derived from a market value, e.g., by an actuary in terms of quoted prices in an active and liquid market. If no active market is prevalent, which will often be the case in the public sector, for items of property (such as land) the price of items with similar characteristics can be used. In case of an item of plant and equipment, relying on IPSAS 21 for non-cash generating assets, there is a choice to use the depreciated replacement cost, restoration cost, or service unit approaches for measuring the fair value (IPSAS 17.47).

The general principles of using the revaluation model are outlined in IPSAS 17.44 ff. These refer, e.g., to the frequency of revaluation, items with a definite useful life, and classes of assets. Revaluation has to be undertaken with sufficient regularity, building on the question how often significant changes in fair value occur. If significant annual changes are expected, then



a revaluation is to be done annually. If insignificant annual changes occur, then a revaluation every 3-5 years is sufficient. Even if using the revaluation model, items with a definite useful life still need to be depreciated. Also, it needs to be stressed that the revaluation model applies to the entire class of PPE to which the revalued asset belongs (IPSAS 17.51, with the exception of impairments under IPSAS 21 and 26). Thus, a simultaneous revaluation of all assets in that class of PPE has to be undertaken. Also, the adjustment of the accumulated depreciation after revaluation is to be done for the entire class of assets (IPSAS 17.50).

The accounting treatment of the revaluation method can be a sophisticated matter. An example is shown in Figure 10.2 with the reporting periods depicted on the abscissa and the carrying amount on the ordinate axis.

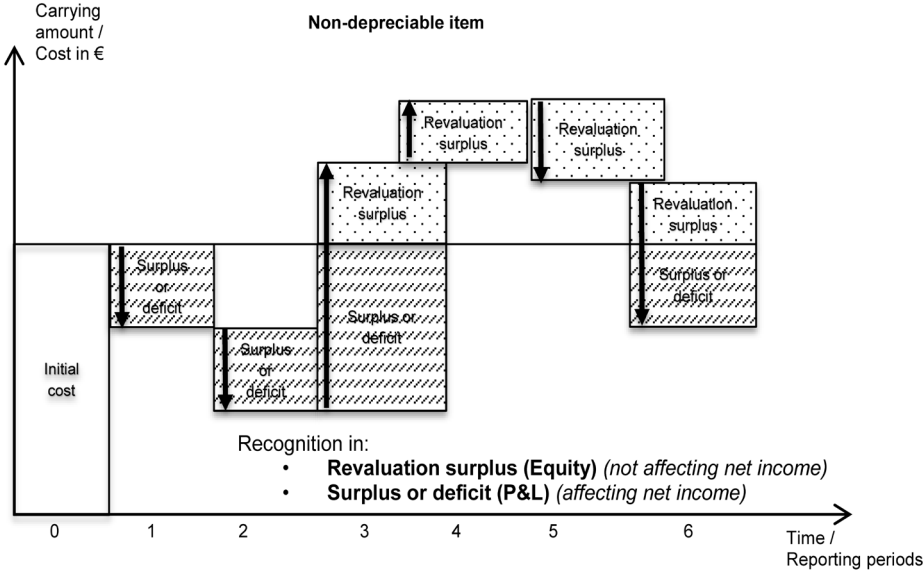


Figure 10.2: Revaluation model: Accounting treatment of revaluation surpluses / deficits

For reasons of simplicity, an example of a non-depreciable item is drawn, which might be, e.g., a piece of land, as land has an unlimited useful life. The graph shows revaluation amounts that have to be accounted for directly in equity without changing net income in the dotted areas (“Revaluation

surplus”). The diagonally striped areas depict revaluation amounts that are accounted for through “surplus or deficit” (i.e. profit and loss), and thus will change net income. In this example, after initial recognition in the first two reporting reports, the revalued amount lies below the initial cost of the item, i.e. there is an impairment loss. In this case, the revaluation decrease shall be recognized in the surplus or deficit, leading to a reduction in the net income of the public entity in these years. In years 3 and 4, the value of the item increases, so that the revalued amount even lies above the initial cost. In this case the revaluation surplus has to be split. First, to the extent that the revaluation reverses a revaluation decrease (i.e. impairment loss) previously recognised in surplus or deficit, it has to be recognized in surplus or deficit. The remaining amount, i.e. the difference, that exceeds the initial cost is to be recognized directly in net assets. Here, the reverse of revaluation even does not only refer to one specific asset, but to the entire class of assets (IPSAS 17.54). If in year 5 the revalued amount goes down below the initial cost again, first the revaluation surplus is to be reversed, and second the remaining amount is to be recognized in surplus or deficit.

To summarize subsequent measurement so far, for both assets with a definite useful life and those with an indefinite useful life, there is the option to choose between the cost model or the revaluation model. Regardless of the approach for subsequent measurement selected, for assets with a definite useful life, a scheduled depreciation has to be accounted for. When using the revaluation method, for both assets with a definite useful life and those with an indefinite useful life, a revaluation depending in the determined frequency has to take place.

In addition, to each of these variants regardless of the useful life of an asset, it has to be tested for impairment, i.e. whether there is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the assets depreciation. With respect to impairment. IPSAS 17.79 distinguishes between cash generating and non-cash generating assets and this differentiation is a public sector specific one, because IFRSs do not regard such situations. Cash generating assets are held by the public entity with the intention to generate cash inflows independent of other assets (IPSAS 21.16). Therefore, the asset is presented like by a

profit-oriented company, such as rented buildings or managed forests. For impairment of these assets IPSAS 26 has to be applied. Non-cash generating assets are all assets other than cash generating assets (IPSAS 21.14), as these are acquired with the intention to deliver services to the public (IPSAS 21.18): e.g., streets, public buildings, and fire trucks. Specifically, for the impairment of non-cash generating assets, IPSAS 21 has been developed by the IPSASB, as there was no comparable IFRS to be referenced to.

The general procedure of testing for impairment is basically the same under IPSAS 21 and 26. In a first step, at the reporting date, a check for an indication of impairment has to be done. Accordingly, external and internal sources of information are listed in IPSAS 21.27 and 26.25<sup>10</sup>. The check for such indications is not to be conducted for intangible assets with indefinite useful lives or intangible assets not yet available for use or goodwill, as for these assets there is an obligation for an impairment test once a year. Secondly, if there is any indication of impairment, the impairment test is initiated by measuring the recoverable service amount (IPSAS 21) or the recoverable amount (IPSAS 26), respectively. Thirdly, the recoverable (service) amount is compared with the carrying amount of the asset: if the recoverable (service) amount lies below the carrying amount, an impairment is to be recognized.

For non-cash generating assets under IPSAS 21, the recoverable service amount is the highest of the fair value less costs to sell and the value in use. If one of the amounts exceeds the asset's carrying amount, the other does not need to be calculated (IPSAS 21.36). For the fair value less costs to sell, the best evidence would be the asset's price in a binding sale agreement in an arm's length transaction, or current bid price at an active market. As this will hardly be measurable for typical public sector assets, an alternative is a disposal amount, e.g. recent transactions for similar assets not within a forced sale. The value in use, i.e. the present value of an asset's service potential, can, according to IPSAS 21 be determined by using one of three methods:

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<sup>10</sup> Including the respective Implementation Guidance (IG).

- 1) Depreciated replacement cost approach:** Cost to replace the asset's gross service potential, which is determined as the lower of the reproduction or replacement cost (less accumulated depreciation) (IPSAS 21.45 ff.);
- 2) Restoration cost approach:** Cost of restoring the service potential to its pre-impaired level, which is determined by subtracting the estimated restoration cost of the asset from the current cost of replacing the remaining service potential of the asset before impairment (IPSAS 21.48);
- 3) Service units approach:** Value of the reduced number of service units from the asset in its impaired state, determined by reducing the current cost of the remaining service potential of the asset before the impairment to conform with the reduced number of service units expected from the asset in its impaired state (IPSAS 21.49).

For cash generating assets under IPSAS 26, the recoverable amount is the highest of the fair value less costs to sell (comparable to the IPSAS 21 definition) and the value in use. The value in use is determined by an estimation of the future cash in- and outflows expected to be derived from the use of the asset and its ultimate disposal. Here the appropriate discount rate to those future cash flows has to be applied, which is a sophisticated issue (IPSAS 26.AG3).

If the (accumulated) impairment loss of the previous period has decreased in the next period, a reversal of impairment is to be recognized (IPSAS 21.67/26.102). However, the maximum of reversal is the amount as if no impairment loss existed (IPSAS 21.68, IPSAS 26.106). A reversal of impairment is to be recognized in surplus or deficit (IPSAS 21.68, 26.108). Also the depreciation charge needs to be adjusted afterwards.

Examples of how to handle the accounting treatment for PPE under IPSAS 17, 21 and 26 are provided in chapter 11.

## 4. Accounting for revenue from non-exchange transactions

IPSAS 23 addresses accounting for revenue from non-exchange transactions, which is a specific public sector matter. Whereas in the private sector, the majority of transactions has an exchange character, the public sector mainly finances its activities by means of taxes or transfers,<sup>11</sup> i.e. by non-exchange transactions. Due to this reason, there is no IFRS that deals with this type of transactions and therefore the IPSASB developed an own standard as the accounting treatment of revenue from non-exchange transactions is not trivial. Also, recently, IPSAS 42 ‘Social benefits’, i.e. a specific form of expenses from non-exchange transactions, has been published. In addition, an IPSASB project on further expenses from non-exchange transactions (collective and individual services and emergency relief) is currently ongoing. Furthermore, as Müller-Marques Berger and Wirtz (2018) highlight, concessionary loans and public guarantees are partially addressed in IPSAS 28, 29 and 41.

### 4.1. Definition of non-exchange transactions

The scope of IPSAS 23 and the corresponding definitions are provided in IPSAS 23.5-23.7. Here, non-exchange transactions are defined as transactions in which a public entity receives/pays resources and provides/receives no or nominal consideration (IPSAS 23.9). Nominal costs are either insignificant or symbolic. The scope of IPSAS 23 covers (1) taxes and (2) transfers. **(1) Taxes** are economic benefits or service potential compulsorily paid or payable to the public entity other than fines or other penalties (IPSAS 23.7). Taxes represent revenues to the public sector entities. **(2) Transfers** are inflows from non-exchange transactions, other than taxes, such as cash or non-cash assets, debt forgiveness, bequests, donations, goods and services in-kind (IPSAS 23.7).

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<sup>11</sup> IPSASB (2018) Preface to the IPSASs, 10.(b).

## 4.2. Recognition of elements to be recorded in non-exchange transactions

In order to account for revenue from non-exchange transactions, the following flowchart can be applied as shown in Figure 10.3<sup>12</sup>.

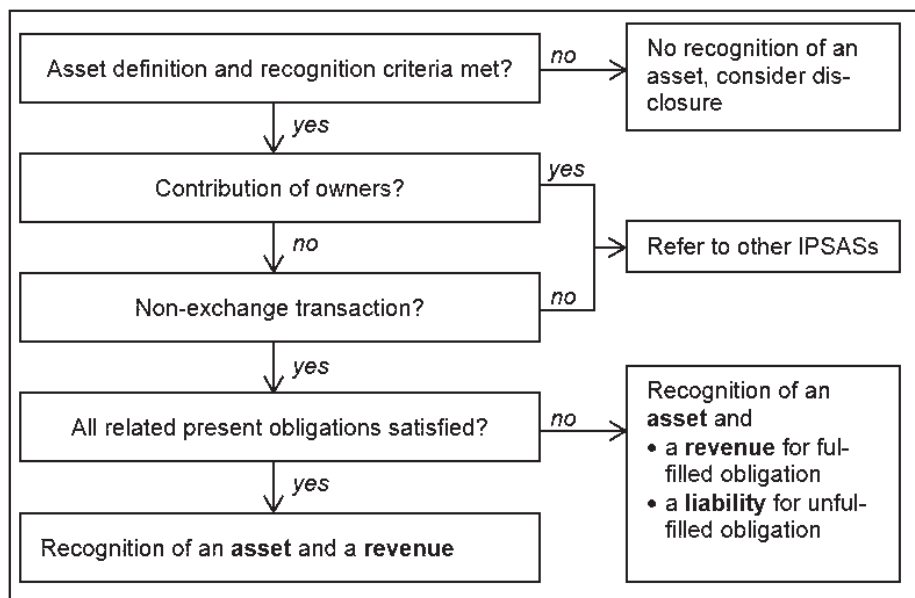


Figure 10.3: Flowchart of accounting for non-exchange transactions (IPSAS 23)

First, an assessment is needed, whether for the item acquired the asset definition (IPSAS 1.7) and recognition criteria (IPSAS 23.31) are met. If this is not the case, an asset is not recognized, but maybe a disclosure is to be done. If an asset was acquired, it needs to be verified whether it was a contribution of owners (IPSAS 23.37) as defined in IPSAS 1.7. If so, other IPSASs are referred to. In the other case, it is to be checked whether it was a non-exchange transaction as otherwise other IPSASs apply. If the transaction meets the definition of a non-exchange transaction (IPSAS 23.9-10), the next question is whether all related obligations to the transaction

<sup>12</sup> See also IPSAS 23.29 and Müller-Marques Berger and Wirtz (2018) in Adam (2018), p. 398.

have been fulfilled, i.e. if there are not any conditions on the transferred asset (IPSAS 23.17). If there are no conditions, i.e. no present obligations, an asset and a revenue in the surplus or deficit is to be recognized (IPSAS 23.44). Otherwise, an asset and a revenue for the fulfilled obligation and a liability for unfulfilled obligations are to be recorded. In fact, a liability is a deferred revenue, i.e. a revenue with conditions. It becomes revenue in the surplus or deficit as the obligations are accomplished.

A specific question with respect to recognition is the point of time in which to recognize particular taxes. According to IPSAS 23.34, taxes are to be recognized at the taxable event, i.e. the event that the public entity has determined to be subject to taxation (IPSAS 23.7). This is, e.g., the event of earning of assessable income during taxation period for income tax, undertaking of a taxable activity during a taxation period for the value added tax, the movement of dutiable goods across customs boundary for customs duty, or passing of the date on or for which the tax is levied for property tax. As the taxable event and the payment of taxes often take place at different points in time, in the statement of financial position, also advance receipts – revenue deferrals (for prepayments) and tax receivables – revenue accruals (for subsequent payments) need to be considered (IPSAS 23.27-28).

#### **4.3. Measurement of the elements to be recorded in non-exchange transactions**

The asset is to be initially measured when the public entity gains control over the asset (substance over form), at fair value. For subsequent measurement, other IPSASs, e.g., IPSAS 17 (PPE) or 16 (Investment property) apply. The revenue is to be measured at the amount of the increase in net assets (also fair value). The liability is recognized if its definition and recognition criteria are fulfilled; it is measured at the amount to settle the obligation as of the reporting date.

## 5. Accounting for service concession arrangements: Grantor

IPSAS 32 is a further standard developed for the specific use by public sector entities that act as the grantor in such constellations.<sup>13</sup>

### 5.1. Definition of service concession arrangements and assets

A service concession arrangement is defined as a binding agreement between a grantor and an operator, whereby the operator uses an asset to provide a public service on behalf of the grantor for a specified period of time, and the operator is compensated over the service concession period (IPSAS 32.8). Thereby, the so called service concession asset can alternatively either be a) provided by the operator, who constructs, develops or acquires the asset for the grantor or an existing asset of the operator, or b) provided by the grantor as an existing asset of the grantor or an upgrade to such an asset (IPSAS 32.8).

Table 10.1 provides an overview of examples of service concession agreements and assets based on IPSAS 32.

<b>Agreements</b>	<b>Assets</b>
Provision of toll roads	Roads, bridges, tunnels, etc.
Hospital operation	Hospitals (land & buildings, etc.)
Facility management, e.g. cleaning services	Machines as cleaning facilities, etc.
Transportation services	Busses, trains, etc.
Utilities, e.g. water supply, telecommunication services	Water pipe lines, telecommunication networks

*Table 10.1: Examples for service concession arrangements (IPSAS 32 IE)*

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<sup>13</sup> Still, it mirrors IFRIC 12 for the private sector and the operators.



## 5.2. Recognition of elements to be recorded in service concession arrangements

The service concession arrangement has to be recognized by the grantor if the following conditions are cumulatively fulfilled (IPSAS 32.9). The grantor controls or regulates which services are provided, to whom these are provided, and what is the price of delivery. In addition, the grantor must control any significant residual interest in the asset, at the end of the term of the arrangement. In addition, a liability is recognized together with a new service concession asset, except for cases in which the service concession is an existing asset of the grantor, therefore only needing reclassification (IPSAS 32.14).

## 5.3. Measurement of elements to be recorded in service concession arrangements

Initial measurement of the service concession asset is at fair value at the time of recognition (IPSAS 32.11), except for cases in which an existing asset of the grantor is only reclassified (IPSAS 32.12). For its subsequent measurement, the IPSAS relevant for the specific asset are to be applied, namely IPSAS 17 for PPE or IPSAS 31 for intangible assets.

The liability is initially measured at the same amount as the asset. For subsequent measurement, depending on the type of compensation is obligation of the grantor to pay, two alternative models have to be distinguished: (1) the financial liability model, and (2) the grant of a right to the operator model. In the following, the models<sup>14</sup> are explained and two examples are drawn to highlight the differences in accounting treatment for the grantor, i.e. a public entity.

(1) The **financial liability model** is prevalent if the grantor has an unconditional obligation to pay for the construction, development,

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<sup>14</sup> Also, a mixed model by dividing the agreement is possible (IPSAS 32.27). However, this is not explained in this chapter.

acquisition or upgrade of the asset (IPSAS 32.18). As such, the operator is compensated for the asset by a payment of the grantor, and not by the parties who receive the service delivered with the asset. The subsequent measurement is recorded as follows: when the financial liability model is applied, the payment of the grantor is distinguished between an asset component, which also leads to a reduction of the liability, a finance charge, i.e. the cost of capital and a service component, which covers the charge for delivering the service (IPSAS 23.21). Finance charge and service component are accounted for as expenses (IPSAS 23.22). If the service charge and the finance charge are not separately identifiable, the payment is to be allocated relative to the fair values of the asset and the revenues (IPSAS 23.23). Applying this model approximates the recognition of a financial leasing contract.

#### **An example**

A private operator provides transportation services on behalf of a public entity, using busses controlled by the public entity. The operator receives fixed payments from the public entity, which prescribes the services and prices. As such the financial liability model is prevalent and the asset and a liability have to be recognized. The initial measurement of the asset, i.e. the busses, takes place at fair value of the busses, whereas for subsequent measurement, according to IPSAS 17, there is the option to choose between the cost or the revaluation model. The busses are assets with a definite useful life, so these are to be depreciated and regularly assessed for indications of impairment. Correspondingly to the asset, also the liability is to be initially measured at the fair value of the busses. In each reporting period, the payment to the operator is divided into an asset component and a service component (plus interest), whereas the asset component annually reduces the liability.

(2) For the **grant of a right to the operator model**, there is no unconditional obligation to pay by the grantor to the operator. Instead, the operator is given the right to earn revenue from third-party users or another asset (IPSAS 32.24). Thereby the transaction, a revenue is earned by the operator. Together with the asset and a liability (which is a deferred revenue) at the initial recognition, a revenue is afterwards also

recorded by the grantor in combination with a reduction of the liability (IPSAS 32.25).

### **An example**

A private operator provides ferry services on behalf of a public entity using a cable ferry which is controlled by the grantor. For the service delivery, the operator is granted the right to charge the ferry users. Thus, the grant of a right to the operator is to be applied and the asset and a liability (deferred revenue) have to be recognized. Also the grantor recognizes a revenue in each reporting period during the term of the contract. However, a question remains whether the initial values of the asset and the liability are the fair value of the asset received (i.e. the concession asset) or of the revenues foregone by the public entity. Thus, the revenue recorded by the grantor does not necessarily equal the revenue of the operator. The sophisticated question of measuring the fair value of the asset and the revenue of the grantor has also been addressed in a Question and Answer document of the IPSASB:

“generally, it will be appropriate to determine the fair value of the asset received (the service concession asset). This is because the right to earn revenue from third-party users (which is the asset given up under the grant of a right to the operator model) will not have been previously recognized in the grantor’s statement of financial position. Consequently, the fair value of the asset received (the service concession asset) will be more clearly evident than the fair value of the asset given up (...).”<sup>15</sup>

Thus, the initial measurement of the asset, i.e. the cable ferry, is at its fair value. Subsequent measurement is done according to IPSAS 17, as done for the busses. The liability is to be initially measured at the fair value of the cable ferry. In the following reporting periods, for determining the reduction in the liability and the recording of a revenue, the liability is allocated over the term of the agreement, e.g., on a straight-line basis. Other

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<sup>15</sup> IPSASB, Q&A, February 2016, Q1, p.2.

allocation methods can be used if these better reflect the earned portion of the liability.<sup>16</sup>

Further examples of both models are explained in the case study in Chapter 11. However, also mixed models of the financial liability model and grant of a right to the operator model can occur in practice.<sup>17</sup> In such cases, the parts of the contract need to be accounted for separately (IPSAS 32.27).

## **6. Conclusion**

For almost each line item in the financial statement, there is at least one specific IPSAS to be applied. In addition, there are reporting specific IPSASs. This chapter focused on the accounting treatment of PPE, non-exchange transactions and service concession arrangements, thus particularly addressing IPSASs 17, 21, 23, 26, and 32.

Summarizing, not only for PPE, many long-term assets can be measured at cost or revalued amounts / fair values. For potential non-exchange transactions, a specific procedure has to be undergone to verify whether the definition of a non-exchange transaction is fulfilled and thus whether an asset has to be recognized. Non-exchange transactions that are not bound to an unfulfilled obligation are to be recorded as revenues, either in the surplus of deficit or directly in the equity.

For service concession contracts, the substance of the transaction needs to be considered in order to select the appropriate model for recognizing the liability; it may imply a deferred revenue if a right is granted to the operator.

The next chapter introduces a case study in which the IPSASs introduced in this chapter will be used and the accounting records are shown.

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<sup>16</sup> IPSASB, Q&A, February 2016, Q2, p.3.

<sup>17</sup> See Aggestam-Pontoppidan and Andernack (2016), p. 181, for an example.

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## **Additional readings**

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- MÜLLER-MARQUES BERGER, Thomas (2018) – IPSAS Explained: A Summary of International Public Sector Accounting Standards, Chichester: Wiley, ISBN: 978-1-119-41506-0, 3rd ed.

## **Discussion topics**

- Heritage assets in the public sector – Challenges for accounting and differences between IPSAS and local accounting norms
- Revaluation model in the public sector – PROs and CONs from the perspectives of preparers and users
- Options in PSA – PROs and CONs from the perspectives of preparers and users

## **CHAPTER 11**

### **IPSAS: CASE STUDY**

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#### **SUMMARY**

This chapter sets forth the Chapter 10 by presenting the accounting treatment of selected economic transactions. By using a case study of a municipality, specific accounting issues will be worked through using the standards and other pronouncements of the IPSASB.

Thereby this chapter provides insights into selected accounting issues dealt by public sector entities and the process to prepare financial reports in conformity with IPSAS. Thereby, also the accounting records and the changes in the accounts will be entered. The focus is on selected public sector relevant IPSAS, namely IPSAS 16, 21, 23 and 32. As a result of this chapter, a closing balance sheet, a statement of financial performance and a statement of financial position is developed.

#### **KEYWORDS**

Public sector specific standards, IPSAS, non-cash generating assets, non-exchange transactions, service concessions

## 1. Introduction

This chapter sets forth the Chapter 10 by presenting the accounting treatment of selected economic transactions. By using a case study of a municipality, specific accounting issues will be worked through using the standards and other pronouncements of the IPSASB.

Thereby this chapter provides insights into selected accounting issues dealt by public sector entities and the process to prepare financial reports in conformity with IPSASs. The aim of this chapter is to deepen the readers' knowledge about certain areas of IPSAS accounting by resolving specific real life accounting cases. The focus will be on selected public sector relevant IPSAS, namely IPSASs 16, 21, 23 and 32.

Relying on the IPSASs that have been introduced, initial and (the options for) subsequent measurement of property, plant and equipment (PPE) according to IPSAS 16 is exemplified and complemented by an impairment of non-cash generating assets (IPSAS 21). Furthermore, differences in the application of IPSAS 23 (revenues from non-exchange transactions) are highlighted by using examples with and without an obligation. Finally, the two models of service concession arrangements (IPSAS 32) are characterised by two transactions.

The chapter is structured as follows: Section 2 introduces the case study. The subsequent sections are devoted to the accounting transactions of PPE (Section 3), revenues from non-exchange transactions (Section 4) and service concession arrangements (Section 5). In each section, the background of the transactions is explained and tasks to be resolved are formulated. In general, for each transaction, the reader is expected to set up the accounting records, to edit the accounts and the balance sheet, and to identify whether the transaction has an impact on the cash flow (C) or the financial performance (FP). In the corresponding lecture material<sup>1</sup>, also the entire task description can be found, as well as the respective booking entries and updated balance sheets after each transaction. However, in this

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<sup>1</sup> See Lecture 11, available at <http://offene.uni-rostock.de/online-course-european-public-sector-accounting/>

chapter, only in Section 6 the completion of the balance sheet, statement of financial performance and cash flow statement will be presented.

## **2. Description of the case study**

Municipality “Eucity” is a public sector entity fully adopting the accrual basis IPSASs since 5 years, with 300,000 inhabitants and 300 employees in the municipal administration. The reporting period is equal to the calendar year. The following transactions take place in the year 20X1.

For each transaction, specific tasks have to be completed, such as developing the accounting records, and indicating the potential impacts on the cash flow statement (C for cash flow) and the statement of financial performance (FP for financial performance). At the end, a closing balance sheet, cash flow statement and the statement of financial performance (nature of expense method) have to be prepared.<sup>2</sup>

At the beginning of the reporting period, inventory lists of assets and balance confirmations for bank accounts and liabilities have been created, which conform with the balance sheet at the end of 20X0.

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<sup>2</sup> For didactic purposes, the balance sheet and some accounting information is simplified and presented e.g. without comparative prior year information.



<b>Item</b>	<b>Remaining useful life / maturity</b>	<b>Opening balance 20 x 1</b>
City hall	20 years	200 kEUR
Land of city hall		100 kEUR
Machines	10 years	50 kEUR
Mainframe computer	3 years	112.5 kEUR
Office wear (desks, chairs, IT)	4 years	44.5 kEUR
Software licences	5 years	10 kEUR
Raw materials (mineral aggregates, bitumen)	To be used in 20X1	8 kEUR
Cash		25 kEUR
Bank account		50 kEUR
Accounts receivables	50% due in 20X1, remaining due in 20X4	40 kEUR
Non-exchange recoverables	Due in 20X1	30 kEUR
Bank liabilities	Annuity loan until 20X1+8, of which 12.5% due in 20X1	Total 240 kEUR
Pension for the mayor	Due in 20X1+30	50 kEUR
Accounts payable	Due in 20X1	15 kEUR

*Table 11.1: Inventory list to compile the opening balance sheet*

**The introductory task** is to assign these items to the respective balance sheet positions and compile the opening balance sheet 20X1 starting with non-current items.

Afterwards, the opening balance sheet 20X1 is composed as shown in Table 2. Assets<sup>3</sup> that are expected to be used during more than one reporting period are assigned as non-current assets. Most of these non-current assets belong to the category of PPE.<sup>4</sup> Also liabilities have to be distinguished between current and non-current depending on their maturity. This also means that e.g. the accounts receivable and the bank liabilities have to be split and disclosed separately. The net assets are determined

<sup>3</sup> See Chapter 8 for a review of the asset definition.

<sup>4</sup> As defined in Chapter 10.

as the residual value between the total assets (670 kEUR) and the total liabilities (305 kEUR). As the reporting period starts with the opening balance sheet, the net surplus/(deficit) is zero, so that the net assets (365 kEUR) are recorded in the reserves.

<b>ASSETS</b>	kEUR	<b>LIABILITIES AND NET ASSETS</b>	kEUR
<b>NON-CURRENT ASSETS</b>		<b>NON-CURRENT LIABILITIES</b>	
Intangible assets	10	Pensions, other employee benefits	50
Property, plant and equipment	507	Financial liabilities	210
Accounts receivables	20	<b>CURRENT LIABILITIES</b>	
<b>CURRENT ASSETS</b>		Financial liabilities	30
Accounts receivables	20	Accounts payable	15
Non-exchange recoverables	30	<b>TOTAL LIABILITIES</b>	<b>305</b>
Inventories	8	<b>NET ASSETS</b>	
Cash and cash equivalents	75	Reserves	365
		Net surplus/(deficit)	<b>0</b>
		<b>TOTAL NET ASSETS</b>	<b>365</b>
<b>TOTAL ASSETS</b>	670	<b>LIABILITIES AND NET ASSETS</b>	<b>670</b>

*Table 11.2: Opening balance sheet 20X1*

Taking the opening balance sheet as starting point, in the following the transactions of Eucity in 20X1 will be analysed and accounted for.

### **3. Selected transactions of property, plant and equipment**

This chapter deals with initial and subsequent measurement of property, plant and equipment (PPE) according to IPSAS 16. In particular, the options for subsequent measurement of PPE are shown and also how an impairment

of non-cash generating assets can be accounted for by applying IPSAS 21, addressing the three methods for determining value in use.

### Transaction 1: Purchase of assets

In order to establish a public library, Eucity buys a building together with its lot of land on 1<sup>st</sup> April 20X1. Both assets are ready for use as a library. Details of the transaction are presented in Table 3.

Costs	Amount	Financing / Payment
Purchase price land	50 kEUR	Bank loan (due in 20X1+20)
Purchase price building	147 kEUR	
Land transfer tax (for land only)	4 kEUR	Bank account
Notary fees (allocation: 25% land, 75% building)	4 kEUR	
Costs for establishing disabled access and parking on the land	5 kEUR	
General administration cost for setting up the library (already recorded as expenses)	3 kEUR	

*Table 11.3: Details for Transaction 1*

**The tasks for Transaction 1** at initial recognition are to determine the acquisition cost and to set up the accounting records for 20X1.

In a first step to determine the acquisition cost, the assets purchased need to be identified. IPSAS 17 does not prescribe the unit of measure for recognition<sup>5</sup>. However, these assets belong to different classes: the lot of land (library building) belongs to the asset class of land (buildings). The acquisition cost is to be determined separately, also because the lot of land has an unlimited useful life, whereas the building has a definite useful life and is to be depreciated. Both are non-current assets and PPE.

<sup>5</sup> See Müller-Marques Berger (2018), p. 155.

In the second step, the acquisition cost components (IPSAS 17.30) as shown in Chapter 10 are determined. The purchase price and the fees have to be allocated to both assets whereas, according to Table 3, the costs for establishing the access for the disabled is recorded for the land only. The general administration cost cannot be capitalized (IPSAS 17.33). Table 4 and Table 5 show the allocation of cost.

<b>Elements of cost</b>	<b>Application to Transaction 1</b>	<b>Amount</b>
Purchase price	Purchase price	50 kEUR
+ Non-refundable import duties and purchase taxes	+ Land transfer tax + Notary fees (75% of 4kEUR)	4 kEUR 1 kEUR
- Trade discounts and rebates	(none)	
+ Costs directly attributable to bringing the item into service	+ Making land accessible for disabled persons	5 kEUR
<b>= Acquisition cost</b>	<b>= Acquisition cost land</b>	<b>60 kEUR</b>

*Table 11.4: Transaction 1: Acquisition cost of lot of land*

<b>Elements of cost</b>	<b>Application to Transaction 1</b>	<b>Amount</b>
Purchase price	Purchase price	147 kEUR
+ Non-refundable import duties and purchase taxes	+ Notary fees (75% of 4kEUR)	3 kEUR
- Trade discounts and rebates	(none)	
+ Costs directly attributable to bringing the item into service	(none)	
<b>= Acquisition cost</b>	<b>= Acquisition cost building</b>	<b>150 kEUR</b>

*Table 11.5: Transaction 1: Acquisition cost of library building*

According to IPSAS 5, also borrowing cost for the acquisition of qualified assets can optionally be capitalized. However, the benchmark treatment is to recognize borrowing costs as expenses (IPSAS 5.5). Presumably, both assets do not meet the definition of a qualified asset as these do not necessarily take a substantial time to be ready for their intended use or sale, but are ready for use. Thus, the borrowing cost are expenses.

After determining the acquisition cost, the accounting records are set up separately for both assets, also indicating that part of the transaction influenced the cash flow<sup>C</sup>. The changes in the accounts will be considered when setting up the closing balance sheet in Section 6.

Debit		to	Credit	
Land	60 kEUR	to	Non-current financial liabilities	50 kEUR
			Bank account <sup>C</sup>	10 kEUR
Building	150 kEUR	to	Non-current financial liabilities	147 kEUR
			Bank account <sup>C</sup>	3 kEUR

## Transaction 2: Self construction of a road

Due to (another) larger construction project, Eucity builds a by-pass road that will be used for 3 years only. The road is completed at the end of June 20X1. After 3 years, the road has to be closed and removed. Details are shown in Table 6.

Costs	Amount	Additional information
Costs for raw materials	8 kEUR	Taken from inventories
Personnel cost for own staff*	19 kEUR	Paid from bank account
Best estimate for cost of removing the road (Pre-tax discount rate: $i = 3.57422\%$ p.a.)	10 kEUR	In June 20X4

*Table 11.6: Details for Transaction 2*

\* Simplified, including the employer's social security contributions, not yet recorded as expenses.

**The tasks for Transaction 2** at initial recognition are to determine the construction cost of the item and to set up the accounting records for 20X1.

Again the item is a non-current asset belonging to the class road network and balance sheet line item PPE. The construction cost calculation is shown in Table 7.

<b>Elements of costs</b>	<b>Application to transaction 2</b>	<b>Amount</b>
Costs directly related to the unit of production	Raw material + Personnel cost	8 kEUR 19 kEUR
+ Systematic allocation variable and fixed production overheads	(none)	
+ Costs directly attributable to bringing the item into service	(none)	
+ Costs of obligations for dismantling, removing and restoring (DRR) the site after the end of use		9 kEUR
<b>= Construction cost</b>	<b>= Construction cost road</b>	<b>36 kEUR</b>

*Table 11.7: Transaction 2: Acquisition cost of road*

In order to determine the DRR cost after the end of use<sup>6</sup> the present value of the expenditures expected to settle the obligation has to be calculated. Therefore, the best estimate of future costs for dismantling the road in June 20X4 (10 kEUR) is discounted by 3 years, for which the pre-tax discount rate (*i*) is used:

$$\frac{10 \text{ kEUR}}{(1 + i)^{\text{years}}} = \frac{10 \text{ kEUR}}{1.0357442^3} = 9 \text{ kEUR}$$

Thus, 9 kEUR are capitalized at initial recognition and at the same amount, a provision for DRR cost is accounted for. The accounting record is the following:<sup>7</sup>

<sup>6</sup> See Chapter 10 for more explanations.

<sup>7</sup> Simplified, the effects on financial performance due to the use of raw materials and personnel costs are neglected.

Debit		to	Credit	
Road network	36 kEUR	to	Inventories	8 kEUR
			Bank account <sup>C</sup>	19 kEUR
			Provision for DRR costs	9 kEUR

After the initial measurement of the three items of PPE, their subsequent measurement at the end of the reporting year 20X1 is subject of Transactions 3-5 differentiated between the assets.

### Transaction 3: Subsequent measurement of the library building

At the end of 20X1, the library building is to be subsequently measured. As shown in Transaction 1, the initial costs were 150 kEUR in April 20X1.

For buildings, as one class of assets, Eucity applies the cost model. Eucity expects that the acquisition cost will decrease with a constant charge over the useful life of 30 years to a residual value of 10 kEUR.

The library building contains an elevator for access of the disabled. The elevator makes up 20 kEUR of the initial costs of the building, has an expected useful life of only 10 years with no residual value and will be used by 600,000 persons with 30,000 persons using the elevator in the first year. This is based on the assumption that the number of passengers per year will increase over the useful life of the elevator.

**The tasks for Transaction 3** are to determine the depreciation method and calculate the depreciation and to set up the accounting records for 20X1.

According to IPSAS 17.59, each part of an “item of PPE with a cost that is significant in relation to the total cost of the item shall be depreciated separately”, i.e. the component approach is to be used. Thus, the building and its elevator are depreciated separately, but still disclosed together. The calculation of depreciation starts in April 20X1 with the availability for use, according to IPSAS 17.71. In this example, the useful life is considered in months and using the duodecimal method. Otherwise, in the first year, despite

just being used for 9 months, the entity might choose to depreciate the whole year, and not to depreciate in the final. The calculation of the depreciation in 20X1 using the straight-line depreciation for the building and the units of production method (IPSAS 17.78) for the elevator is shown in Table 8.

	<b>Library building</b>	<b>Elevator</b>
<b>Useful life</b>	30 years	10 years
<b>Residual value</b>	10 kEUR	0 kEUR
<b>Depreciation method</b>	Straight-line method	Units of production method
<b>Depreciable amount</b>	Initial costs - elevator - residual value = 150 kEUR - 20 kEUR - 10 kEUR = <b>120 kEUR</b>	Initial costs of elevator - residual value = 20 kEUR - 0 = <b>20 kEUR</b>
<b>Calculation of depreciation in 20X1</b>	$\frac{\text{Depreciable amount}}{\text{Useful life}} \cdot \frac{\text{Months in 20X1}}{12 \text{ months}}$ = $\frac{120 \text{ kEUR}}{30 \text{ years}} \cdot \frac{9 \text{ months}}{12 \text{ months}}$ = <b>3 kEUR</b>	$\frac{\text{Depreciable amount}}{\text{Total production}} \cdot \text{Production 20X1}$ = $\frac{20 \text{ kEUR}}{600,000 \text{ persons}} \cdot 30,000 \text{ persons}$ = <b>1 kEUR</b>

Table 11.8: Transaction 3: Subsequent measurement for Transaction 1

Thus, for the first 9 months of use, the building is depreciated by 3 kEUR and the elevator by 1 kEUR, which is recorded as an expense (and therefore affects financial performance) as shown in the accounting records below. Depreciation expense refers to accumulated depreciation, that allow to decrease the assets value in the balance sheet every year. The component approach only concerns valuation of assets, but not their presentation in the balance sheet. As such, the elevator remains a part of the building, but is depreciated separately.

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Depreciation expense <sup>FP</sup>	3 kEUR	To	Building	3 kEUR
Depreciation expense <sup>FP</sup>	1 kEUR	To	Building	1 kEUR



#### **Transaction 4: Subsequent measurement of library's lot of land**

At the end of reporting period 20X1, the lot of land of the library (Transaction 1) is to be subsequently measured. For land, as one class of assets, Eucity applies the revaluation model. In general, land has an unlimited useful life. The library's lot of land lies in a prosperous area in Eucity. As such, significant changes in fair value are expected, so that Eucity undertakes an annual revaluation. For the other property hold by Eucity (the lot of land of the city hall (100 kEUR)), no revaluations are necessary as no change in fair value incurred.

The fair value of the library's lot of land is reliably determined from market-based evidence by appraisal. The following fair values have been assessed at the respective revaluation dates:

<b>Revaluation date; end of</b>	<b>Fair value of the lot of land</b>
20X1	75 kEUR
20X2	50 kEUR
20X3	60 kEUR

*Table 11.9: Details for Transaction 4: Fair values of the lot of land*

**The tasks for Transaction 4** are to determine the carrying amount of the lot of land at the end of the years 20X1, 20X2 and 20X3, to set up the accounting records for the same years, but to update the accounts and the balance sheet for the year 20X1 only.

As the lot of land is an asset with an unlimited useful life, the asset is not depreciated. Therefore, the asset can be immediately revaluated, i.e. it is subsequently measured at fair value: above (below) its initial costs in revaluation reserve (deficit or surplus). This is shown in Table 10. For year 20X1, the revaluation effect of 15 kEUR are accounted for through the revaluation reserve (IPSAS 17.44 f.). In year 20X2, the revaluation reserve is reduced until zero value (i.e. 15 kEUR) and the remaining amount of 10 kEUR is allocated to surplus or deficit (i.e. affecting financial

performance). In year 20X3, the increase in the carrying amount is also recorded in surplus or deficit because the initial costs are not exceeded.

Year	Carrying amount beginning of year	Fair value of the lot of land	Carrying amount end of year	Revaluation recognized in	
				Revaluation reserve	Surplus or deficit (Profit/Loss)
20X1	60 kEUR	75 kEUR	75 kEUR	+15 kEUR	
20X2	75 kEUR	50 kEUR	50 kEUR	-15 kEUR	-10 kEUR
20X3	50 kEUR	60 kEUR	60 kEUR		+10 kEUR

*Table 11.10: Transaction 4: Revaluation of lot of land*

The accounting records for the revaluations are shown below.

Year	Debit		to	Credit	
20X1	Land	15 kEUR	To	Revaluation reserve	15 kEUR
20X2	Revaluation reserve	15 kEUR	to	Land	25 kEUR
	Impairment expenses <sup>FP</sup>	10 kEUR			
20X3	Land	10 kEUR	to	Reversal of impairment <sup>FP</sup>	10 kEUR

### **Transaction 5: Subsequent measurement of the road and its provisions for DRR costs**

At the end of year 20X1, also the self-constructed road and the provision for DRR costs (initial recognition 9 kEUR at end of June 20X1, 3 years, discount rate 3.57442% p.a.) are subject to subsequent measurement (Transaction 2). Eucity applies the cost model with a straight-line depreciation for the 3 years of useful life with no residual value.

**The tasks for Transaction 5** are to calculate the carrying amount of the road at the end of 20X1 and of the provision at the end of the years 20X1 to 20X3 and to set up the accounting records for 20X1.

The road was capitalized at an amount of 36 kEUR in June 20X1. Thus, it needs to be depreciated for 6 months until the end of 20X1 by using the straight-line method. Like in Transaction 4, the duodecimal system is used, i.e. considering the precise months of use:<sup>8</sup>

$$\frac{\text{Depreciable amount}}{\text{Useful life}} \cdot \frac{\text{Months in 20X1}}{12 \text{ months}} = \frac{36 \text{ kEUR}}{3 \text{ years}} \cdot \frac{6 \text{ months}}{12 \text{ months}} = 6 \text{ kEUR}$$

Just like the road (the asset), also the provision needs to be subsequently measured (IPSAS 19.54). Presumably, the expected DRR costs do not change. This means that for year 20X1 the provision is to be compounded by 6 months (until the end of 20X1) by using the underlying monthly pre-tax interest rate  $i_m$  of 0.293097% p.m.<sup>9</sup> Thus at the end of the first year, the provision increased by 159 EUR, which is accounted for as an interest expense (i.e. through surplus or deficit). The process of compounding is repeated for the years 20X2 and 20X3 for 12 months respectively and for 20X4 for 6 months only. In June 20X4, the present value of the provision equals 10 kEUR which is the best estimate for the cost of removing the road (see Table 6 of Transaction 2), as the estimation was not subject to revision.

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<sup>8</sup> In some countries, it is also possible to consider the whole year (i.e. Germany and Portugal).

<sup>9</sup> See in the online lecture material, Lecture 11 Appendix A for the calculation.

Date	Present value at beginning of reporting period	Calculation: Compounding of provision $\text{Present value}_{20XX} \times (1+i_m)^{\text{months}}$	Present value at end of reporting period of the provision	Interest expense
31 Dec 20X1	9,000 EUR	$9,000 \text{ EUR} \times 1.00293097^6$	9,159 EUR	159 EUR
31 Dec 20X2	9,159 EUR	$9,159 \text{ EUR} \times 1.00293097^{12}$	9,487 EUR	328 EUR
31 Dec 20X3	9,487 EUR	$9,487 \text{ EUR} \times 1.00293097^{12}$	9,825 EUR	338 EUR
30 June 20X4	9,825 EUR	$9,825 \text{ EUR} \times 1.00293097^6$	10,000 EUR	175 EUR

*Table 11.11: Transaction 5: Subsequent measurement of the provision*

Accordingly, the accounting records for this transaction are the following:

Debit		to	Credit	
Depreciation expense <sup>FP</sup>	6 kEUR	to	Road network	6 kEUR
Interest expense <sup>FP</sup>	0.2 kEUR	to	Provision for DRR	0.2 kEUR

### **Transaction 6-8: Impairment of non-cash generating assets**

After the acquisition and construction of assets and their subsequent measurement has been completed according to IPSAS 17, the following three transactions turn to the impairment of assets, which is a further step in subsequent measurement. As non-cash generating assets are a public sector specific matter, IPSAS 21 has no IFRS equivalent. Due to the high importance of these assets in the public sector, the following transactions focus on the application of IPSAS 21 only<sup>10</sup>.

The case study proceeds as follows: At the end of the reporting year 20X1, straight-line depreciation has been recorded for all assets with a

<sup>10</sup> See Chapter 10 for a definition of non-cash generating assets.

limited useful life. The indication whether non-cash generating assets may be impaired has been checked by assessing internal and external indicators (IPSAS 21.27). The results are shown in Table 12.

Asset	Indicator & Description	Details
<b>Mainframe computer</b>	<p><b>Significant long-term change with adverse effect on use:</b> Usage of mainframe computer declined by 80% as Eucity increasingly relies on cloud computing technologies.</p> <p>The mainframe computer has an estimated useful life of 5 years and is in 20X1 at the end of its 3rd year of use. A smaller (new) computer that can provide the remaining service potential has a market price of 30 kEUR. Reproduction is not possible by Eucity.</p>	<p>Carrying amount: 75 kEUR</p> <p>Asset's market price: 50 kEUR</p> <p>Costs of disposal: 5 kEUR</p>
<b>Road (Transactions 2 &amp; 5)</b>	<p><b>Physical damage of the asset:</b> Several severe Winter caused road holes, plans to conduct road repair in Spring 20X2.</p> <p>The road has been built and completed at the end of June 20X1. Restoring the road to a usable condition would require 10.5 kEUR. To build a new road (incl. costs of obligations for DRR after the end of use) would now cost 39 kEUR. The restoration will not affect the useful life of the road.</p>	<p>Carrying amount: 30 kEUR</p> <p>Fair value less costs to sell: no reliable estimate available</p>
<b>Scanner for books</b>	<p><b>Cessation of the demand or need for services provided by the asset:</b> Library users do rarely use scanning service in the library.</p> <p>The scanner was acquired and recorded on 1st January 20X0 for 15 kEUR (included in office wear). Its use was estimated to be 100,000 scans per year for 6 years of its useful life. Citizens used the service only 60,000 times in each year, i.e. the number of service units decreased by 40%. A new scanner would cost 13.5 kEUR.</p>	<p>Carrying amount: 10 kEUR</p> <p>Asset's market price: 10.5 kEUR</p> <p>Costs of disposal: 0.5 kEUR</p>

*Table 11.12: Details for Transactions 6-8*

**The tasks for Transactions 6-8** are to explain the general rule for impairment and to describe for each of the three assets, which method for measuring value in use is appropriate. Afterwards, the value in use for each of the three assets is to be determined and the necessity of an impairment is to be assessed and (if applicable) at which amount. Then, the accounting records for the year 20X1 are to be completed.

The general rule of impairment is explained in details in Chapter 10, Section 3 with the respective references. To put it short: An asset is to be impaired, if the recoverable (service) amount lies beyond the asset's carrying amount. Before, the recoverable (service) amount needs to be determined, which is the higher of the fair value less costs to sell (FVLCTS) and the value in use (VIU). In the following, the procedure is described for each of the assets separately.

### **Transaction 6: Depreciated replacement cost approach**

With respect to the mainframe computer, drawing on the information shown in Table 12, the FVLCTS and VIU are to be calculated. The FVLCTS is the difference between the asset's market price and its costs of disposal, i.e. 45 kEUR. As it is lower than the carrying amount of the asset (75 kEUR), also the VIU needs to be determined. In this example, the mainframe computer is an overcapacity asset: its capacity is greater than necessary to meet the demand, also as no standby or surplus capacity is needed. As such, in order to determine the VIU, the depreciated replacement cost approach is appropriate (IPSAS 21.45-.47) with the calculation shown in Table 13 (see also IPSAS 21.IE6 and IE8). Hereby, the replacement by another computer is assumed that has the required (lower) capacity to fulfil the demand. As the mainframe computer has been used for 3 years already, also the replacement computer needs to be depreciated for 3 years. Therefore, the VIU is 12 kEUR.

<b>Carrying amount</b> , end of 20X1	75 kEUR
<b>Replacement cost</b> (new computer)	30 kEUR
<b>Accumulated depreciation</b> $30 \text{ kEUR} \times \frac{3}{5} \text{ years}$	-18 kEUR
<b>Depreciated replacement cost = Value in use</b>	12 kEUR

Table 11.13: Transaction 6: Depreciated replacement cost approach

The recoverable service amount of the mainframe computer is the higher amount of the FVLCTS (45 kEUR) and the VIU (12 kEUR). As 45 kEUR lies beyond the carrying amount of the asset (75 kEUR), an impairment by 30 kEUR is required and recorded as follows:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Impairment expense <sup>FP</sup>	30 kEUR	to	Computer	30 kEUR

### Transaction 7: Restoration cost approach

As shown in Table 12, the road is physically damaged. It needs to be repaired to restore its service potential to its pre-impaired level. Therefore, the restoration cost approach is suitable to determine its VIU (IPSAS 21.48) with the calculation shown in Table 14 (see also IPSAS 21.IE13). Thereby, the VIU is based on the costs of an undamaged new road, also in order to reflect potential changes in prices and needs to be depreciated by 6 months to have a comparative level of use (see information in Table 12). The VIU of the road is 22 kEUR.

<b>Carrying amount</b> , end of 20X1	30 kEUR
<b>Replacement cost</b> (new road)	39 kEUR
<b>./. Accumulated depreciation</b> $\frac{39 \text{ kEUR}}{3} \times \frac{6}{12}$	-6.5 kEUR
<b>Depreciated replacement cost (undamaged)</b>	32.5 kEUR
<b>./. restoration cost</b>	-10.5 kEUR
<b>Value in use</b>	22 kEUR

Table 11.14: Transaction 7: Restoration cost approach

In order to find the recoverable service amount, in general, the FVLCTS would be needed as well, but is not available for the public road. Therefore, the VIU of 22 kEUR may be used as recoverable service amount (IPSAS 17.37). As it is lower than the carrying amount of the asset (30 kEUR), the road is to be impaired by 8 kEUR:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Impairment expenses <sup>FP</sup>	8 kEUR	to	Road network	8 kEUR

### Transaction 8: Service units approach

For the book scanner, as shown in Table 12, the number of service units to be produced by the asset has reduced, as the demand for this asset ceased. As the service units are measurable, the service units approach is most appropriate for measuring the asset's VIU (IPSAS 21.49). The scanner was acquired and recorded on 1st January 20X0 for 15 kEUR. Its number of service units needed decreased by 40%. A new scanner would cost 13.5 kEUR. The calculation of the VIU based on the service units approach is shown in Table 15 (see also IPSAS 21.IE14).

<b>Carrying amount</b> , end of 20X1	$15 \text{ kEUR} - \frac{15 \text{ kEUR}}{6} \times 2$	10 kEUR
<b>Replacement cost</b> (new scanner)		13.5 kEUR
<b>./. Accumulated depreciation</b>	$\frac{13.5 \text{ kEUR}}{6} \times 2$	-4.5 kEUR
<b>Depreciated replacement cost</b> (before adjustment for remaining service units)		9 kEUR
<b>./. Reduction of remaining service units (40%)</b>		-3.6 kEUR
<b>Value in use</b>		5.4 kEUR

Table 11.15: Transaction 8: Service units approach

Thus, the VIU of the scanner is 5.4 kEUR and lower than the FVLCTS (market price ./. costs of disposal), so that the recoverable service amount is 10 kEUR. Therefore, no impairment is required, as the FVLCTS equals



the carrying amount. In general, a VIU calculation was not necessary as the FVLCTS was determinable more easily and not below the carrying amount. Therefore, for this transaction, no accounting record is needed.

With respect to transactions 6-7, in the future, Eucity will have to check whether there are indications that the impairment for both assets has increased, decreased or does not exist anymore (IPSAS 21.64). In such case Eucity may potentially have to record a reversal of impairment to the maximum of the carrying amount of the asset without prior impairment (i.e. taking net depreciation or amortization into account) (IPSAS 21.68).

#### **4. Selected transactions of non-exchange transactions**

Section 4 explains the application of IPSAS 23 Revenue from non-exchange transactions by drawing two transactions with taxation and a donation.

##### **Transaction 9: Taxation of citizens**

For any conveyance and disposition of land in its territory, Eucity imposes a 5% land transfer tax. In June 20X1, Citizen A acquired a lot of land for 500 kEUR (effective date of the transfer). Eucity issues a tax statement, which will probably be paid by Citizen A in July 20X1.

**The tasks for Transaction 9** are to determine whether this is a non-exchange transaction and when it has to be recognized. If applicable, the accounting records are to be developed followed by an update of the accounts and the balance sheet.

In a first step, it needs to be checked whether the inflow of cash represents an asset. According to IPSAS CF 5.6 an asset is a resource presently controlled by the entity as a result of a past event. In this case, the payment by Citizen A represents a resource, which is controlled by Eucity, because it has an enforceable claim (= the tax statement issued). The past event, here the taxable event, is the acquisition of land according to tax

law. As the inflow of resources is probable and the inflow can be reliably measured, an asset is to be recognised with the IPSAS to be applied in question.

IPSAS 23 only applies to revenues from non-exchange transaction, which means that there is no exchange of approximately equal values. This is the case here, as Citizen A pays the tax, but does not receive an asset from Eucity in exchange. Through the tax, Eucity receives a revenue (IPSAS 23.7), i.e. is a gross inflow of economic benefits or service potential, which represents an increase in net assets, other than increases relating to contributions of owners (IPSAS 21.23).

IPSAS 23 also provides information about potential stipulations or conditions on the transferred assets. However, this does not apply to tax payments. Therefore, it can be concluded that the payment is to be recognised as a revenue according to IPSAS 23, after determining the taxable event and the tax amount. The taxable event (subject to taxation; IPSAS 23.27) is June 20X1, in which the transfer of land has been conducted. The tax amount is 25 kEUR (5% of 500 kEUR).

The accounting records are the following. First when the tax statement is issued, non-exchange recoverables are booked and the transaction is recorded in a revenue account, here called land transfer taxes, which affects the financial performance of Eucity. After Citizen A completed the payment, non-exchange recoverables are decreased.

Debit		to	Credit	
Non-exchange recoverables	25 kEUR	to	Land transfer taxes <sup>FP</sup>	25 kEUR
Bank account <sup>C</sup>	25 kEUR	to	Non-exchange recoverables	25 kEUR

**Transaction 10: Donation of an asset with obligation**

On 31<sup>st</sup> December 20X1, Citizen B voluntarily transfers a building, which was the birthplace of a famous person, to Eucity. The transfer, however,

underlies a contractual agreement: Eucity needs to open the house to the public for the next 10 years. If the condition is not met, the initially recognized value of the building – reduced pro rata temporis over 10 years – is to be retransferred.

The carrying amount of the building is 80 kEUR, whereas its fair value is 100 kEUR. As a public sector entity, Eucity is not subject to tax over donations received.

**The tasks for Transaction 10** are to assess the measurement of the asset, the obligation and the revenue from the non-exchange transaction. Afterwards, the accounting records are to be set up.

Again, as for Transaction 9, it needs to be considered whether there is an asset to be recognised. In this case, also, an asset is prevalent, as Eucity gains control over the building by completing its transfer together with an agreement which is based on a past event, i.e. the donation of Citizen B. Here, the building is a heritage asset, for which there is an option for recognition (IPSAS 17.9), which Eucity decided to use. The asset is to be measured at fair value, i.e. 100 kEUR. As Eucity does not provide a value in exchange for the building, IPSAS 23 is to be applied for this non-exchange transaction.

However, compared to Transaction 9, it needs to be considered that this is a transaction with a condition (making open to the public for at least 10 years). Therefore, for Transaction 10, a performance obligation due to this condition has to be recognised in the form of a liability (IPSAS 23.23). In future reporting periods, the liability is reduced on a straight-line basis, and revenue is progressively recognised for each reporting period in which the condition is fulfilled (i.e. 10 kEUR per year). Initially, the liability is measured at 100 kEUR and split up in its current and non-current part. Here, it is presumed that there is no material time value of money, so the liability it is not discounted (IPSAS 19.53). The first year's accounting records are as the following:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Buildings	100 kEUR	to	Non-current financial liability	90 kEUR
			Current financial liability	10 kEUR

## 5. Selected transactions of service concession arrangements

Public sector entities increasingly use partnerships with private sector entities for their service delivery. Some of these partnerships are service concession arrangements, in which a private sector entity uses or develops an asset of a public sector entity in order to provide public services (for a definition see Chapter 10). Here IPSAS 32 applies. There are two different models of how to account for service concession arrangements which are introduced by Transactions 11 and 12 in the following.

### **Transaction 11: Construction and fixed-payment operation of a tunnel by an operator**

Eucity commissioned an external operator to construct a tunnel running under a river in 20X0. The tunnel is completed and accepted by Eucity on 1<sup>st</sup> January 20X1. The construction cost of the tunnel is 250 kEUR and has been financed by the operator. The expected useful life of the tunnel is 20 years and the residual value after a straight-line depreciation is 50 kEUR.

The arrangement also specifies that from 20X1 onwards for the next 10 years, the operator delivers the following free of access services to the public:

- operation of the transit through the tunnel;
- maintenance works at the tunnel.

Thereby, Eucity controls the services to be provided by the operator and pays an unconditional fixed amount of 40 kEUR at the end of each year to the operator of which the service charge is 10 kEUR. After the end of the term, the operator will transfer the operation of the tunnel to Eucity. By then, Eucity also controls the residual interest in the tunnel.

The rate implicit in the service concession arrangement specific to the asset is 3.46% p.a.

**The tasks for Transaction 11** are to determine the type of service concession contract, to (if applicable) recognize and measure the elements to be recorded and to set up the accounting records in 20X1.

In this transaction, Eucity has an unconditional obligation to pay for the construction of the asset. Therefore, the **financial liability model** applies according to IPSAS 32.18. This means that in January 20X1 an asset and a liability have to be recognised. The asset is the tunnel, which is part of the asset class PPE. According to IPSAS 32.11 initial measurement is to be done at the fair value of the tunnel, which are the construction costs of the tunnel (IPSAS 32.AG30, IPSAS 17.26). Therefore, the tunnel is initially measured at 250 kEUR. According to IPSAS 32.15 the liability is to be initially measured at the same amount as the asset, i.e. also 250 kEUR.

At the end of the reporting year, i.e. December 20X1, also the payment of 40 kEUR is to be accounted for. According to the financial liability model the payment is to be distinguished between (1) a service component (here the service charge of 10 kEUR) and (2) an asset component, which is related to the liability and needs to be further distinguished into a finance charge and the reduction in liability. First, the finance charge is determined, which is the borrowing cost of ca. 8.7 kEUR (250 kEUR × 3.46%).<sup>11</sup> The calculation of the reduction in liability in 20X1 is shown in Table 16.

Annual payment	40 kEUR
– Service charge	10 kEUR
– Finance charge	8.7 kEUR
<b>Reduction in liability</b>	<b>21.3 kEUR</b>

*Table 11.16: Transaction 11: Calculation of reduction in liability*

Besides the payment of 40 kEUR, at the end of the reporting year also the depreciation of the tunnel has to be considered. In this case the cost model according to IPSAS 17.43 is applied:

$$\frac{(250 \text{ kEUR} - 50 \text{ kEUR})}{20 \text{ years}} = 10 \text{ kEUR.}$$

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<sup>11</sup> See in the online lecture material, Appendix B for the calculation for the entire term of the contract.

Summarising Transaction 11, the following accounting records have to be set up. The first concerns the beginning of the year, when the tunnel is acquired and the liability is recognised. The two remaining are for the depreciation of the tunnel and the payment of Eucity to the operator at the end of 20X1.

	Debit		to	Credit	
Jan 20X1	Road network	250 kEUR	to	Non-current financial liability	250 kEUR
Dec 20X1	Depreciation expense <sup>FP</sup>	10 kEUR	to	Road network	10 kEUR
	Service expense <sup>FP</sup>	10 kEUR	to	Bank <sup>C</sup>	40 kEUR
	Financial charge <sup>FP</sup>	8.7 kEUR			
	Non-current financial liability	21.3 kEUR			

### **Transaction 12: Construction and operation of a tunnel by an operator with the right to earn revenue from third party users**

Eucity commissioned an external operator to construct another tunnel running under a railtrack in 20X0. The tunnel is completed and accepted by Eucity (= grantor obtains control) on 1<sup>st</sup> January 20X1. The construction cost of the tunnel is 250 kEUR and has been financed by the operator. The expected useful life of the tunnel is 20 years and the residual value after a straight-line depreciation is 50 kEUR.

The arrangement also specifies that from 20X1 onwards for the next 10 years, the operator delivers the following services by collecting tolls from users:

- operation of the transit through the tunnel;
- maintenance works at the tunnel.

There is no direct payment from Eucity to the operator, but the operator will receive revenue from car drivers' tolls. A constant number of users is expected with a collection of tolls of 40 kEUR per year.

**The tasks for Transaction 12** are to determine the type of service concession contract, to (if applicable) recognize and measure the elements to be recorded and to set up the accounting records for 20X1.

This transaction is different from Transaction 11, as the operator is not compensated by Eucity, but granted the right to earn revenues from the users of the tunnel. Therefore, the **grant of a right to the operator model** (IPSAS 32.24) is to be used here. This means that in January 20X1, an asset (i.e. the tunnel) and also a liability (i.e. the unearned revenue) is to be recognised. The asset is to be initially measured like an exchange of non-monetary assets (IPSAS 32.AG25b) that means to its fair value at the date of acquisition (IPSAS 17.27), here 250 kEUR. The liability is to be measured at the same amount as the asset (IPSAS 32.15). Even the IPSASB considered the question of measuring the liability: It concluded that “generally it will be appropriate to determine the fair value of the asset received (the service concession asset). This is because the right to earn revenue from third-party users (which is the asset given up under the grant of a right to the operator model) will not have been previously recognized in the grantor’s statement of financial position. Consequently, the fair value of the asset received (the service concession asset) will be more clearly evident that the fair value of the asset given up”<sup>12</sup> (the right to collect tolls).

At the end of year 20X1, the depreciation amount of the tunnel on a straight-line basis is determined:  $\frac{(250 \text{ kEUR} - 50 \text{ kEUR})}{20 \text{ years}}$

For this asset, there would have been the subsequent measurement choice between applying the cost or the revaluation model (IPSAS 17.42), however, assets with a limited useful life need to be depreciated either way. Eucity applies the cost model. As there are no indications for impairment, their assessment and a test for impairment are obsolete (IPSAS 21.26).

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<sup>12</sup> IPSASB Q&A, February 2016, Q1.

It is assumed that the time value of revenue recognition is not significant, therefore the liability needs not to be discounted. As such, the reduction in liability equals the pattern of revenue recognition which depends on the access to the service concession asset:

$$\frac{250 \text{ kEUR}}{10 \text{ years}} = 25 \text{ kEUR}$$

Therefore, the accounting records for the year 20 X1 are the following: The first refers to initial recognition in January 20X1, whereas the remaining two relate to subsequent measurement at the end of 20X1:

	<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Jan 20X1	Road network	250 kEUR	to	Service concession liability	250 kEUR
Dec 20X1	Depreciation expense <sup>FP</sup>	10 kEUR	to	Road network	10 kEUR
	Service concession liability	25 kEUR	to	Service concession revenue <sup>FP</sup>	25 kEUR

## 6. Conclusion

After the accounting for the 12 transactions in 20X1 have been completed, Eucity's financial statements<sup>13</sup> can be compiled. Here, the completion tasks are not to compile and present the entire set of financial statements required by IPSAS 1.21<sup>14</sup>, but a closing balance sheet, a cash flow statement and a statement of financial performance for Eucity for the reporting year 20X1, only.

After closing all the accounts, the balance sheet as shown in Table 17 is derived.

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<sup>13</sup> In the corresponding lecture material, also the transactions in the accounts and balance sheet are to be recorded. See Lecture 11, available at <http://offene.uni-rostock.de/online-course-european-public-sector-accounting/>

<sup>14</sup> See also Chapter 9 for further explanations of the different statements.



<b>ASSETS (in kEUR)</b>	<b>20X1</b>	<b>20X0</b>	<b>LIABILITIES AND NET ASSETS (in kEUR)</b>	<b>20X1</b>	<b>20X0</b>
<b>NON-CURRENT ASSETS</b>			<b>NON-CURRENT LIABILITIES</b>		
Intangible assets	10	10	Pensions, other employee benefits	50	50
Property, plant and equipment	1,300	507	Financial liabilities	725.7	210
Accounts receivables	20	20	Service concession liability	225	0
<b>CURRENT ASSETS</b>			Provisions (...) DRR	9.2	0
Accounts receivables	20	<b>20</b>	<b>CURRENT LIABILITIES</b>		
Non-exchange recoverables	30	30	Financial liabilities	40	30
Inventories	0	8	Accounts payable	15	15
Cash and cash equivalents	28	75	<b>TOTAL LIABILITIES</b>	<b>1,064.9</b>	<b>305</b>
			<b>NET ASSETS</b>		
			Reserves	380	365
			Net surplus/(deficit)	<b>(36.9)</b>	<b>0</b>
			<b>TOTAL NET ASSETS</b>	<b>343.1</b>	<b>365</b>
<b>TOTAL ASSETS</b>	<b>1,408</b>	<b>670</b>	<b>LIABILITIES AND NET ASSETS</b>	<b>1,408</b>	<b>670</b>

Table 11.17: Closing balance sheet 20X1 (simplified)

For setting up the statement of financial performance (Table 18) and the cash flow statement (Table 19), the indications of <sup>FP</sup> and <sup>C</sup> in the accounting records can be used to find all relevant transactions. For guidance, also the relevant transactions for setting up the statements are shown in the tables, which is however not needed in real life. From the statement of financial performance, it can be seen that the difference of total revenues and total

expenses equals the change in net surplus/(deficit) in the balance sheet. The net decrease in cash and cash equivalents equals the change in cash and cash equivalents between the opening and the closing balance sheet.

	<b>kEUR</b>	<b>Relevant transactions</b>
<b>Revenue from non-exchange transactions</b>		
Taxes	25	9 (25 kEUR)
Property, plant and equipment acquired in non-exchange transactions		
<b>Revenue from exchange transactions</b>		
Revenue from service concession arrangement	25	12 (25 kEUR)
<b>Total revenue</b>	50	
<b>Expenses</b>		
Depreciation and amortisation	68	3 (4 kEUR), 5 (6 kEUR); 6-7 (38 kEUR), 11 (10 kEUR), 12 (10 kEUR)
General expenses	10	11 (10 kEUR)
Interest expenses	8.9	5 (0.2 kEUR); 11 (8.7 kEUR)
<b>Total expenses</b>	86.9	
<b>Net deficit</b>	<b>(36.9)</b>	
Surplus attributable to non-controlling interest	<b>0</b>	
Surplus attributable to Eucity	<b>(36.9)</b>	

*Table 11.18: Statement of Financial Performance 20X1<sup>15</sup>*

<sup>15</sup> The right column is for reproducibility only; the column is not part of the statement of financial performance.

	<b>kEUR</b>	<b>Relevant transactions</b>
<b>Cash flows from operating activities</b>		
Receipts from taxes	25	9 (25 kEUR)
Receipts from transfers		
Payments to suppliers	(10)	11 (10 kEUR)
<b>Net cash flows from (used in) operating activities</b>	<b>15</b>	
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment	(32)	1 (13 kEUR), 2(19 kEUR)
<b>Net cash flows from (used in) investing activities</b>	<b>(32)</b>	
<b>Cash flows from financing activities</b>		
Cash repayments of amounts borrowed	(30)	11 (8.7 kEUR + 21.3 kEUR)
<b>Net cash flows from (used in) financing activities</b>	<b>(30)</b>	
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>(47)</b>	
Δ Cash and cash equivalents 20X1 – 20X0	<b>(47)</b>	28-75

Table 11.19: Statement of Cash Flows 20X1<sup>16</sup>

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<sup>16</sup> The right column is for reproducibility only; the column is not part of the statement of cash flow. For deriving the cash flow from operations, Eucity chooses the direct method.

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## **Discussion topics**

- Non-cash generating assets vs. cash-generating assets – Implications for accounting
- Differences between cost for acquisition and self-construction
- Challenges in determining the taxable event according to IPSAS 23

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## **CHAPTER 12**

### **CONSOLIDATED FINANCIAL STATEMENTS**

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#### **SUMMARY**

This chapter introduces consolidated financial reporting in general and highlights public sector specifics. The aim is to provide insights for the reasons for consolidation, the peculiarities in the public sector and underlying theories of consolidation. The chapter shows organisational challenges for preparing consolidated financial statements and explains the differences between consolidated financial statements and whole of government accounts. The different types of influences and methods for consolidation are explained. A short overview about consolidated financial reporting of this book's partner countries is presented.

#### **KEYWORDS**

Consolidation, consolidated financial reporting, whole of government accounting

## 1. Introduction: A group as an accounting phenomenon

During the last chapters, financial statements (FS) of single sector public entities have been in the focus. However, often there are also public sector entities that have controlling relationships between each other. For example, a public sector entity does not only provide public services through its departments, i.e. the central administration, but also with the help of separate, legally independent operations such as public utility companies, municipal housing companies or wastewater associations. Together with the recent reforms in the public sector, an increase in collaboration between public sector entities and public corporations, and in public-private partnerships took place, which might require an “accounting tool that could provide financial information on the group as a whole”<sup>1</sup>.

In general, an economic entity (also called group) is formed of at least two legally independent entities: a (parent) controlling entity and (at least) one controlled entity (called subsidiary or special purpose entity in the private sector). This chapter deals with consolidated financial statements (CFS), i.e. financial information presented about the activities of a group of entities as if it were a single entity.<sup>2</sup> Thereby, this chapter focusses on vertical subordinate groups, but not on horizontal peer groups. CFS do not simply sum up the SFS of the separate entities belonging to the economic entity, but aggregate the transactions of the controlling entity and its controlled entities by using consolidation techniques. The first CFS were already prepared by private sector entities around the turn of the 20<sup>th</sup> century by U.S. accountants.<sup>3</sup> For multinational private sector entities, CFS have become the norm, but in the public sector, reforms primarily in Anglo-Saxon countries have driven the adoption of ‘consolidated accounts’ or even ‘whole of government accounts’.<sup>4</sup> However, as consolidated accounting represents several organisational challenges, there are also

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<sup>1</sup> Santis; Grossi and Bisogno (2019), p. 1.

<sup>2</sup> Aggestam-Pontoppidan and Andernack (2016), p. 308.

<sup>3</sup> J.P. Morgan is attributed to have insisted on consolidated accounts for his steel holding company in 1901, see Mueller; Gernon and Meek (1997), p. 103.

<sup>4</sup> See Brusca and Montesinos (2009), p. 243.

some jurisdictions<sup>6</sup> that withdrew the legal requirement for consolidated financial reporting in the public sector, e.g. for their local governments. This is the case e.g. in some federal states in Germany, in which small local governments do not need to prepare CFS anymore.<sup>5</sup> This has been explained with the reason that the costs for preparing the CFS do exceed the benefits of having consolidated data. Still, both practice and research are predominantly of the view that CFS foster accountability and support decision-making<sup>6</sup> as will be addressed in Subsection 3 of this chapter.

The aim of Chapter 12 is to introduce important terms with respect to CFS, which are to some extent comparable with the private sector, but also to highlight specific issues related to the public sector. Chapter 13 is instead devoted to consolidation methods relevant for IPSAS CFS. Thereby, both chapters take accrual-based financial statements as starting points. This chapter does not deal with aggregations used for a consolidated presentation of budgets neither building on the cash principle nor on the accrual principle.<sup>7</sup>

This Chapter 12 is structured as follows: Section 2 introduces the group as one fictional entity and the consolidation scopes, followed by Section 3 with reasons for consolidated accounting and theories of consolidation. Organizational challenges for setting up consolidated accounts are discussed in Section 4. The often debated question, how the reporting entity is to be defined and what are the boundaries of consolidated accounts, in particular with respect to the public sector, are in the focus of Section 5. Section 6 generally introduces the methods and procedures of consolidation, which are again addressed in Chapter 13 with IPSAS-based examples. Finally, a conclusion is provided in Section 7 together with a comparative table showing the status quo of consolidated financial reporting in the DiEPSAm partner countries.

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<sup>5</sup> For instance in the German federal state Mecklenburg-Vorpommern <https://www.regierung-mv.de/Aktuell/?id=147126&processor=processor.sa.pressemitteilung>

<sup>6</sup> See e.g. Chapter 8 for the terms accountability and decision-making support.

<sup>7</sup> See Bergmann et al. (2016), p. 772 for a short explanation of cash-based traditional approaches.



## 2. The group as a fictional entity and the consolidation area

The concept of an economic entity is based on the fiction that single entities, which are legally independent, from an economic point of view represent one entity. The idea of the fictional entity assumes that the single entities belonging to the group fictitiously lose their legal independence and are treated in accounting as legally dependent operations. Thereby, an economic entity (i.e. group) is created. Still, this group is neither legally existent nor subject to tax law.<sup>8</sup> Also, in a public sector context, Clarke and Dean (1993) stress that groups of governments with their controlled entities are “a fictitious structure, without legal power to exercise rights or incur physical or financial damage.”<sup>9</sup> In this context, it needs to be stressed, that the idea of the fictional accounting entity is not to be confounded with the entity theory, which is explained in the next section.

With respect to the composition of a group, the consolidation area – also called **scope of consolidation** – is to be clarified. Building on the approach adopted by private sector accounting, usually it is defined depending on the degree of influence exercised by the controlling (i.e. parent) entity. Chapters 12 and 13 of this textbook draw on the **concept of control** as the leading principle to define the scope of consolidation, because it is the principle predominantly used in the European public sector accounting (PSA) context. However, using the concept of control is not uncontested in public sector research and practice, as Section 5 of this chapter will address in more detail.

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<sup>8</sup> Küting and Weber (2018), p. 92.

<sup>9</sup> Clarke and Dean (1993) cited by Grossi et al. (2014).

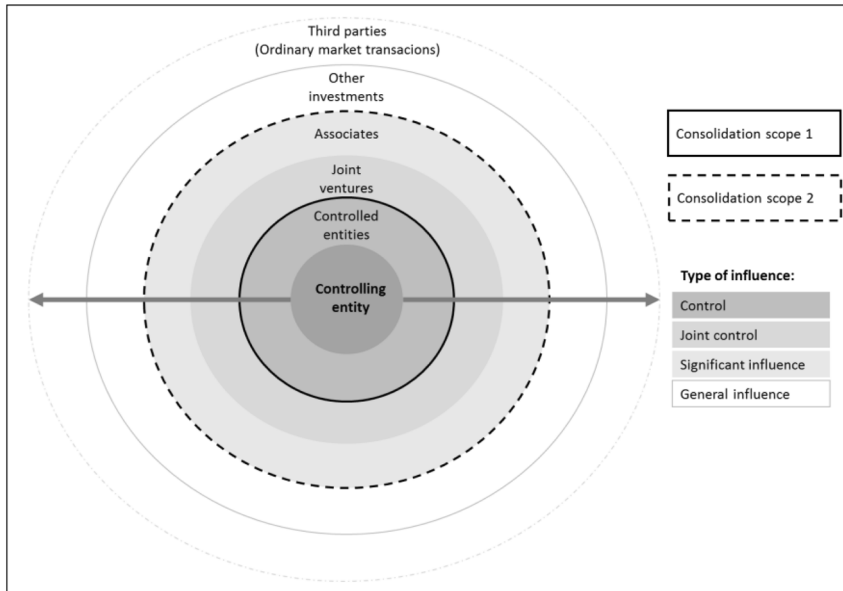


Figure 12.1: Scope of consolidation – between hierarchy and market

In a **narrow sense**, the **scope of consolidation 1** (see Figure 12.1) encompasses the parent entity and the entities that are only controlled by this entity. **Control** is seen as the strongest form of influence of one entity to another. Although the concept of control is internationally accepted and applied in order to identify the consolidation area, there is no common definition.<sup>10</sup> In terms of voting power (if applicable) the parent is presumed to have more than 50 percent of the voting power of an investee. Depending on the control pattern, control can be exerted either **directly** from the controlled to the controlling entity, and/or **indirectly**. A mixed direct and indirect control might be based on the total of voting rights, owned directly by a parent of the group and owned indirectly by at least one other controlled entity. The third scenario is an indirect control. In these cases, the economic entity consists of more than one chain of controlling relationships, which means, that a controlled entity holds control of another entity, i.e. it is itself a controlling (parent) entity. Such indirect control is also called pyramiding control. In any cases, the highest level

<sup>10</sup> See also Brusca and Montesinos (2009).

entity (the ultimate parent) includes financial information from all directly and/or indirectly controlled entities into a single set of CFS.

The **consolidation area** can also be viewed in a **broader sense** (scope 2), which also encompasses two types of non-controlled entities. Thereby, weaker but sufficient influence by the parent entity must be given to include also joint ventures and associate entities.

**Joint venture** mean that an entity together with at least one entity outside the group jointly and unanimously controls another entity. The jointly controlling entities share rights to the net assets of the joint venture.<sup>11</sup>

An **associate** is given, if the controlling entity holds a **significant influence** in another entity. Significant influence is prevalent if the parent entity does not have control over another entity, but it has a reasonable share in this entity.<sup>12</sup> This share provides influence to participate in the operating and financial policy decisions of an entity, but it is not control over those policies. In terms of voting power (if applicable) the investing entity is presumed to have significant influence, if it holds at least 20 percent of the voting power of an investee, but not more than 50 percent.

If the influence is weaker, (almost) normal 'business' (market) relationships are assumed, so that no consolidation techniques are required. Such investments are included in the CFS as financial assets as in the FS.

The consolidation area described above is primarily drawn from private sector accounting. However, using the private sector approach to identify the scope of consolidation in the public sector can lead to several practical problems as raised by e.g. Grossi and Steccolini (2015) and Bisogno et al. (2015). Depending on how the relationship between one entity and another is defined (e.g. either controlling, joint control or significant influence or none) the method of consolidation might differ. Typically, (depending on the accounting standards applied) **controlled entities are fully consolidated**, whereas associated entities or joint ventures are not. This

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<sup>11</sup> For the distinction between joint operations and joint ventures as variants of joint arrangements, see Chapter 13.

<sup>12</sup> Krimpmann (2015), p. 67.

can lead to a “negative effect in terms of financial disclosure” in cases of entities with “fragmented or mixed public-private ownership” as the assets and liabilities of associates and joint ventures are not shown in the CFS, although a public sector entity is retaining financial responsibility.<sup>13</sup> Before the consolidation methods are explained, the objectives and theories of consolidation and the challenges of preparing CFS are addressed.

### 3. Theories and objectives of consolidated accounts

Accounting theories have already been addressed in Chapter 5 by explaining that these represent “a set of broad principles that provide a general frame of reference by which accounting practice can be evaluated and guide the development of new practices and procedures”. With respect to accounting theories, that can serve as a reference for consolidation, the (1) entity theory, (2) parent company theory and the (3) proprietary theory are relevant, which are popular accounting approaches in the private sector, but are also discussed in the public sector context.<sup>14</sup> These three theories refer rather to the technicalities of consolidation and in particular provide guidance on how non-controlling interests (also called minority interests) are to be treated. Non-controlling interests specify the remaining interest in net assets that is held by outside investors in controlled entities, but not by the controlling entity. In research, there are also other theories that are relied upon in order to discuss users and usefulness of CFS, such as the legitimacy, institutional, agency, or stakeholder theory.<sup>15</sup> Still, a basic accounting theory for explaining the research in this field so far has not been found.<sup>16</sup>

According to the (1) **entity theory**, the controlled entities are regarded as dependent permanent operations of the parent. Entity theory takes the perspective of the economic entity itself, separated from its

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<sup>13</sup> Grossi and Steccolini (2015), p. 330.

<sup>14</sup> See also Chapter 5.

<sup>15</sup> Santis; Grossi and Bisogno (2018).

<sup>16</sup> See Santis; Grossi and Bisogno (2018), p. 238 with reference to other papers.

owners. Consequently, both the owners of the parent entity and all (minority) owners of non-controlling interests of the controlled entities are ‘shareholders’ of the economic entity. This perspective serves for all considerations of classification, valuation and netting the assets and liabilities of the controlling and the controlled entities. However, the scope of application of the entity theory is generally limited to the CFS. For relationships with third parties (shareholders (if applicable), creditors, and tax authorities), the individual FS remain decisive, so that intra-entity offsetting has no legal effect. Entity theory is seen as “fundamental to modern accounting as well as more appropriate, especially in the public sector” than the parent company theory, which is explained subsequently.<sup>17</sup>

**(2) Parent company theory** takes the viewpoint of the controlling (parent) entity in order to represent the economic entity in the CFS. According to this view, the controlling entity has the power to control the assets and liabilities of other entities to the full extent, i.e. not only with a proportionate share. A full consolidation approach is applied by separately recognising the claims on the net assets of non-controlling interests as a kind of liability and the claims of the non-controlling interests in the surplus or deficit as income or expenses.<sup>18</sup> When the individual FS are aggregated, positions in the balance sheet and income items (or cash flows) are to be split into claims inside and outside the economic entity.

From the point of view of **(3) proprietary theory**, the economic entity is defined narrower than according to the previous two theories. Thus, the CFS has the function of an extended FS of the controlling entity. The extension relates to the items of the balance sheet, income statement and cash flow statement, to which the controlled entity is (proportionately) entitled. As a result, the non-controlling interests are to be regarded as liabilities, their pro rata profits for the period as expenses and their pro rata inter-entity profits as realised from the point of view of the controlling entity. CFS prepared in accordance with the proprietary theory therefore do not provide a complete insight into the net assets, financial position and results of operations of the

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<sup>17</sup> See e.g. Bisogno et al. (2015), p. 312.

<sup>18</sup> See e.g. Bisogno et al. (2015).

group (as controlled by its ultimate parent). From an economic perspective, it is regarded as an inappropriate information and decision-making tool.<sup>19</sup>

Depending on the theory, also the **objectives of consolidated financial reporting** differ. Based on the entity theory, the CFS have a pure information function. They are intended to provide a true and fair view of the group's position. In contrast, according to some national accounting standards, SFS also have a profit/revenue distribution function. In particular in the municipal context, the increase in service delivery by public corporations hampers the financial transparency of FS of local governments as the reports only represent a partial view of the municipalities' economic and financial activities, as the financial consequences of controlled entities, joint ventures, and associates are not adequately considered.<sup>20</sup>

The objective of CFS is seen to "provide relevant and undistorted financial information to internal and external stakeholders that encompasses every subsidiary or department and clears out any internal transactions, as well as mutual assets and liabilities".<sup>21</sup> To offer such view, CFS are argued to be necessary also in the public sector context.<sup>22</sup> However, Walker (2009) warns that other financial statements or budget reports might be more suitable for some information needs, e.g. to inform about efficiency of service delivery. Based on theoretical considerations, Walker (2009) lists the following routinely made judgements, for which CFS prepared at the central government level might deliver the necessary (decision useful) information:<sup>23</sup>

1. Results and sustainability of a government's financial management practices;
2. Capacity to continue to deliver existing levels of services (or to enhance those services);
3. Manner in which government is pricing services;

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<sup>19</sup> See e.g. Bisogno et al. (2015).

<sup>20</sup> Tagesson (2009).

<sup>21</sup> Bergmann et al. (2016), p. 766.

<sup>22</sup> See e.g. Heald and Georgiou (2000) and Lande (1998).

<sup>23</sup> See Walker (2009), p. 200, Table 3.

4. Extent to which a government is funding or delivering subsidised services;
5. How government has spent taxpayers' funds and any borrowings;
6. Whether a government is incurring obligations which will impose burdens on future generations;
7. Attractiveness of investing in government securities;
8. Attractiveness of maintaining investment in government securities;
9. Financial circumstances of regional governments vis-à-vis other regional (state) governments; and
10. Financial circumstances of nations vis-à-vis other nations.

However, it needs to be stressed that these points refer to a special category of CFS and do not apply to CFS at all government levels. Thereby, Walker (2009) also stresses and criticises, that the users and addressees of CFS need to be identified first in order to figure out their information needs and thus to adjust the objectives of CFS. He suggests that even several kinds of CFS might be necessary depending on the information needs. This means that even multi-column CFS might be required, e.g. the first column entails information about primary government, further columns provide aggregated data about different segments of the group and a final column provides information about the entire group.

The **addressees and users** of public sector CFS are strongly debated in practice and research.<sup>24</sup> Usually, the following users/stakeholders are discussed to benefit from the CFS by greater transparency and better support for decision-making processes: **internal users** such as politicians, managers, and employees and **external stakeholders** such as citizens, voters, taxpayers, suppliers, other public administrations, and financial institutions.<sup>25</sup> For internal users, CFS can represent a tool for “steering and controlling the direct and indirect provision of public services” and “public decision-making and programming and controlling the different public policies”.<sup>26</sup> With respect to external stakeholders, banks can use CFS

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<sup>24</sup> See e.g. Walker (2009) and Bergmann et al. (2016).

<sup>25</sup> Santis; Grossi and Bisogno (2018), p. 242.

<sup>26</sup> Bergmann et al. (2016), p. 766.

in order to assess creditworthiness of the economic entity and for rating agencies, CFS are useful to assess solvency and financial risks.<sup>27</sup> However, empirical findings about the actual usefulness are sparse.<sup>28</sup>

#### 4. Organisational challenges

The compilation and presentation of CFS can be an organisational challenge because it contains a range of steps to be conducted. This process may also depend on the legal requirements, i.e. the jurisdiction the public sector entity is located in. In the following, a (non-exhaustive) enumeration of challenges with a particular focus on the public sector context are listed and explained subsequently:<sup>29</sup>

- 1) Implementation of consolidated financial reporting;
- 2) Initial consolidation;
- 3) Requirement of uniformity;
- 4) Timely organisation of the consolidation process;
- 5) Coordination of audits.

The **(1) implementation of consolidated financial reporting** needs to be well prepared before its start. Consolidated financial reporting can be considered to be the supreme discipline of accounting and financial reporting, because it concerns all kinds of economic transactions on several layers of an economic entity. Therefore, skilled personnel are needed, which are experienced in applying the consolidation methods and able to oversee the relevant consolidation areas in the economic entity. As such, in particular for the public sector, there is a high demand for qualified personnel. This also means that enhanced personal costs, costs for training and consulting are incurred. The volume of data for consolidated accounting and the time required for its transfer generally lead to the need

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<sup>27</sup> Bergmann et al. (2016), p. 766.

<sup>28</sup> Walker (2009); Bergmann et al. (2016).

<sup>29</sup> See also Krimpmann (2015) or Lorson; Poller and Hausteiner (2019) for more detailed explanations.



for enhanced information technology systems and the respective accounting software.<sup>30</sup>

In particular, with respect to **(2) initial consolidation** in the public sector, the determination of its date can be in question. Of course, this date will also depend on national or local accounting standards and an obligation to present CFS and also on the necessary aforementioned preparations. The date of initial consolidation is relevant for the revaluation of the assets and liabilities of the newly consolidated entities. In the public sector, in particular when initially starting with consolidated accounting, in most cases the acquisition transaction of the controlled entity will be fictitious. In addition mostly, an entity does not only become a controlled entity at the point in time when it is included in the CFS, but before, when the controlling (parent) entity obtains control. This is particularly the case in countries in which accrual accounting is just adopted. In this respect, a focus on the time of acquisition is associated with considerable problems with regard to revaluation of assets and liabilities at fair value as of the acquisition date.

Preparing CFS involves specific **(3) requirements of uniformity**, i.e. that the FS of the consolidated entities are based on the same criteria with respect to recognition of items, measurement and structure.<sup>31</sup> However, a particular challenge to achieve is the harmonisation of the FS of the different decentralised entities drawn up according to different accounting standards.<sup>32</sup> A particular public sector problem is when some entities still use cash accounting, whereas other entities in the group use accrual accounting. Such problem is hardly to overcome.<sup>33</sup> In addition, whereas a local government entity might use PSA standards, its controlled entities could be private sector entities, which are based upon private sector accounting standards. This would lead to differences in, for example

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<sup>30</sup> Bergmann et al. (2016), p. 766.

<sup>31</sup> See e.g. Walker (2011) with an in-depth analysis of differences in the (non-)recognition and valuation between the jurisdictions, consolidated in the Australian government financial report.

<sup>32</sup> Brusca and Montesinos (2009).

<sup>33</sup> Brusca and Montesinos (2009).

measurement of assets and liabilities or in reporting dates. Therefore, the FS of the entities to be included in the CFS need to be prepared before consolidation, which can lead to three levels of FS (in particular with respect to the balance sheet (BS) and income statement):

- FS I: prepared according to local (national) accounting standards;
- FS II: prepared according to accounting standards applied within the economic entity and aligned to the same balance sheet date (if applicable: according to a group individual consolidated accounts manual);
- FS III: of the controlled entities after revaluation, i.e. revealing and amortisation of hidden reserves and burdens.<sup>34</sup>

At the date of consolidation, controlled entities, joint ventures and associates will have prepared **FS I (local FS)** according to their national accounting standards. In order to establish conformity of the FS of all entities belonging to the economic entity, the consolidated entities need to prepare additional **FS II** for harmonization, if the accounting standards applied in the FS I do not comply with the standards applied for the CFS. For this purpose, the controlling entity might use a consolidated accounts manual in order to ensure completeness of the accounting approach and uniformity of valuation e.g. by prescribing in which way generally existing recognition, valuation or disclosure options are to be exercised. The **consolidated accounts manual** serves as a guideline for the consolidated entities and incorporates the uniform balance sheet date, accounting, disclosure and measurement methods for the economic entity. It may consider structures in the economic entity, reporting structures and the accounting environment and may also prescribe a chart of accounts to be used. Those guidelines will vary between different groups because of individual decisions in fields, where options and management judgement has to be exercised. Due to the complexity of the issues to be prescribed, the consolidated accounts manual should be documented in writing (at least

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<sup>34</sup> See also Chapter 13.

in the group's main language) and agreed with the body of audit. If even foreign controlled entities are involved, binding regulations must be made regarding language (of the report and communication for reporting) and currency conversion.

A further challenge can lie in the **(4) timely organisation of the consolidation process**. Being able to comply with the preparation, auditing and disclosure obligations is to be strictly organised with respect to the time horizon and possible deadlines for reporting and auditing. A binding timetable should be drawn up and enforced for all entities in the scope 1 and 2 of consolidation in order to ensure timely preparation.

Finally, with respect to the **(5) coordination of audits**, national or local audit law needs to be adhered to when setting up CFS. The audits of the FS of the controlled entities, joint ventures and associates must be coordinated with the audit of the CFS.

These challenges include one-off issues (e.g. the preparation of the consolidated accounts manual) and recurring issues such as the maintenance of the consolidated accounts manual on the basis of a monitoring of changes to accounting standards in conjunction with an assessment of the associated changes, e.g. the maintenance of schedules and the generation, evaluation and audit of data.

## **5. Scope and boundaries of consolidated accounts**

The consolidation area, i.e. the type of entities to be included in CFS, has already been explained in Section 2. It is a critical and also highly debated topic in the public sector context. Further issues, which are explained in this section, are the criterion to define the consolidation area (i.e. the control concept) and the definition of the reporting unit. Both of these aspects also influence the scope and boundaries of consolidated accounts.

In Section 2, the scope of consolidation was distinguished based on the **concept of control**. This means that an organisational and legal perspective is applied. Still, control is differently defined in national and international accounting standards, which in turn can lead to differences

in the composition of the group. Mostly, control is based on ownership or rights to exercise power based on a substance-over-form control relationship as in the case of IFRS 10 and IPSAS 35. Whether control is prevalent, also depends on the national law and the government structure. In some countries, the general government might have control over its states and local governments, whereas in other countries due to different legal settings such control is not given. Also, in the public sector context, the definition of control can be critical if distinguishing between market versus political forces. For example, entities, which are economically dependent on a public sector organisation due to being funded through the government budget, are not considered controlled and not consolidated in IPSAS CFS, as mere budget dependence is not seen as a sufficient indicator of control according to IPSAS 35.26b.

The example of budget dependence, i.e. economic dependence, shows that the control concept is not the only criteria that can be used for defining the scope of consolidation. In particular in the public sector, **other perspectives and approaches** could be appropriate **to define the scope of consolidation**, for example a so-called statistical perspective, a risk perspective or a budget or budgetary perspective.<sup>35</sup> For example, in the USA, the consolidation area is defined based on financial accountability and budget dependence and in Sweden organisational law is the basis.<sup>36</sup> Still, the control concept is predominantly relied upon in Europe and also in the DiEPSAm partner countries as the comparative Table 12.1 shows.

Besides the concept of control, the **definition of the reporting unit** is strongly linked to the consolidation area. More generally, it refers to the question, which government levels are to be included in one economic entity and which entities to exclude. On the most general level, consolidated accounts and whole of government accounts can be distinguished in this context. In some countries, such as Portugal or Finland, CFS are prepared for the single economic entities in the country (e.g. single local governments or the central government). These are also called **individual consolidated**

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<sup>35</sup> See Bergmann et al. (2016), p. 769 for a detailed description of the perspectives.

<sup>36</sup> Bergmann et al. (2016), p. 773.

**accounts.**<sup>37</sup> In other countries, a broader approach is applied, which is also known as **whole of government accounting (WGA)** or **whole of government financial reporting (WGFR)**. WGFR is not very widespread, but only applied by few countries.<sup>38</sup> In the UK or in New Zealand, the process of consolidation includes all of the different levels of government, and for the case of the UK even the public corporations. WGFR aims to present “the overall financial position of the government of a particular jurisdiction [...] via the consolidation of the financial statements and transactions of all the entities controlled by the jurisdiction’s government”<sup>39</sup> by producing “statements encompassing the whole of a specific tier of government”.<sup>40</sup> The process of WGFR is very data intensive and complex.<sup>41</sup> In particular for countries organised as federal states, WGFR is argued to be very challenging, but “less useful”.<sup>42</sup>

Comparisons are often drawn between WGFR and government financial statistics (GFS).<sup>43</sup> GFS focuses at the general government sector<sup>44</sup> and provides macroeconomic information concerning each of the different sectors of the economy. To some extent, the GFS also present a consolidated view of the different sectors of the economy, and thereby also produce a consolidated view of the general government sector. But as control is not the guiding principle for defining the boundaries of consolidation, GFS do not produce the same type of data as CFS or WGFR, given that the latter are based on the concept of control.<sup>45</sup> Figure 12.2 shows the financial reporting entity from a macroeconomic point of view, with its differentiation between the general government sector and public non-financial and financial

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<sup>37</sup> Chow et al. (2015), p. 6.

<sup>38</sup> Brusca and Montesinos (2009), p. 243.

<sup>39</sup> Santis; Grossi and Bisogno (2018), p. 231 with further references.

<sup>40</sup> Walker (2009), p. 173.

<sup>41</sup> Brusca and Montesinos (2009).

<sup>42</sup> Bergmann et al. (2016), p. 776.

<sup>43</sup> See Chapter 6 for more details.

<sup>44</sup> See Chapter 1 for a definition.

<sup>45</sup> Bergmann (2009).

corporations (in bold rectangles).<sup>46</sup> CFS also include controlled public non-financial and financial corporations. Due to these differences in the entities included, there are attempts to harmonise macroeconomic GFS and micro economic accounting, e.g. in Australia.<sup>47</sup>

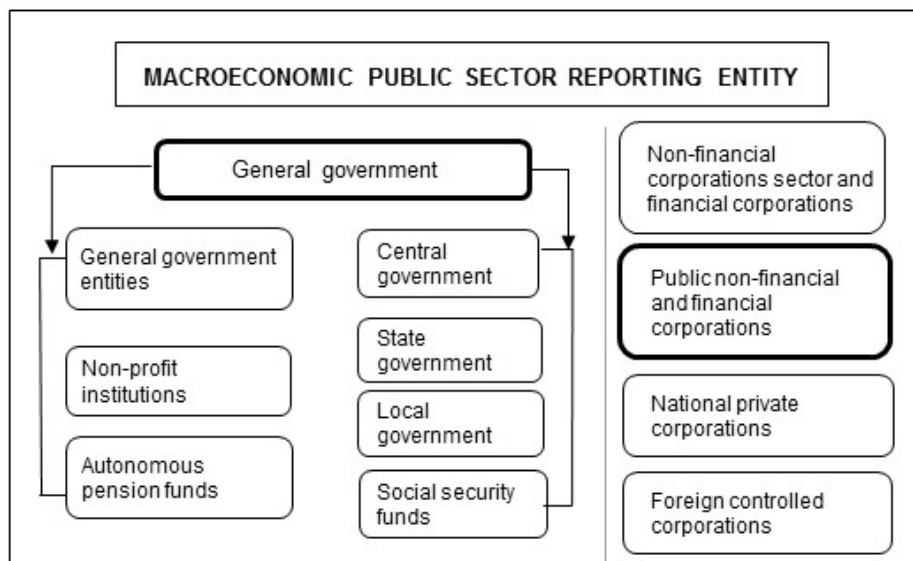


Figure 12.2: Macroeconomic public sector reporting entity  
(Source: Brusca and Montesinos, 2009)

Even in those countries that produce WGFR, several differences lead to the fact that the reports would not be comparable because the definition of the reporting entity differs.<sup>48</sup> Thus, there are disparities of what is encompassed by WGA as shown in Figure 12.3, reflecting different ways of defining WGFR.

<sup>46</sup> See Brusca and Montesinos (2009) for more detailed explanations.

<sup>47</sup> Brusca and Montesinos (2009), p. 247.

<sup>48</sup> Brusca and Montesinos (2009), p. 243.

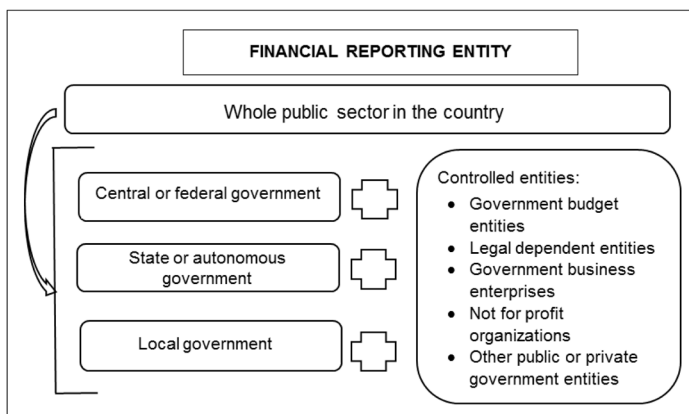


Figure 12.3: *Financial reporting entity* (Source: Brusca & Montesinos, 2009)

In the UK, the whole of government accounts are seen as the “most consequent approach to CFS”. These comprise all state levels and public corporations. Notable exclusions are that the Parliament and the National Audit Office are not included in the consolidation area in order to stress in particular the Parliament’s role in holding government to account. Also in the UK WGFR, nationalised banks are not consolidated.<sup>49</sup>

The question whether also to consolidate entities that have dissimilar operations compared to the controlling entity – such as banks –, is highly contested and does not only refer to WGFR, but also to individual CFS. To include entities with “strong balance sheets”, e.g. national banks, financial intermediates or insurances, as controlled entities by full consolidation would mean that all the assets of those entities are shown in the consolidated balance sheet. This could lead to misinterpretations of the CFS in terms of high resources of the economic entity. Therefore, such entities with dissimilar activities are e.g. in Canada not fully consolidated, but included according to the equity method or in Austria or France not included in the CFS at all.<sup>50</sup> In such cases, divergence from full consolidation could be reasonable.

<sup>49</sup> Chow et al. (2015).

<sup>50</sup> Bergmann et al. (2016), p. 779.

Overall this section showed that there is no ultimate solution for the definition of the reporting entity and the scope of consolidation. As such, there will be differences between the CFS of different public sector entities on an international scale.

## 6. Methods and procedures of consolidation

As highlighted in Section 2, Figure 12.1 depending on the type of influence and also the accounting standards, different methods of consolidation are to be used. The consolidation method refers to the procedure used in the preparation of CFS and the inclusion of entities in the CFS. The following three methods are introduced below subsequently,<sup>51</sup> followed by an explanation of the procedures of consolidation needed for the full consolidation method:

- 1) Full consolidation;
- 2) Proportional consolidation and
- 3) Equity method.

In the case of **(1) full consolidation** (also called line-by-line consolidation), the assets, liabilities and net assets/equity as well as the revenues and expenses of the controlled entities are included in full in the CFS on a line-by-line basis, irrespective of the controlling entity's share in the net assets of the controlled entities. For non-controlling interests, an adjustment item must be formed for the amount of their portion in net assets in the consolidated balance sheet. Accordingly, in the consolidated statement of financial performance, the share of surplus or deficit attributable to non-controlling interests included in the net surplus or deficit for the reporting period must be disclosed. Transactions between the entities are to be eliminated in full. This includes offsetting of mutual liabilities (and receivables) and elimination of both double counting and economic

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<sup>51</sup> See e.g. Mori (2016) and Krimpmann (2015) for detailed explanations.



transactions not yet realised with third parties. As such, full consolidation requires consolidation of net assets/equity, debt intra-economic entity revenues and expenses and the elimination of interim results. These consolidation procedures are explained at the end of this section.

When applying **(2) proportional consolidation**, the assets, liabilities and net assets/equity of the controlled entities as well as the revenues and expenses are only included the CFS, to the extent of the controlling entity's portion in the net assets of the controlled entities. Also here, similar items in the FS are combined, but only to the extent "owned" by the controlled entity, e.g. 60 or 80 percent of a piece of land or a building or a provision. Non-controlling interests are excluded from the CFS, so that only the controlling interest of the parent entity in other entities is shown.

Strictly speaking the **(3) equity method** is not a method of consolidation. Depending on the national accounting standards, it is a commonly used method of integrating associates and joint ventures – and in the case of Germany also (because of non-materiality) non-consolidated controlled entities – into the CFS. When applying the equity method, the shares of an entity are initially recognised at cost and in subsequent periods adjusted for the post-acquisition change in the reporting entity's portion in the net assets/equity of the entity.<sup>52</sup> Thus, the assets and liabilities of entities included by the equity method are not shown in the CFS.

The aim of full consolidation is that the CFS appears as if the consolidated entities were actually a single entity. This implies that all intra-economic entity transactions need to be eliminated. Full consolidation encompasses four different **consolidation procedures**, which are shortly explained in the following by highlighting public sector specifics; examples are shown in Chapter 13:

- 1) Net assets/equity consolidation;
- 2) Debt (and receivables) consolidation;
- 3) Revenue and expenses consolidation and
- 4) Elimination of unrealised gains or losses.

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<sup>52</sup> Bergmann et al. (2016), p. 771. See example provided in Chapter 13.

**(1) Net assets/equity consolidation** is also known as capital consolidation. The purpose is to prevent the equity of the controlled entity from being recorded twice, by offsetting the carrying amount of the investment of the controlled entity against the controlling entity's share of the equity of the controlled entity. If the carrying amount of the investment does not equal controlling entity's share of the equity, the difference is to be accounted for as either goodwill or badwill. Different methods are available for this area of consolidation, e.g. the acquisition methods, the pooling of interest method or the fresh start method with differences regarding revaluation of the consolidated entities' assets and liabilities<sup>53</sup> as depicted in Table 12.1.

Entity	Controlling entity	Controlled entity
Valuation of assets/liabilities	1 Fair value	
	2 Book value	
<b>Pooling of interest method</b>	2	2
<b>Acquisition (or purchase) methods</b>	2	1
<b>Fresh start method</b>	1	1

*Table 12.1: Differences in valuation between the methods of net assets/equity consolidation*

Net assets/equity consolidation is the first step when initially consolidating controlled entities and exemplified in Chapter 13.

In the course of **(2) debt consolidation**, intra-entity receivables and liabilities as well as all other loans, provisions and corresponding prepaid expenses must be eliminated. The aim is to avoid double counting and thus to eliminate the annual effect of intra- entity debt relationships on the net asset situation. In the simplest case, the items with the character of mutual receivables and payables are mirrored (in the same amount) with no offset differences. Such debt relationships are neutralised by simply “omitting” them (without affecting surplus or deficit). Debt consolidation must be

<sup>53</sup> See Munter (1999) for an explanation of the methods.

(partially) recognised in surplus or deficit, if offset differences arise because liabilities and receivables have different amounts. A distinction can be made between “real” and “unreal” offset differences:<sup>54</sup>

- Real offset differences arise from different recognition and measurement rules, which are not eliminated by an adjustment to uniform accounting rules in the course of preparing the FS II.
- Unreal offset differences, are based on accounting deficiencies, i.e. these arise due to timing differences in the booking of those transactions in the accounts of the engaged entities or incorrect accounting records and should therefore be corrected before the CFS are prepared.

The aim of **(3) revenue and expenses consolidation** is to take account of the principle of realisation: Revenue and expenses may only be recognised, if they have been realised vis-à-vis third parties outside the economic entity. All other (intra-economic entity) supply and service relationships, interest expenses and income as well as income from investments are to be treated - in accordance with the entity fiction (see Section 2) - as relationships between dependent operations. Hence, revenue and expenses must be consolidated, unless these are related to increases in inventories or own capitalised work. Depending on the local accounting standard, revenue and expenses consolidation may be omitted if it is of minor importance for the CFS. If corresponding revenue and expenses of the same amount are offset against each other, they are to be treated in the same way as described for debt consolidation, i.e. these are to be written off against each other. The treatment of offset or netting differences is as explained for debt consolidation.

A particular **offset difference** in the public sector can result from **sales tax**. The consolidation of economic transactions, in which one entity is subject to sales tax and the other entity is not eligible for sales tax deduction, is largely unclear. Various solutions are applied and discussed

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<sup>54</sup> See Krimpmann (2015), pp. 278 ff.

in practice. For example, it is possible that the offset difference remains in the consolidated expenses or that the offset difference is eliminated via the other expenses.<sup>55</sup>

A public sector specific case of revenue and expenses consolidation is **tax consolidation**, i.e. if one of the consolidated entities pays tax to another consolidated entity (e.g. a local authority).<sup>56</sup> To prepare CFS, tax revenue (or expenses from tax refunds) of the local authority must be offset against the corresponding tax expenses (or income from tax refunds) of the entities to be consolidated. Special features for tax consolidation arise, e.g. from combined federal, state and local taxes: One public sector entity is entitled to collect these taxes, but the tax is shared between public sector entities at different government levels on a pro rata basis. Combined federal, state and local taxes can be shown as liabilities from tax distribution. A further challenge in tax consolidation arises from different recording and realisation dates for the consolidated entities. These can result from the imparity (of revenue and expenses recognition) principle, for example, in the case of corporation tax: While the paying entity must recognise the corporation tax expense as a provision (reduced by advance payments) on the reporting date, the receiving state or federal government may only realise the income from corporation tax once it has been sufficiently specified (e.g. with the publication of the tax assessment notice). Due to the recognition as a provision by the paying entity and the missing recognition of a receivable in the receiving entity, offset differences regularly arise, which must be eliminated in the course of consolidation with an effect on surplus or deficit in the CFS.

A further specific public sector application of this procedure of consolidation refers to the **consolidation of grants**, depending on how grants are recorded by the grant provider and recipient. Investment grants can lead to an asset item for one of the entities involved and a liability item for the second entity involved. Within consolidation, these two items are to be eliminated and accounting records to release the item (intangible assets)

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<sup>55</sup> See e.g. Lorson et al. (2016), Note 715.

<sup>56</sup> See e.g. Lorson et al. (2016), Notes 720 ff.

with an effect on surplus or deficit are to be reversed. In the case of income subsidies, the offsetting is completed analogous to the consolidation of revenue and expenses.

Finally, the **4) elimination of unrealised gains or losses** is to be carried out. Gains and losses based on inter-economic entity deliveries and services that have not yet been realised with third parties must be eliminated from the CFS unless they are of minor materiality. To this end, the valuation of these assets must be adjusted. There may also be a requirement to eliminate interim results for entities which are included in the CFS using the equity method. Like for the other procedures of consolidation, an example is shown in Chapter 13.

Usually, no group accounting system for the economic entity will exist. This means, that each reporting period the SFS of the consolidated entities need to be harmonised (SFS II) and prepared for consolidation (SFS III). Then, depending on the type of entity to be consolidated, a respective method of consolidation is to be implemented followed by the steps described for the procedures of consolidation in the case of full consolidation. In each reporting period, these steps are to be repeated until the current reporting period (only in order to establish the status quo), followed by the actual consolidation records for the current reporting period. The application of the equity method is explained in Chapter 13.

## **7. Conclusion**

This chapter aims to give an introduction into terms and processes related to compiling CFS. Due to an increase in relationships of public sector entities with other entities, CFS can lead to enhanced transparency and can also support decision-making in the public sector. Although consolidated financial reporting is a complex and quite technical process, it can be seen as an important development in PSA and reporting. However, there are many different approaches regarding the definition of the

consolidation scope, the definition of the reporting unit and differences in the application of the consolidation methods on an international scale.

As a summary of this chapter, Table 12.2 provides an overview about consolidated financial reporting in the DiEPSAm partner countries. Like for the status quo of individual financial reporting shown in Chapter 1, the current situation is quite heterogeneous. However, commonalities lie in the definition of the consolidation area according to the control concept. As stressed in this chapter, the UK can be seen to pursue the most consequent approach to CFS (WGA). Chapter 13 continues to explain consolidation methods by specifically drawing on IPSAS and giving some example calculations.

	Country				
	Austria	Finland	Germany	Portugal	UK
<b>State of consolidated financial reporting</b>	<ul style="list-style-type: none"> <li>Mandatory CFS at central level only, ongoing transition to accrual accounting for all government levels;</li> <li>After completion: Mandatory CFS for central, federal and local governments<sup>57</sup></li> </ul>	<ul style="list-style-type: none"> <li>Central level: Consolidated central government financial statement (CCGFS) (less than 90 accounting entities);</li> <li>Mandatory CFS for municipalities using the acquisition method or pooling of interest method<sup>58</sup></li> </ul>	<ul style="list-style-type: none"> <li>Heterogeneous: at central and state level (if accrual only): Voluntary CFS (currently by only 3 federal states);</li> <li>Mandatory CFS for municipalities<sup>59</sup> that are located in 12 federal states</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory CFS at central and local level</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory CFS at central and local level</li> </ul>
<b>WGA?</b>	No	No	No	No (future plans)	Yes
<b>Principle for scope of consolidation</b>	Control	Control	Control	Control	Control
<b>Notable exceptions</b>	<ul style="list-style-type: none"> <li>Only consolidation of directly controlled entities</li> </ul>	<ul style="list-style-type: none"> <li>CCGFS does not contain government funds, government utilities, state owned companies or universities</li> </ul>	<ul style="list-style-type: none"> <li>Controlled entities with dissimilar activities to those of the controlled entity in most jurisdictions are not consolidated.</li> </ul>		<ul style="list-style-type: none"> <li>WGA does not include: Parliament, National Audit Office, Nationalised Banks</li> </ul>

Table 12.2: Status quo of consolidated accounting in the DIPSAm countries

(Source: Brusca et al. (2015))

<sup>57</sup> <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20009319> §23

<sup>58</sup> Referred to as “parity method”: no goodwill or gains are recorded in the consolidation (See Oulasvirta in Brusca et al (2015), p. 73).

<sup>59</sup> With recently implemented exceptions for small local governments in some federal states.

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## **Additional readings**

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## **Discussion topics**

- Reasons for consolidated financial reporting in the public sector
- Information needs fulfilled by public sector CFS
- Consolidation methods: Which suits best in the public sector?

## CHAPTER 13

### CONSOLIDATION METHODS

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#### SUMMARY

This chapter aims to illustrate consolidated financial reporting according to IPSAS by applying consolidation methods. Public sector combinations according to IPSAS are introduced. The process of consolidated financial reporting is explained by illustrating full consolidation comprising of the four different procedures of consolidation and the application of the equity method. The relevant steps are illustrated by short case examples. This IPSAS-focused chapter informs about when consolidated financial statements must be prepared, which entities must be included and by which methods, how to set up the accounting records for consolidation and relevant consolidation procedures.

#### KEYWORDS

Consolidation, consolidated financial reporting, consolidation methods, full consolidation, equity method, public sector combinations, goodwill

## 1. Introduction

The preceding Chapter 12 introduced important terms with respect to consolidated financial statements (CFS) and highlighted conceptual problems related to the public sector. The consolidation methods and accompanying procedures have been shortly introduced and explained; however, without a specific focus on International Public Sector Accounting Standards (IPSAS). Chapter 13 is devoted to consolidation methods relevant for IPSAS CFS. Thereby, the terms introduced in Chapter 12 serve as a basis. The relevant steps in the consolidation process are illustrated by short case examples, drawing on the municipality Eucity that has already been subject of the case study presented in Chapter 11. Whereas for Eucity, financial statements (FS) have been prepared for the local government only, this chapter now focuses on CFS, i.e. Eucity and its controlled entities, joint ventures and associates. However, due to the complexity of the consolidation processes, not a full case study is presented, but only selected examples. After this IPSAS-focused chapter, readers will know when IPSAS CFS must be prepared, which entities must be included and by which methods, how to set up the accounting records for consolidation and the relevant consolidation procedures.

Chapter 13 is structured as follows: Section 2 provides further definitions and background of consolidated financial reporting according to IPSAS. In particular, the term public sector combination (PSC) is introduced. Section 3 gives an overview about the relevant IPSAS that are needed for consolidated financial reporting. The process of consolidated financial reporting is subject of Section 4 by describing the IPSAS control concept, the principles of uniformity and the process of consolidated financial reporting. In Section 5, full consolidation and its relevant consolidation procedures are explained by examples. Finally, Section 6 introduces the application of the equity method with a conclusion provided in Section 7.

## 2. Definitions and background

A public sector entity that prepares its accounts in accordance with the accrual-based IPSAS and holds investments in a controlled entity, an associate or a joint venture may present separate financial statements (SFS), in which these investments are accounted for at cost, as financial instruments according to IPSAS 29 or using the equity method as described in IPSAS 36 (IPSAS 34.8; 34.12). If the reporting entity exercises control over one or more entities, CFS have to be presented for the economic entity (i.e. group) (IPSAS 35.5). CFS are FS of an economic entity in which the elements of the financial statements, namely liabilities, assets, net assets/equity, revenue and expenses and cash flows, of the controlling and controlled entities are presented as those of a single economic unit (IPSAS 35.14).

Like for FS,<sup>1</sup> also a complete set of IPSAS CFS consists of

- a) A statement of financial position;
- b) A statement of financial performance;
- c) A statement of changes in net assets/equity;
- d) A cash flow statement;
- e) A comparison of budget and actual amounts, if the entity makes publicly available its approved budget (either as separate FS or budget column in the FS);
- f) Notes, and
- g) Comparative information.

In general, a group is formed through a public sector combination (PSC).<sup>2</sup> A PSC is the bringing together of separate operations in a public entity (IPSAS 40.5). An operation is an “integrated group of activities and assets and/or liabilities that is capable of being managed or conducted for

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<sup>1</sup> See Chapter 8.

<sup>2</sup> However, mostly in the public sector, the group will already exist before initial consolidation.

the purpose of achieving an entity's objectives, by providing goods and/or services" (IPSAS 40.5).<sup>3</sup>

The PSC might occur either by mutual agreement or by compulsion (for example by legislation). IPSAS 40 contains no provisions or restrictions with regard to the legal structure of PSCs or the abandonment of the legal capacity of the entities to be combined (IPSAS 40 AG1). The public entity that is formed through such PSC can be either a single reporting entity or an economic reporting entity consisting of several persisting reporting entities (IPSAS 40 AG2). Depending on which type of entity results from the PSC, the combination will be accounted for at the level of FS or CFS. This chapter refers to those PSCs that lead to the requirement of consolidated financial reporting. Therefore, the two relevant forms of PSCs need to be distinguished: amalgamation and acquisition (IPSAS 40.5), which also influence how these are consolidated.

An **amalgamation** is a combination (IPSAS 40.5),

- a) in which no party of the combination gains control of one or more operations; or
- b) in which one party gains control over one or more operations, whereby the economic substance of the combination is that of an amalgamation.

As a special case, a combination under common control is also considered as an amalgamation. It occurs if all entities or operations involved in the combination are controlled by the same entity before the combination as after it (IPSAS 40.5).

An **acquisition** occurs when a party to the combination obtains control of one or more operations and there is evidence that it is not an amalgamation (IPSAS 40.5). For the definition of control, reference is made to IPSAS 35 (see Subsection 4.1). It is therefore first necessary to assess, whether control over the operations is gained by one of the parties

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<sup>3</sup> In this respect, there is a terminological difference to IFRS 3, as the term business is used in IFRS 3 instead of operation. Also, in contrast to IFRS 3.2c, also combinations under common control are within the scope of IPSAS 40.4/13c.

involved. If this is denied, an amalgamation exists, as can be seen from the assessment scheme in Figure 13.1. Otherwise, the economic substance of the amalgamation must be assessed on the basis of six indicators (IPSAS 40.12 and .13).

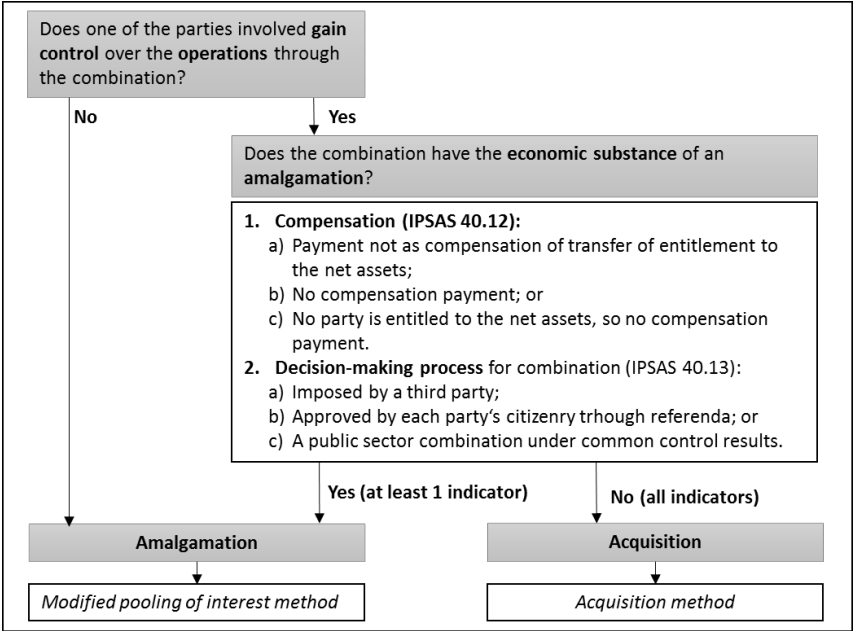


Figure 13.1: Distinction between amalgamations and acquisitions (IPSAS 40)

As shown in Figure 13.1, IPSAS 40 refers to two criteria of the amalgamation for the assessment of its economic substance: firstly, the consideration paid and secondly, how the PSC decision was made. Each criterion is based on three indicators to be fulfilled either individually or in combination (IPSAS 40.9). If at least one indicator is true (1.a to 1.c or 2.a to 2.c), it is an amalgamation. This is the case, if, for example, a PSC is enforced by third parties without the involvement of the combined entities (IPSAS 40 AG32), such as the nationalisation of a private company (IPSAS 40 AG35). On the other hand, an acquisition is prevailing if the entities involved participate at least voluntarily in the decision (IPSAS 40 AG32) in order to be able to exert a certain influence on the conditions for the combination (IPSAS 40 AG33). The most common **evidence of**

**an acquisition** is therefore (IPSAS 40 BC40): an entity involved in the combination gains the

- a) Control over an operation and pays consideration in exchange as a compensation for giving up the entitlement to the net assets of that operation;
- b) Control over an operation previously outside the public sector without payment of any consideration for giving up the entitlement to the net assets of that operation;
- c) Control over an operation previously outside the public sector by imposing (i.e. forcing) that combination;
- d) Control over an operation from a separate government.

An **amalgamation** is accounted for by applying the **modified pooling of interest method** (IPSAS 40.15) when presenting the FS of the new reporting entity, whereas for an acquisition the use of the **acquisition method** in the CFS is prescribed (IPSAS 40.58). The differences between these methods primarily lie in the different valuation of assets and liabilities in the CFS as already addressed in Chapter 12. In Subsection 5.1, the application of the acquisition method is illustrated.

### **3. Overview about relevant IPSAS norms**

Table 13.1 provides an overview about standards that are relevant for consolidated financial reporting according to IPSAS.

IPSAS	Scope	Excluded from the scope	IFRS basis
<b>35</b> <b>Consolidated financial statements</b>	Preparation and presentation of <b>CFS for the economic entity</b>	<ul style="list-style-type: none"> <li>• Accounting requirements for PSCs</li> <li>• Postemployment benefit plans (IPSAS 39)</li> <li>• Controlling entities that are investment entities</li> </ul>	IFRS 10
<b>36</b> <b>Investments in associates and joint ventures</b>	Accounting for investments in <b>associates</b> and <b>joint ventures</b> by the investor leading to a quantifiable ownership interest	<ul style="list-style-type: none"> <li>• Investments that give not rise to a quantifiable ownership interest</li> </ul>	IAS 28
<b>37</b> <b>Joint arrangements</b>	Determining the type of joint arrangements and accounting for the rights and obligations of a <b>joint operation</b>		IFRS 11
<b>38</b> <b>Disclosure of interests in other entities</b>	Disclosing information about <b>interests in controlled</b> consolidated and unconsolidated entities, <b>joint arrangements</b> and <b>associates</b> and unconsolidated structured entities	<ul style="list-style-type: none"> <li>• Postemployment benefit plans (IPSAS 39)</li> <li>• Separate financial statements (with exceptions)</li> <li>• Interest in another entity that is accounted for in accordance with IPSAS 29</li> </ul>	IFRS 12
<b>40</b> <b>Public sector combinations</b>	Accounting for PSCs, i.e. the <b>bringing together of separate operations into one public sector entity</b>	<ul style="list-style-type: none"> <li>• Accounting for the formation of a joint arrangement in the FS of the joint arrangement</li> <li>• The acquisition or receipt of an asset /group of assets assumption of a liability/ group of liabilities that do not constitute an operation</li> <li>• The acquisition of investment entities</li> </ul>	IFRS 3

*Table 13.1: Overview about IPSAS relevant for consolidation*



The most relevant norms for consolidation can be found in IPSASs 35, 36 and 37. Each of these standards is effective since reporting periods beginning from 1<sup>st</sup> Jan 2017. Various methods of capital consolidation are available for offsetting the invested capital and the net assets between the entities. Which method is to be applied in which cases has not been specified in the IPSAS until IPSAS 40 became effective from 1<sup>st</sup> Jan 2019 onwards. Of course, the IPSAS conceptual framework serves as a guideline for the definition and measurement of the FS items, although its use is not mandatory.<sup>4</sup>

#### **4. Process of consolidated financial reporting**

From a legal and organisational perspective, the process of consolidated financial reporting for a public sector entity that presents IPSAS CFS comprises the following steps for initial consolidation:

- 1. IPSAS requirements for CFS** (i.e. Check for control);
- 2. Definition of the consolidation area<sup>5</sup>** (Which entities are to be included with which methods in the CFS?);
- 3. Development of a consolidated accounts manual** in order to maintain uniformity, i.e. determination of the date of reporting and the group individual accounting policies with respect to recognition, measurement and disclosure;
- 4. Determination of responsibilities**, e.g. at the group level: revaluation (i.e. disclosure of hidden reserves and burdens), currency conversion of FS, consolidation procedures; decentral preparation of FS II;
- 5. Initial consolidation** by applying the consolidated accounts manual (Step 3) and completion of the required consolidation procedures.

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<sup>4</sup> See Chapters 1 and 8.

<sup>5</sup> Also referred to as scope of consolidation.

In the subsequent reporting periods, the controlling entity:

6. May **review** and **update** the consolidation area, consolidated accounts manual and responsibilities;
7. If no group accounting (booking) system exists:<sup>6</sup> **repetition of all consolidation steps of previous reporting periods** (i.e. initial consolidation and subsequent consolidation of the previous reporting periods) in order to achieve a status quo as at the end of the previous reporting period;
8. **Implementation of the subsequent consolidation** for the current reporting period.

This section addresses the Steps 1-4, whereas Steps 1 and 2, i.e. the definition and boundaries of the economic reporting entity are explained in Subsection 4.1 and the principles of uniformity (as parts of the consolidated accounts manual and the responsibilities) are the topic of Subsection 4.2. In Subsection 4.3, an overview about the consolidation procedures adopting the full consolidation is shown (Steps 5-8) (see Figure 13.2).

#### 4.1. Definition of the economic entity

A controlling public sector entity is required to present CFS (IPSAS 35.5). Therefore, an entity shall determine whether it controls another entity (IPSAS 35.18). According to IPSAS 35.20, the following three indicators need to be cumulatively fulfilled for control: The entity has

- a) **Power** over another entity;
- b) **Exposure**, or **rights** to **variable benefits** from its involvement with the other entity, and
- c) The **ability to use its power** to affect the nature or amount of the **benefits**.

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<sup>6</sup> This will be the usual case for public sector groups.

**Power** is defined as existing rights that give the controlling entity the current ability to **direct** the **relevant** financial and operating **activities** (IPSAS 35.24), that significantly affect the nature or amount of the benefits from its involvement with the controlled entity. The rights can lie in voting rights, e.g. granted by equity instruments, but also result from binding agreements. The controlling entity does not necessarily need to exercise those rights (IPSAS 35.27). However, rights such as regulatory control or economic dependence alone are not sufficient for power according to IPSAS 35.26.<sup>7</sup>

The **variable** (positive or negative) **benefits** can be of financial or non-financial nature and vary with the other entity's performance. Examples of **financial benefits** are the typical returns on investment such as dividends or similar distributions (IPSAS 35.32). **Non-financial benefits** can lie for example in specialised knowledge, improved or more efficient delivery of outcomes or a higher level of service quality (IPSAS 35.33).

The final criterion, the **link between power and benefits** means that the controlling entity has the ability to use its power to affect the benefits from its involvement (IPSAS 35.35). However, the mere existence of congruent objectives is insufficient, but it means that the controlling entity can direct the other entity to work further towards the controlling entity's objectives (IPSAS 35.36).

A controlling entity has to present CFS, but is **exempted from this obligation** if all of the following conditions are fulfilled (IPSAS 35.5): It

- a) Is itself a controlled entity (with conditions regarding the information needs of users and the approval of the other owners in cases of partially owned controlled entities);
- b) Does not trade own debt or equity instruments in the public market;
- c) Is not in the process of issuing any class of instruments in a public market, thereby it did not file or is not in the process of filing with the securities commission, and

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<sup>7</sup> Budget dependence could be an alternative criterion to the control concept to define the consolidation area as explained in Chapter 12.

- d) Has an ultimate or any intermediate controlling entity that produces publicly available FS that comply to IPSAS.

If a controlling entity presents CFS, it has to define the **consolidation area in a narrow and a broad sense**<sup>8</sup> by clarifying different types of influence leading to relevant methods of consolidation as shown in Table 13.2.

Type of influence	Type of entity	IPSAS	Method of consolidation
Controlling influence	Controlled entity	35	Full consolidation
Joint controlling influence	Joint venture	36	Equity method
Significant influence	Associate entity	36	Equity method

*Table 13.2: Overview of the IPSAS relevant for consolidation area*

The definition of control was presented previously and the full consolidation according to IPSAS 35 is explained in Section 5. According to IPSAS 37.12, **joint control** is defined as “the **sharing of control of an arrangement**, which exists only when decisions about the relevant activities require the **unanimous consent** of the parties sharing control.” A prerequisite is a binding agreement (IPSAS 37.10), which can be a contract or documented discussions between the parties, but also statutory mechanisms (IPSAS 37.8). A joint arrangement gives at least two parties joint control of the arrangement (IPSAS 37.10) and it can qualify as a joint operation or a joint venture (IPSAS 37.11). In a **joint operation**, the jointly controlling parties have rights to the assets, and obligations for the liabilities, relating to the arrangement (IPSAS 35.7). In contrast, for a **joint venture**, the parties do not belong to the same group (economic entity) and have rights to the net assets of the arrangement (IPSAS 35.7). The interest in a joint operation is, according to IPSAS 37.23, recognised (e.g. proportionately) in relation to its interest in the assets, liabilities, revenues, and expenses. However, it is not consolidated, but only recognised in the FS of the joint operator. In contrast, the investment in joint ventures shall

<sup>8</sup> See Chapter 12.

be recognised in the CFS by the joint venturer using the equity method in accordance with IPSAS 36.

A public sector entity owns an interest in an **associate**, if **significant influence** exists, which means there “is power to participate in the financial and operating policy decisions of another entity, but it is not control or joint control of these policies” (IPSAS 36.8). Significant influence is assessed based on judgement on the nature of the relationship between the investor and investee. IPSAS 35 requires that the investor holds a quantifiable ownership interest. Significant influence can be **assumed** if the investor **holds** directly or indirectly **20% or more of the voting power** of the investee. If it holds less, it can be assumed that there is no significant influence unless the contrary can be demonstrated (IPSAS 36.11). Besides the voting power **other indicators** are e.g. the representation on the board of directors of the investee, participation in policy-making processes or interchange of managerial personnel (IPSAS 36.12). The investment in an associate is recognised by applying the **equity method** (IPSAS 36.16) with exemptions similar to IPSAS 35.5 (IPSAS 36.23).

Investments with no controlling influence, joint control or significant influence are to be recognised as financial instruments according to IPSAS 29, which is not further addressed in this chapter.

From the date the controlling entity obtains control, joint control or significant influence over another entity, the controlled entity, the joint venture and the associate have to be included in the CFS. The obligation to present CFS starts when the reporting entity becomes a controlling entity and ceases when the entity is no more a controlling entity (IPSAS 35.38). CFS present the group as a fictitious single entity. They therefore presuppose compliance with the uniformity principles.

## 4.2. Principles of uniformity

Before starting with the consolidation, the controlling entity needs to ensure that the FS of the entities to be consolidated conform to certain

principles of uniformity. As described in Chapter 12<sup>9</sup>, the consolidated accounts manual prepared by the controlling entity can support this process. The principles of uniformity usually encompass:

1. Harmonisation of the reporting dates;
2. Uniform accounting policies (recognition, measurement and presentation), and
3. Foreign currency conversion.

According to IPSAS 35.46 the **(1) reporting dates** of the different FS and the CFS should be the same. If the reporting dates of the controlled entity differ, either a) an additional FS at the same date of the CFS needs to be prepared (for the purpose of consolidation only) or b) the most recent FS might be used by adjusting for effects of significant transactions occurred between the date of the FS and the CFS (IPSAS 35.46).

When preparing CFS, the controlling entity is required to use **(2) uniform accounting policies** “for like transactions and other events in similar circumstances” (IPSAS 35.38). Thereby, the consolidated entities are obliged to adopt these uniform accounting policies prescribed by (the accounting manual of) the controlling entity (IPSAS 35.41). This means, that the local FS (i.e. FS I) needs to be transformed into FS II conforming to the **recognition, measurement and presentation** policies adopted in the CFS.<sup>10</sup> Although IPSAS 35.38 requires uniform accounting policies to be applied, there are no clear prescriptions that this also includes uniform presentation, such as the classification of the FS or item designations and assignment of assets and liabilities to balance sheet items. Under the fiction of the economic entity (IPSAS 35.14), an explicit regulation is basically unnecessary. Uniform presentation is therefore mandatory. IPSAS 1 and thus the explanations on the general features, structure and content of FS apply, i.e. the presentation of items must be maintained consistently (for all reporting periods) (IPSAS 1.42 f.).

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<sup>9</sup> See Chapter 12.4.

<sup>10</sup> See Chapter 12 for further explanations about the different levels of FS.

The uniformity principle for accounting, measurement and presentation applies equally to real (explicit) and unreal (factual) options due to regulatory gaps, the interpretation of indefinite legal terms and the use of estimates or other discretionary decisions.

In case that the consolidation area also encompasses foreign controlled entities, a **(3) currency conversion** needs to be completed. Basically, the rules provided in IPSAS 4 need to be adhered.

After the uniformity of the FS has been ensured by presenting FS II for each entity to be consolidated, the Steps 1-4 described in the introduction of this Section 4 are completed and the actual consolidation process can start.

### **4.3. Overview about the process of full consolidation**

Before explaining full consolidation in Section 5 and the equity method in Section 6, Figure 13.2 presents an overview about the process of full consolidation over two consecutive reporting periods<sup>11</sup> at the level of the balance sheet (BS). After preparing the BS II, when applying the acquisition method of capital consolidation (according to IPSAS 40), the assets and liabilities of the initially consolidated entities need to be revalued. This step of revaluation is not completed at the level of the group accounts, but at the FS level. Thereby the BS II are transformed into BS III of the initially consolidated entities. Afterwards, the BS items of all consolidated entities are added up line by line so that an aggregated BS results. From this, the consolidation procedures of full consolidation are implemented. As described in Step 7 of the process of consolidation, these consolidation procedures need to be repeated and updated in subsequent reporting years. This is depicted also in the Figure 13.2.

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<sup>11</sup> By assuming that the reporting period equals the calendar year.

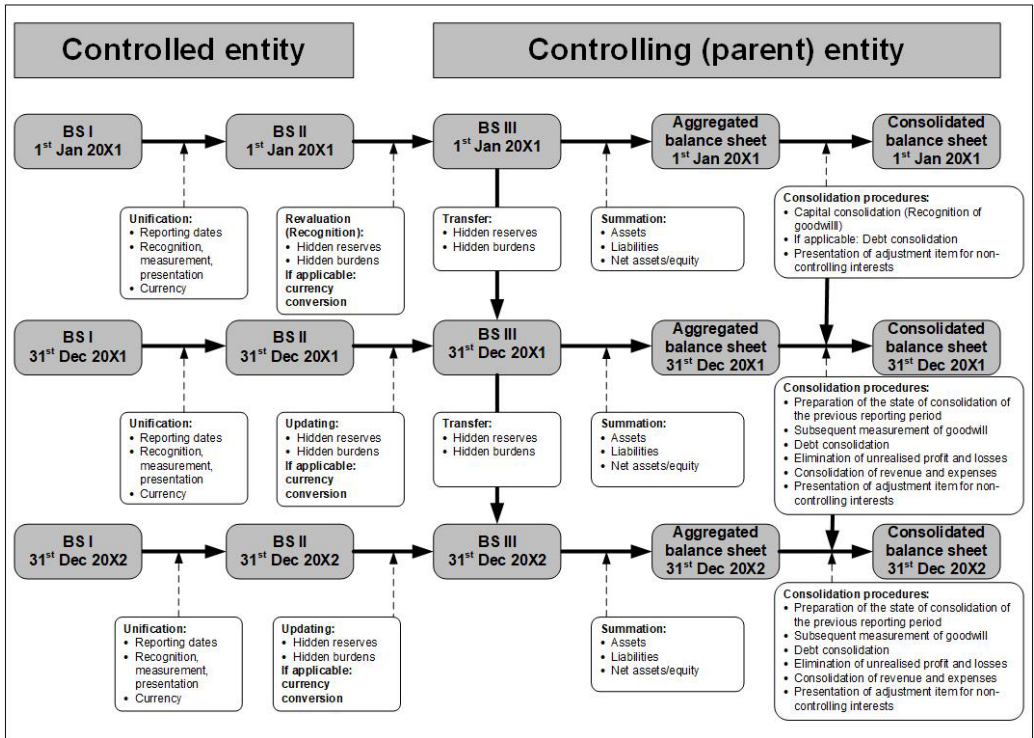


Figure 13.2: Process of full consolidation (Source: Lorson, Poller and Haustein, 2019)

## 5. Full consolidation (initial and subsequent consolidations)

IPSAS 35.40 describes the consolidation procedures for controlled entities. A full consolidation is to be carried out. This means that first, all like items of assets, liabilities, net assets/equity, revenue, expenses and cash flows of the controlling entity are combined with those of the controlled entities (IPSAS 35.40a). The items are added line by line and, as shown in Figure 13.2, an **aggregated** BS results. The second step is net assets/equity consolidation (also called **capital consolidation**) (IPSAS 35.40b), which is explained in Subsection 5.1. Finally, according to IPSAS 35.40c all intra-economic entity assets, liabilities, net assets/equity, revenue, expenses and cash flows relating to **transactions within the group** are to be eliminated, as described in Subsections 5.2-4. Each of these consolidation procedures



was already introduced in Chapter 12, so in this chapter the focus is on providing short examples.

### **5.1. Net assets/equity consolidation**

As explained in Section 2, for PSCs that are categorised as acquisition, the acquisition method of accounting is to be used for initially recognising the investment (IPSAS 40.58). It is divided into four steps (IPSAS 40.59):

- a) Identification of the acquirer;
- b) Determination of the acquisition date;
- c) Recognition and measurement of identifiable assets received and liabilities assumed and non-controlling interests (NCI) in the operation acquired;
- d) Recognition and measurement of goodwill, a gain or loss from an acquisition.

First, the acquirer must be identified as the party to the acquisition that obtains control of the transferred operations (IPSAS 40.60). Second, the acquisition date is the date on which control was obtained (IPSAS 40.62). This is generally (and latest) the date of the legal transfer of the consideration paid for the acquisition of the ownership rights and/or the transferred assets and liabilities (IPSAS 40.63).

The acquisition method means that the identifiable assets acquired and the liabilities assumed are to be measured at their acquisition date fair values (IPSAS 35.72). Therefore, the assets and liabilities of the initially consolidated controlled entity need to be revalued and reported separately from goodwill (IPSAS 40.59 (c)). Due to public sector specificities, exceptions were made for recognition, initial and subsequent measurement of assets and liabilities that result from non-exchange transactions (IPSAS 40.75ff.). There are exceptions for

- Recognition, here contingent liabilities (IPSAS 40.76);

- Recognition and measurement, here taxation items (e.g. waived as part of the acquisition; IPSAS 40.78f.), liabilities and assets from employee benefits (if any; IPSAS 40.80), indemnification assets (IPSAS 40.81f.), and
- Measurement, here reacquired rights (IPSAS 40.83) and share-based payment transactions (IPSAS 40.83).

For non-controlling interests (NCI)<sup>12</sup> (IPSAS 40.59 c), a choice can be made between the revaluation method<sup>13</sup> and the full goodwill method (IPSAS 40.73). In the latter case, the fair value of the NCI can be determined on the basis of a market price quotation on an active market or, if not available, using valuation techniques (IPSAS 40 AG91). An extrapolation based on the price per share or on the purchase price of the acquirer could be inappropriate, as an acquirer may, among other things, include a control premium (IPSAS 40 AG92).

Finally, in step d), the controlling entity's interest in the acquired entity (i.e. the consideration paid) is offset against the controlled entity's share of net assets attributable to the controlling entity and recognised as a difference (IPSAS 40.59 (d)). Any excess of (a) the cost of acquisition over (b) the fair value of net assets acquired is recognised as **goodwill** to the extent that the acquisition will result in future positive cash flows or reduced cash outflows to the acquirer (IPSAS 40.86). Differences in excess of (b) over (a) (i.e. a badwill or a **bargain purchase**) must be recognised – after a review (IPSAS 40.90) – as a loss in surplus or deficit (IPSAS 40.86). Goodwill related to service potential without payment validity is not to be recognised (IPSAS 40 AG93). In subsequent periods, goodwill must not be amortised, but tested for impairment in accordance with IPSAS 26 Impairment of Cash-Generating Assets (IPSAS 26.76-97).

A public sector characteristic is an acquisition without payment of a consideration (e.g. forced nationalisations or bequests). In these cases, any gain or loss arising from the acquisition is to be recognised in surplus

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<sup>12</sup> See Chapter 12.3.

<sup>13</sup> Also called partial goodwill method.

or deficit (IPSAS 40.94). Expenses incurred for the purpose of acquiring (another) operations are recognised as expenses in surplus or deficit when they arise (IPSAS 40.111).

In the following, examples are drawn to show the case of 100% ownership with the initial and subsequent consolidation (Examples 1 and 2) and a case of 80% ownership, i.e. with NCI, (Examples 3 and 4) by applying the full goodwill method. Only the effects on the balance sheet are shown, so no separate accounting records for the statement of financial performance are presented.<sup>14</sup>

### Example 1: Net assets/equity initial consolidation without NCI

On 1<sup>st</sup> Jan 20X1, the municipality Eucity acquires 100% of the company CE (controlled entity) for 100 kEUR. Eucity gains control of CE. The PSC is an acquisition according to IPSAS 40.5. The simplified balance sheets (BS) II of both entities, which comply to the consolidated accounts manual, are shown in Table 13.3.

Eucity (BS II)				CE (BS II)			
1 <sup>st</sup> Jan 20X1 in kEUR				1 <sup>st</sup> Jan 20X1 in kEUR			
Assets		Net assets & liabilities		Assets		Net assets & liabilities	
PPE	800	Reserves	300	PPE	250	Reserves	40
Investment	100	Surplus	100	Inventories	100	Surplus	10
Inventories	50	Liabilities	550	Cash	50	Liabilities	350
Total	950	Total	950	Total	400	Total	400

Table 13.3: Balance sheets II of Eucity and CE at initial consolidation date

At 1<sup>st</sup> Jan 20X1, a scan of CE's accounted assets and liabilities regarding an appropriate measurement unveiled the following issues:

- The fair value of property, plant, and equipment (PPE) is 300 kEUR with a useful life of 5 years and a straight-line depreciation.
- The fair value of inventories is 110 kEUR.
- The liabilities are understated. An additional amount of 20 kEUR will be needed to settle the liabilities.

<sup>14</sup> This would be necessary, if no group IT booking system exists.

The net assets/capital consolidation as part of initial consolidation is to be carried out.

At initial consolidation, according to the acquisition method, the acquirer (Eucity) and the acquisition date (1<sup>st</sup> Jan 20X1) have been determined. Next, the controlled entity's identified assets and liabilities are to be measured at fair value. There are hidden reserves of 50 kEUR in PPE and 10 kEUR in inventories and 20 kEUR of hidden burdens in the liabilities. A revaluation gain is not to be recognised in surplus and deficit but directly through net assets (in a revaluation reserve).<sup>15</sup> The combined accounting record is as follows:

Debit		to	Credit	
PPE	50 kEUR	to	Liabilities	20 kEUR
Inventories	10 kEUR		Revaluation reserve	40 kEUR

The revalued assets and liabilities of CE are shown in the level III balance sheet (BS III) in Table 13.4. In the aggregated BS (right column), the items of the consolidated entities are added up after the revaluation of CE. Thus, for Eucity (the controlling entity) the BS II is used, whereas for CE (the controlled entity) the BS III is added. A full consolidation is applied, i.e. the BS items are added in their total amounts.

Item in kEUR	Eucity BS II	CE BS II	Revaluation		CE BS III	Aggregated BS
			Debit	Credit		
PPE	800	250	50		300	1,100
Investment in CE	100	0			0	100
Inventories	50	100	10		110	160
Cash	0	50			50	50
<b>Total assets</b>	<b>950</b>	<b>400</b>			<b>460</b>	<b>1,410</b>
Reserves	300	40		40	80	380
Surplus	100	10			10	110
Liabilities	550	350		20	370	920
<b>Total net assets &amp; liabilities</b>	<b>950</b>	<b>400</b>	60	60	<b>460</b>	<b>1,410</b>

Table 13.4: Example 1: Determination of the aggregated balance sheet at 1<sup>st</sup> Jan 20X1 in kEUR

<sup>15</sup> For this and the following examples, deferred tax is neglected because it depends on national tax systems and probably public entities will not be subject to tax.

However, the aggregated BS cannot serve as the consolidated BS, as there is double counting: the carrying amount of the investment of Eucity in CE on the asset side and the net assets/equity of CE acquired by Eucity are both in the aggregated BS. Net assets/equity consolidation is now performed by derecognizing the shares held by the controlling (parent) entity (carrying amount of investment) against the revalued equity of the CE. The revalued net assets are calculated as follows:

Reserves	40 kEUR
+ Surplus	+ 10 kEUR
= Balance sheet net assets of CE	= 50 kEUR
+/- Hidden reserves/burdens (+60 kEUR / - 20 kEUR)	+ 40 kEUR
<b>= Revalued net assets of CE</b>	<b>= 90 kEUR</b>

The revalued net assets are offset against the carrying amount of the investment of Eucity in CE. The resulting positive difference is to be capitalised as goodwill based on the expectation of positive future net cashflows:

Investment of Eucity in CE (consideration transferred)	100 kEUR
- Revalued net assets of CE	- 90 kEUR
<b>= Goodwill</b>	<b>= 10 kEUR</b>

Net assets/equity consolidation is completed by the following accounting record within the consolidated BS shown in Table 13.5. Only the net assets of Eucity remain and the item with the investment of Eucity in CE is derecognised. The new asset item “goodwill” is added:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Reserves	80 kEUR	to	Investment in CE	100 kEUR
Surplus	10 kEUR			
Goodwill	10 kEUR			

<b>Item</b> <b>in kEUR</b>	<b>Aggregated</b> <b>BS</b>	<b>Consolidation records</b>		<b>Consolidated</b> <b>BS</b>
		Debit	Credit	
PPE	1,100			1,100
Goodwill	0	10		10
Investment in CE	100		100	0
Inventories	160			160
Cash	50			50
<b>Total assets</b>	<b>1,410</b>			<b>1,320</b>
Reserves	380	80		300
Surplus	110	10		100
Liabilities	920			920
<b>Total net assets &amp; liabilities</b>	<b>1,410</b>	100	100	<b>1,320</b>

Table 13.5: Example 1: Consolidation table at 1<sup>st</sup> Jan 20X1

### Example 2: Net assets/equity subsequent consolidation without NCI

After one year, on 31<sup>th</sup> Dec 20X1, the subsequent consolidation is to be performed. The BS II of both entities are the following:

<b>Eucity (BS II)</b>				<b>CE (BS II)</b>			
<b>31<sup>st</sup> Dec 20X1 in kEUR</b>				<b>31<sup>st</sup> Dec 20X1 in kEUR</b>			
<b>Assets</b>		<b>Net assets &amp; liabilities</b>		<b>Assets</b>		<b>Net assets &amp; liabilities</b>	
PPE	800	Reserves	300	PPE	250	Reserves	50
Investment	100	Surplus	100	Inventories	100	Surplus	40
Inventories	50	Liabilities	550	Cash	50	Liabilities	310
Total	950	Total	950	Total	400	Total	400

Table 13.6: Balance sheets II of Eucity and CE at subsequent consolidation date

At the end of the reporting period (i.e. 31<sup>st</sup> Dec 20X1), the hidden reserves in the inventories have been realised, and the acquired surplus has been transferred to the reserves of CE. A surplus of 40 kEUR has

been earned by CE in the reporting period 20X1 and in the same amount liabilities have been repaid. Still, the hidden burdens in the liabilities of 20 kEUR remain. The net assets/capital consolidation as part of subsequent consolidation is to be completed.

Before starting with the actual subsequent consolidation, the initial consolidation is to be carried forward and has to be advanced. The repetition of the initial consolidation is necessary, because there is no group accounting (booking) system and both entities again provide their FS as of 31<sup>st</sup> of December 20X1 for consolidation. As such, first the revaluation of assets and liabilities has to be repeated. The accounting record is as follows:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
PPE	50 kEUR	to	Liabilities	20 kEUR
Inventories	10 kEUR		Revaluation reserve	40 kEUR

As described above, the hidden reserves in the inventories do not exist anymore (-10 kEUR). Also, the hidden reserves in the PPE have a limited useful life of five years and therefore have to be depreciated:<sup>16</sup> 50 kEUR / 5 years = 10 kEUR. Thus, a second accounting record is needed whereas in subsequent consolidation, the realisation of hidden reserves is to be accounted for respectively neutralized in surplus or deficit:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Surplus	20 kEUR	to	PPE	10 kEUR
			Inventories	10 kEUR

Again for CE the BS III is created, based on which the aggregated BS is shown in Table 13.7:

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<sup>16</sup> See Chapters 10 and 11 for explanations about depreciation.

Item in kEUR	Eucity BS II	CE BS II	Revaluation		CE BS III	Aggregated BS
			Debit	Credit		
PPE	800	250	50	10	290	1,090
Investment in CE	100	0			0	100
Inventories	50	100	10	10	100	150
Cash	0	50			50	50
<b>Total assets</b>	<b>950</b>	<b>400</b>			<b>440</b>	<b>1,390</b>
Reserves	300	50		40	90	390
Surplus	100	40	20		20	120
Liabilities	550	310		20	330	880
<b>Total net assets &amp; liabilities</b>	<b>950</b>	<b>400</b>	<b>80</b>	<b>80</b>	<b>440</b>	<b>1,390</b>

Table 13.7: Example 2: Determination of the aggregated balance sheet at 31<sup>st</sup> Dec 20X1

Also the initial net assets/equity consolidation is repeated, thereby taking into account, that for CE the initially consolidated surplus is now part of the reserves. Therefore, the accounting record slightly changes:

Debit		to	Credit	
Reserves	90 kEUR	to	Investment in CE	100 kEUR
Goodwill	10 kEUR			

An annual impairment test has to be performed for the cash-generating unit to which the goodwill has been allocated (IPSAS 26.90F), but no impairment loss incurred. The consolidation table is shown in Table 13.8.

Item in kEUR	Aggregated BS	Consolidation records		Consolidated BS
		Debit	Credit	
PPE	1,090			1,090
Goodwill	0	10		10
Investment in CE	100		100	0
Inventories	150			150
Cash	50			50
<b>Total assets</b>	<b>1,390</b>			<b>1,300</b>
Reserves	390	90		300
Surplus	120			120
Liabilities	880			880
<b>Total net assets &amp; liabilities</b>	<b>1,390</b>	100	100	<b>1,300</b>

Table 13.8: Example 2: Consolidation table at 31<sup>st</sup> Dec 20X1



The previous Examples 1 and 2 have drawn a case, in which the controlling entity holds 100% of the ownership rights of the controlled entity. The following Examples 3 and 4 use the same case for showing the accounting treatment of NCI when applying the full consolidation method.

### Example 3: Net assets/equity initial consolidation with NCI

On 1<sup>st</sup> Jan 20X1, the municipality Eucity acquires 80% of the company CE (controlled entity) for 100 kEUR. All other information provided in Example 1 applies, with the BS II shown in Table 13.3.

The net assets/capital consolidation as part of initial consolidation is to be completed. It is known that the fair value of the NCI on 1<sup>st</sup> Jan 20X1 is 25 kEUR.

As the first step of the initial consolidation, the revaluation of assets and liabilities is to be completed.

Debit		to	Credit	
PPE	50 kEUR	to	Liabilities	20 kEUR
Inventories	10 kEUR		Revaluation reserve	40 kEUR

Also in this case, the aggregated BS is compiled from the BS II of Eucity and the BS III of CE. Again a full consolidation is carried out. This means although Eucity only acquired 80% of CE, the asset and liability items are added in full in the aggregated BS as shown in Table 13.4. For derecognizing the carrying amount of the investment against the revalued net assets of CE, the ownership share of Eucity needs to be considered. This step differs from the one presented in Example 1.

Reserves	40 kEUR
+ Surplus	+ 10 kEUR
= Balance sheet net assets of CE	= 50 kEUR
+/- Hidden reserves/burdens (+60 kEUR / - 20 kEUR)	+ 40 kEUR
<b>= Revalued net assets of CE</b>	<b>= 90 kEUR</b>
of which Eucity group share (80%)	72 kEUR
of which NCI (20%)	18 kEUR

The carrying amount of the investment of Eucity in CE is offset against the revalued net assets. A positive difference results, that is to be capitalised as goodwill based on the expectation of increased future net cash flows. This goodwill is only associated to Eucity group:

Investment of Eucity in CE (consideration transferred)	100 kEUR
– Revalued net assets of CE	- 72 kEUR
<b>= Goodwill</b>	<b>= 28 kEUR</b>

Besides the accounting records for offsetting the investment of Eucity in CE against Eucity’s share on the net assets of CE (80% of 80 kEUR net assets and of 10 kEUR surplus), also the NCI need to be recorded. Thus, a second accounting record is necessary in order to show the NCI in the consolidated BS separately.

Debit		to	Credit	
Reserves	64 kEUR	to	Investment	100 kEUR
Surplus	8 kEUR			
Goodwill	28 kEUR			

Debit		to	Credit	
Reserves	16 kEUR	to	Non-controlling interests	18 kEUR
Surplus	2 kEUR			

According to IPSAS 40.73, NCI can either be measured at a) fair value (full goodwill method) or b) “at the present ownership instruments’ proportionate share in the recognised amounts of the acquired operation’s identifiable net assets” (partial goodwill method). In the latter case, no further accounting records are needed. If the full goodwill method is applied, the NCI is to be adjusted for their fair value, which is according to the case description 25 kEUR. A difference of 7 kEUR (25 kEUR fair value –

18 kEUR non-controlling interest) results, which is recognised as goodwill. Thus, a further accounting record is needed. The consolidation Table 13.9 shows the results for the initial net assets/equity consolidation in the case of the 80% ownership.

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Goodwill	7 kEUR	to	Non-controlling interests	7 kEUR

<b>Item</b> <b>in kEUR</b>	<b>Aggregated</b> <b>BS</b>	<b>Consolidation records</b>		<b>Consolidated BS</b>
		Debit	Credit	
PPE	1,100			1,100
Goodwill	0	28 7		35
Investment in CE	100		100	0
Inventories	160			160
Cash	50			50
<b>Total assets</b>	<b>1,410</b>			<b>1,345</b>
Reserves	380	64 16		300
Surplus	110	8 2		100
Non-controlling interests	0		18 7	25
Liabilities	920			920
<b>Total net assets &amp; liabilities</b>	<b>1,410</b>	125	125	<b>1,345</b>

*Table 13.9: Example 3: Consolidation table at 1<sup>st</sup> Jan 20X1*

#### **Example 4: Net assets/equity subsequent consolidation with NCI**

Like in Example 2, after one year, on 31<sup>th</sup> Dec 20X1, the subsequent consolidation is to be performed, now for Eucity's ownership share of 80%. The same information as in Example 2 applies, with the BS II shown in Table 13.6. In addition, it is known that the fair value of the non-controlling interests on 31<sup>st</sup> Dec 20X1 is 30 kEUR. The net assets/capital consolidation as part of subsequent consolidation is to be carried out.

Again, the initial consolidation is to be carried forward and has to be advanced. Thus, the accounting records of revaluation are repeated and adjusted to the information provided at the end of the reporting period:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
PPE	50 kEUR	to	Liabilities	20 kEUR
Inventories	10 kEUR		Revaluation reserve	40 kEUR

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Surplus	20 kEUR	to	PPE	10 kEUR
			Inventories	10 kEUR

So far, there are no differences in the accounting treatment between a case with and without NCI so that the aggregated BS is the same as shown in Table 13.7. Now, the initial net assets/equity consolidation is repeated, keeping in mind that CE's initially consolidated surplus is now part of the reserves. By applying the full goodwill method, the goodwill of the non-controlling interest is adjusted to the fair value at the acquisition date (25 kEUR) and not updated to the fair value at the reporting date. The accounting records for the Eucity group and the NCI are:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Reserves	72 kEUR	to	Investment	100 kEUR
Goodwill	28 kEUR			

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Reserves	18 kEUR	to	Non-controlling interests	18 kEUR

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Goodwill	7 kEUR	to	Non-controlling interests	7 kEUR

With respect to subsequent consolidation, it is of importance to regard that the NCI participate by 20 % in the surplus of CE (20 kEUR, BS III value)

of the accounting period 20X1 as recorded below. The consolidation is shown in Table 13.10.

Debit		to	Credit	
Surplus	4 kEUR	to	Non-controlling interests	4 kEUR

Item in kEUR	Aggregated BS	Consolidation records		Consolidated BS
		Debit	Credit	
PPE	1,090			1,090
Goodwill	0	28 7		35
Investment in CE	100		100	0
Inventories	150			150
Cash	50			50
<b>Total assets</b>	<b>1,390</b>			<b>1,325</b>
Reserves	390	72 18		300
Surplus	120	4		116
Non-controlling interests	0		18 7 4	29
Liabilities	880			880
<b>Total net assets &amp; liabilities</b>	<b>1,390</b>	129	129	<b>1,325</b>

Table 13.10: Example 4: Consolidation table at 31<sup>st</sup> Dec 20X1

## 5.2. Debt consolidation

Debt consolidation is a further consolidation procedure introduced in Chapter 12. According to the entity fiction, a group cannot have mutual liabilities and receivables, so these have to be eliminated. If intra-economic entity liabilities and receivables already existed at the date of initial consolidation, debt consolidation needs to be carried out. Otherwise, debt consolidation is applied during subsequent consolidation, when the consolidated entities realised economic transactions in their individual FS

that led to mutual liabilities and receivables. Usually, intra-economic entity liabilities and receivables will have equal amounts, but in some cases offset differences can occur.<sup>17</sup> Two examples are introduced subsequently. In each of the following examples (also for all subsequent subsections) it is assumed that Eucity owns 100% of CE since 1<sup>st</sup> Jan 20X1 and the reporting period equals the calendar year.

**Example 5: Debt consolidation without offset differences**

On 15<sup>th</sup> Nov 20X1, Eucity ordered goods of CE and made an advance payment for the delivery in 2 months in the amount of 50 kEUR (at no interest). Eucity has recognised the transaction as current receivable and CE as current liability, each with 50 kEUR. The debt consolidation is to be carried out on 31<sup>th</sup> Dec 20X1.

In this case, receivables and liabilities have the same amount, so there are no offset differences. The elimination is realised with the following accounting record:

Debit		to	Credit	
Current liabilities	50 kEUR	to	Current receivables	50 kEUR

**Example 6: Debt consolidation with offset differences**

On 20<sup>th</sup> May 20X1, Eucity lent its controlled entity CE money to be repaid after three years. Eucity has recognised the transaction as non-current receivables and CE as non-current liabilities at 100 kEUR. However, due to pessimistic expectations at the end of 20X1, Eucity has written off its claim in its individual FS by 8 kEUR in surplus or deficit. The debt consolidation is to be conducted on 31<sup>th</sup> Dec 20X1.

Due to the write-down of the receivables, the items do not have same amount, so there is a real offset difference<sup>18</sup>. The transaction is eliminated, as if it had not taken place:

<sup>17</sup> Explained in Chapter 12.

<sup>18</sup> See the explanation of real and unreal offset differences in Chapter 12.6.

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Current liability	100 kEUR	to	Current receivable	92 kEUR
			Surplus (Impairment loss)	8 kEUR

### 5.3. Consolidation of revenue and expenses

As the group can only realise revenue and expenses with outside parties, all related economic transactions that led to intra-economic entity income or expenses, have to be eliminated. The consolidation of revenue and expenses is not carried out during initial consolidation, but only during subsequent consolidation.

#### **Example 7: Consolidation of revenue and expenses**

Eucity rented some rooms of CE's building. For the use during the last 3 months, Eucity paid 1 kEUR/month to CE. The consolidation of revenue and expenses is to be conducted on 31<sup>th</sup> Dec 20X1, here at the level of the consolidated statement of surplus or deficit (profit and loss statement):

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Rental income	3 kEUR	to	Rental expenses	3 kEUR

### 5.4. Elimination of unrealised gains or losses

In the economic entity, consolidated entities might mutually exchange deliveries and services. Here, the valuation of the assets sold and received will differ, making an adjustment necessary. Therefore, gains (i.e. profits) and losses based on inter-economic entity deliveries and services that have not yet been realised with third parties must be eliminated from the CFS and the values of these assets must be adjusted. In the consolidated accounts manual, a common measurement basis will be defined.

### Example 8: Elimination of unrealised gains for inventories

Eucity purchased and already paid inventories, which were delivered by CE in 20X1. The inventories were further processed by Eucity, but not yet given to third parties. The sales price of CE was (value at FS of Eucity) 45 kEUR. The cost of the inventory (measured in compliance with the group accounting manual) was 38 kEUR. The elimination of unrealised profits or losses is to be carried out on 31<sup>th</sup> Dec 20X1.

On the one hand unrealised gains have been recorded (7 kEUR = 45 kEUR – 38 kEUR) and the value of the related inventories is to be decreased at the BS level. In addition, in the statement of financial performance, the revenue and expenses are to be eliminated, so that the surplus is matched.<sup>19</sup>

Debit		to	Credit	
Surplus	7 kEUR	to	Inventories	7 kEUR
Revenues	45 kEUR	to	Cost of materials	38 kEUR
			Surplus	7 kEUR

If in this case, there is an ownership share of less than 100%, i.e. there would be NCI, further accounting records for assigning their part of the adjusted surplus to the NCI are needed as well.

### Example 9: Elimination of unrealised gains for depreciable PPE

On 1<sup>st</sup> Jan 20X1, Eucity purchased and already paid a machine, which was produced by CE in 20X1. The machine is used by Eucity and has a useful life of five years with a straight-line depreciation. The sales price of CE was 45 kEUR (= book value of Eucity). The cost of the machine (measured in compliance with the group accounting manual) was 38 kEUR (= book value per unit in CE's inventory of finished products).

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<sup>19</sup> Separate accounting records for the balance sheet and the statement of financial performance are illustrated here, because it is assumed that there is no group accounting system and both FS have to be booked separately.



The elimination of unrealised profits or losses is to be carried out on 31<sup>th</sup> Dec 20X1.

On the one hand unrealised gains have been recorded (7 kEUR = 45 kEUR – 38 kEUR) and the value of the related machine is to be decreased at the BS level. In addition, in the statement of financial performance, the revenue and expenses are to be eliminated, so that the surplus is matched: Also, it needs to be regarded that the machine was depreciated in 20X1 by Eucity at 9 kEUR (45 kEur / 5 years). However, at the group level, the depreciation would only be 7.6 kEUR (38 kEUR / 5 years). Therefore in contrast to Example 8, besides the elimination of revenue for the purchase of the machine, also the difference in depreciation (1.4 kEUR) needs to be reversed at the BS level and in the statement of financial performance:<sup>20</sup>

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Surplus (BS)	7 kEUR	to	Machine	7 kEUR
Revenue	45 kEUR		Expenses (Reduction in the inventory of finished products)	38 kEUR
			Surplus	7 kEUR
Machine	1.4 kEUR	to	Surplus (BS)	1.4 kEUR
Surplus	1.4 kEUR	to	Depreciation expenses	1.4 kEUR

Again, as in an Example 8, if there would be NCI, further adjustments would be necessary.

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<sup>20</sup> Separate accounting records for the balance sheet and the statement of financial performance are illustrated here, because it is assumed that there is no group accounting system and both FS have to be booked separately.

## 6. Equity method (initial and subsequent consolidations)

The equity method is an alternative consolidation method to be used for **associates** (IPSAS 36.16) and **joint ventures** (IPSAS 37.28). The application of the equity method also requires the existence of uniformly valued FS throughout the group (IPSAS 36.37). In the CFS, an investment in an associate or a joint venture accounted for using the equity method shall be classified as non-current assets (IPSAS 36.21).

Initially, the investment is measured at cost. However, in an auxiliary calculation, the difference between the pro-rata net assets of the associate/joint venture and the revalued net assets (book net assets plus hidden reserves and burdens) is calculated. A resulting goodwill is not recognised (IPSAS 36.35a), whereas an excess of the entity's net fair value of the identified assets and liabilities over the costs of the investment are accounted for as revenue in surplus or deficit (IPSAS 36.35b).

In subsequent reporting periods, this book value of the investment is adjusted by the surplus (profit) or deficit (loss) attributable to the investor (IPSAS 36.16). Thus, in contrast to full or proportionate consolidation, the investment in associates or joint ventures is not replaced in the consolidated BS by the underlying assets and liabilities. Instead, the carrying amount of the investment (i.e. the consideration paid) recognised in the consolidated BS is adjusted for the changes in net assets (equity) attributable to the investor, so that over time it approximates the fair value of the investment in an associate or joint venture. Similarly, the consolidated statement of financial performance does not include any income items of the associated company or joint venture. Rather, gains are only reflected summarily in the financial results. Thus, the main activity for the investor of each associate is recording surplus (profits) or losses and dividends of the associate or joint venture.<sup>21</sup>

For subsequent consolidation, a general structure for the adjustment of the book value according to the equity method is shown in Table 13.11. In the structure, a distinction is drawn between adjustments that were realised through surplus and deficit and those that were not.

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<sup>21</sup> Krimpmann (2015), pp. 278 ff.

<b>Starting point</b>	<b>Book value of investment in associates / joint ventures</b> at beginning of reporting period
<b>Adjustments through surplus or deficit</b>	+ Pro-rata surplus of the associate or joint venture
	- Pro-rata deficit of the associate or joint venture
	- Pro-rata dividend paid
	- Depreciation on hidden reserves and identified assets of the initial recognition
	+ / - Adjustment of hidden burdens
	+ / - Alignment of the associates / joint ventures balance sheet items to the group's accounting policies affecting net income
<b>Adjustments through net assets</b> (i.e. not through surplus and deficit)	+ / - Deferred taxes on depreciation and adjustments (if applicable)
	+ / - Revaluations and adjustments of property, plant and equipment that not are recorded by the associate or joint venture through surplus or deficit (i.e. due to use of revaluation method)
	+ / - Changes in the participation quota that result from any under- or over proportionate increases or decreases in net assets
	+ / - Capital contributions done by the investor / paid to the investor
	<b>= Book value of investment in associates / joint ventures</b> at end of reporting period

Table 13.11: Adjustment of the investment book value according to the equity method<sup>22</sup>

Due to the procedure described above, the equity method is rather perceived as a method of revaluation instead of being a true consolidation method.<sup>23</sup> Net assets/equity consolidation is completed through the revaluation of the investment book value described previously. However, inter-economic entity transactions with associates and joint ventures, with some exceptions, can also be subject of debt consolidation and elimination

<sup>22</sup> See e.g. Krimpmann (2015), pp. 427.

<sup>23</sup> Stolowy and Lebas (2006), p. 468.

of unrealised gains and losses (IPSAS 36.29 ff.). However, differences may lie in the consolidation of, for example gains and losses from downstream and upstream transactions (see IPSAS 36.31), which however are not explained in detail here.<sup>24</sup>

### **Example 10: Application of the equity method**

On 1<sup>st</sup> Jan 20X1, Eucity acquired 25% of the shares in the company AE (associated entity). The acquisition costs were 50 kEUR. The book value of AE's equity at the time of acquisition was 120 kEUR. At the time of acquisition, there were hidden reserves of 32 kEUR in PPE with a remaining useful life of 5 years. In 20X1, AE closed the accounts with a deficit of 8 kEUR and a distribution of dividends of 4 kEUR. The associate is to be recognised at initial recognition and subsequently measured on 31<sup>st</sup> Dec 20X1.

The investment in an associate is recognised at cost:

<b>Acquisition cost</b>	<b>50 kEUR</b>
- Pro rata net assets acquired (25% of 120 kEUR)	30 kEUR
= Difference	20 kEUR
- Pro-rata hidden reserves (25 % of 32 kEUR)	8 kEUR
<b>= Goodwill</b>	<b>12 kEUR</b>

The book value of the investment equals the acquisition cost in the amount of 50 kEUR. The pro rata hidden reserves and also the goodwill are not recognised separately in the consolidated BS, but forwarded in auxiliary calculations. The recognition (e.g. by bank payment) is booked as follows:

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Investments in associates	50 kEUR	to	Bank	50 kEUR

<sup>24</sup> See for detailed explanations e.g. Krimpmann (2015), pp. 450 ff.

For subsequent measurement of the book value of the investment on 31<sup>st</sup> Dec 20X1, the relevant parts of the calculation presented in Table 13.11 have to be inserted as shown below:

<b>Acquisition cost</b>	<b>50 kEUR</b>
<b>= Investment book value 1<sup>st</sup> Jan 20X1</b>	
- Pro rata deficit (25% of 8 kEUR)	2 kEUR
- Pro rata dividend paid (25% of 4 kEUR)	1 kEUR
- Pro rata depreciation of hidden reserves (25% of 32 kEUR/5 years)	1.6 kEUR
<b>= Investment book value 31<sup>st</sup> Dec 20X1</b>	<b>45.4 kEUR</b>

The book value of the investment is to be adjusted. Addition, the need for further impairment loss is to be determined by applying IPSAS 29 (IPSAS 36.43).

The accounting records for the reduction of the book value and the received dividend payment are shown below. Thus, the net result is a loss of 3.6 kEUR from the investment in associates. Finally, the reduction of the book value from this investment is partially compensated by an increase in bank accounts.

<b>Debit</b>		<b>to</b>	<b>Credit</b>	
Deficit of associates accounted for using the equity method	4.6 kEUR	to	Investments in associates	4.6 kEUR
Bank	1 kEUR		Surplus of associates accounted for using the equity method	1 kEUR

## 7. Conclusion

The aim of this chapter was to explain consolidated financial reporting according to IPSAS with a specific focus on the consolidation methods and procedures. It was shown that controlling entities are to be fully

consolidated, whereas investments in associates and joint ventures are to be consolidated using the equity method. As the proportionate consolidation is not allowed in IPSAS, this consolidation method was not addressed.

In explaining the consolidation methods, this chapter presented short examples. However, given the introductory character of this chapter, these examples were rather basic. Still, after completion of this chapter readers should be able to explain the basic techniques of consolidation.

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### **Discussion topics**

- Relevance of accounting for goodwill in the public sector and its interpretation
- Relevance of the full goodwill method in public sector accounting
- Typical examples of public sector specific revenue and expenses and unrealised gains and losses

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**CHAPTER 14**  
**PUBLIC SECTOR ACCOUNTING FUTURE**  
**CHALLENGES: EPSAS OUTLOOK**

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**SUMMARY**

In March 2013, the EC announced the development of European accounting standards for the public sector. The European Public Sector Accounting Standards (EPSAS) aim to harmonise public sector accounting across and within EU Member States. EPSAS are still in the process of development, they have not been implemented yet and there is no binding decision about their future implementation. In this chapter, the evolution of a European public sector accounting system is described and the emergence of EPSAS are outlined. The benefits and challenges of implementing EPSAS are discussed, and the concept of the current EPSAS draft is compared with the International Public Sector Accounting Standards (IPSAS). Besides, the potential process of implementing EPSAS is described. Finally, future challenges in terms of adopting EPSAS are discussed.

**KEYWORDS**

EPSAS, European accounting, accounting harmonisation



## 1. Introduction

In 2013, the European Commission (EC) announced the development of European accounting standards for the public sector. In this context, the EC authorised Eurostat to provide a review of IPSAS and to elaborate on the suitability of IPSAS for harmonisation of public sector accounting in the EU Member States. However, Eurostat came to the conclusion that IPSAS “*cannot easily be implemented in the EU Member States as it stands currently*”, so that an European set of accounting standards should be developed. The European Public Sector Accounting standards (EPSAS), however, should be based on the IPSAS.<sup>1</sup> The European standards for use in the public sector are currently developed and are aimed to be adopted in the next years by all government levels and social security funds in EU Member States. Still currently, an impact assessment is being conducted by Eurostat as required by the ECOFIN in November 2017. Thus, whether EPSAS will really come into place is still open, despite the efforts already taken by the EPSAS Task Force of Eurostat.<sup>2</sup> This chapter gives an overview on the recent developments in terms of European public sector accounting and focuses on the emergence of EPSAS, associated benefits and challenges for EU Member States.

This chapter has the following aims:

- Explaining the evolution of the EPSAS Project and its current (uncompleted) status.
- Describing what are EPSAS, what are the aims of adopting EPSAS and how they would differ from IPSAS.
- Discussing expected benefits and challenges of a potential EPSAS implementation.
- Illustrating the implementation of EPSAS.
- Outlining the next steps towards adopting EPSAS.

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<sup>1</sup> European Commission (2013).

<sup>2</sup> European Commission (2017).

The chapter is structured as follows: In **Section 2**, the evolution of European standards for the public sector is outlined. **Section 3** describes the aims, distinguishes the EPSAS from the IPSAS concept, and discusses benefits and challenges of implementing EPSAS. **Section 4** focuses on the conceptual framework, the EPSAS framework, and the users of EPSAS. **Section 5** gives an outlook, and **Section 6** concludes the chapter.

## 2. Evolution of EPSAS

The need for more comprehensive and transparent reporting of fiscal data and the importance of governments' financial stability have been stressed during the sovereign debt crisis in the years 2008/09 in some of the European Union Member States. In 2011, the so-called **Six-pack legislative package** was adopted by the EU Council and approved by all 27 Member States and the European Parliament. The package aims to strengthen economic governance in the EU. It encompasses five regulations and one directive. The **Budgetary Framework Directive** (Council Directive 2011/85/EU) regulates that EU public sector accounting systems should comprehensively and consistently cover all sub-sectors of general government. Next to fiscal discipline ensured by the obligation to avoid excessive government deficits (Article 126 of the Treaty on the Functioning of the European Union (TFEU)), the Directive stresses that financial stability is based on trust. To ensure trust, the fiscal situation should be measured and forecasted in an improved manner. This should be guaranteed by **harmonised public sector accrual-based accounting standards**.

As the **International Public Sector Accounting Standards** (IPSAS) have been the only internationally recognised set of public-sector accounting standards in 2011, the EC was instructed to evaluate the **suitability of the IPSAS** for EU Member States (Article 16(3) of Directive 2011/85/EU) by 31 December 2012. In 2012, the suitability of IPSAS for use in the EU Member States was assessed by a public consultation. Citizens, organisations, national governments and authorities were able to participate. The results of the public consultation show that 38 percent of respondents agreed that

IPSAS are suitable for their use in the EU, 31 percent partly agreed, and the remaining 31 percent disagreed.<sup>3</sup> For example, IPSAS were criticised for their incompleteness for use in the public sector. Accordingly, certain public-sector characteristics are not covered by IPSAS (e.g., social benefits, taxation). Furthermore, arguments against IPSAS include their complexity and their link to the International Financial Reporting Standards (IFRS) for use in the private sector.

In March 2013, the EC published its report “*Toward implementing harmonised public sector accounting standards in Member States*”, in which the EU concluded that “*IPSAS cannot easily be implemented in EU Member States as it stands currently*”<sup>4</sup>. Thus, in 2013, the EC decided to **develop a separate set of standards, called EPSAS**. However, IPSAS should be a suitable reference framework for the development of EPSAS.

As a consequence, the **EPSAS Task Force on Governance** was created in 2013 to exchange opinions with Member States’ authorities about EPSAS governance arrangements and key principles of EPSAS. The Task Force supports Eurostat in developing the EPSAS governance structure.

In 2014, the **EPSAS Task Force on Standards** was developed in order to exchange about technical aspects of the standards. The Task Force examines the IPSAS and possible problems in practice, discusses how standards can be developed for small public entities also and the implementation of standards via a progressive batched approach<sup>5</sup>.

In March 2015, it was proposed to establish an **EPSAS Cell on First-Time Implementation (FTI)** which is responsible for preparing a draft guidance note on First Time Implementation for the opening balance sheet. The cell specifies the level of guidance for the opening balance sheet and works on definitions on relevant basic terms.

Also in 2015, an **EPSAS working group** has been established as the “*first EU network of public sector accounting standard-setters at the core of EPSAS development and implementation*”. It deals with the introduction, the

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<sup>3</sup> European Commission (2012).

<sup>4</sup> European Commission (2013).

<sup>5</sup> Ernst & Young (2017).

development and operation of EPSAS and has invited representatives from all Member States covering all sub-sectors of general government<sup>6</sup>. In 2015, the three “Cells” were instituted: EPSAS Cell First Time Implementation, EPSAS Cell on Governance Principles, EPSAS Cell on Principles related to EPSAS Standards.

Implementing EPSAS requires an EPSAS Governance setting. Figure 14.1 summarizes the current **institutions working on the development of EPSAS**<sup>7</sup>.

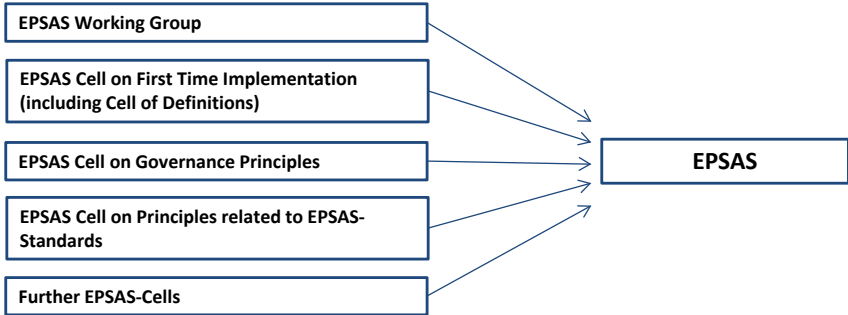


Figure 14.1: EPSAS  
Source: Müller-Marqués Berger, 2016, p.2

### 3. EPSAS: Background

#### 3.1. Aims of EPSAS

The **European Public Sector Accounting Standards**, shortly EPSAS, are harmonised public sector accrual-based accounting standards for use in all entities of the government sector.

**Need for fiscal transparency:** The EPSAS should be **accrual-based**, as the EC explains that “[a]ccruals accounting is the only generally accepted information system that provides a complete and reliable picture of the

<sup>6</sup> Makaronidis (2016).  
<sup>7</sup> Müller-Marques Berger (2016).

*financial and economic position and performance of a government*<sup>8</sup>. Assets and liabilities and revenue and expenses of an entity are captured over the period covered by the accounts and at the moment they are closed. The EC favours accruals accounting over cash accounting, as “[a]ccruals accounting is economically sounder than cash accounting”. Instead of replacing, accruals accounting should complement cash accounting, according to the EC.<sup>9</sup>

Applying EPSAS is expected to enhance accountability and transparency between and within EU Member States. The complete and comparable reporting of a government’s financial position and performance results in more transparent information. This information should be of use for internal decision-makers and users outside government entities. Harmonised accounting practices further enable comparing financial information over time, between EU Member States and across individual entities, so that accountability of public activities can be increased<sup>10</sup>.

**Need for comparability: Harmonised** European public sector accounting means that a single-set of accrual-based accounting standards should be used at all levels of government throughout the EU. The harmonisation should improve the effectiveness and efficiency of public administration. Furthermore, liquidity of governments should be ensured. Finally, accounting harmonisation enhances transparency, accountability, and the comparability of financial reporting in the public sector, and thus also facilitates public audit.<sup>11</sup>

Implementing EPSAS should also be associated with better decision making. Accrual-based financial information offers more detailed data on administrative processes and government performance. Complete and comparable information is necessary as a basis for decision making and future planning. Accordingly, public managers and politicians can use

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<sup>8</sup> Please see Chapters 4 and 5 for details.

<sup>9</sup> European Commission (2013), p.3.

<sup>10</sup> PwC (2014); Aggestam-Pontoppidan and Brusca (2016); Brusca and Martínez (2016); Christians et al. (2015).

<sup>11</sup> European Commission (2013); Makaronidis (2016).

EPSAS-based financial information for deciding about how to allocate financial resources.<sup>12</sup>

Finally, the incoherence between micro-level and the European System of Accounts (ESA) macro-level accounting and reporting frameworks should be minimised. Due to the fact that many public sector accounts record only cash flows and the EU budgetary surveillance is based on ESA 95 accruals data, cash data has to be transferred to accruals.<sup>13</sup>

### 3.2. IPSAS versus EPSAS

As already outlined, EPSAS should be based on IPSAS. However, what is the **difference between IPSAS and EPSAS**? First, IPSAS as the International Public Sector Accounting Standards are the main existing set of international accounting standards for use in the public sector. For a detailed description of IPSAS and an overview on who is developing and using the standards, please see Chapter 7.

Second, EPSAS, as the future European Public Sector Accounting Standards, should be derived to some extent from IPSAS. EPSAS are expected to harmonise public sector accounting in EU Member States. In developing the accounting standards, the experiences and opinions of EU Member States should be integrated.

In sum, whereas some countries align their accounting practices to IPSAS, EU Member States will not fully adopt IPSAS. In terms of EPSAS, IPSAS are seen as a suitable starting point and used as a basis for standard development.

Müller-Marqués Berger and Heiling proposed a way about how to decide to which degree IPSAS should be used as a basis for EPSAS. Figure 14.2 illustrates the process. First, it is asked whether there is an EU-specific reason for deviating from the IPSAS, or, if it is necessary to develop a new

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<sup>12</sup> PwC (2014).

<sup>13</sup> European Commission (2013); Makaronidis (2016).

standard. Second, it must be decided if there is an EPSAS accounting reason justifying a deviation from the ESA 2010.

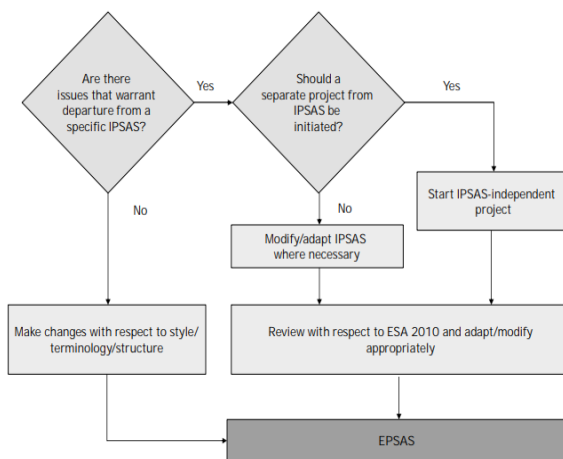


Figure 14.2: “EPSAS Rules of the Road” - Standard adaption  
 Source: Müller-Marqués Berger & Heiling (2015) p.10.

### 3.3. Implementing EPSAS: Reasons, impacts, and challenges

The introduction of EPSAS is discussed highly controversially. **Supporters of EPSAS** reason the need for a harmonised European accounting system, as follows:<sup>14</sup>

- Current accounting systems are criticised by their inaccuracy, which might lead to ill-founded policy decisions.
- Insufficient consolidation efforts result in underestimated deficits and debts.
- There are no EU standards that regulate how individual transactions and events should be recorded, recognised, measured, consolidated, and reported.

<sup>14</sup> European Council (2013); Makaronidis (2016), p.5.

- Data of governments of EU Member States lack comparability and transparency.
- Comparison is insufficient in terms of economic governance, internal markets, and statistics.
- A lack of European government sector accounting harmonisation might result in hampered efficiency and effectiveness, limited accountability, reduced access to financial markets, and challenges for public auditors on the national and entity level.

The introduction of EPSAS aims at addressing these current challenges and creating benefits for the EU and Member States alike. In conclusion, Table 14.1 gives an overview on the expected benefits and impacts of EPSAS introduction for the main stakeholders:

<b>Stakeholder Group</b>	<b>Expected benefits and impacts</b>
Preparers	<ul style="list-style-type: none"> <li>• Use of accrual-based concepts in daily work</li> <li>• Increase in qualifications and skills</li> </ul>
Auditors	<ul style="list-style-type: none"> <li>• Harmonisation of policies across governments leads to greater standardisation in audit methodology.</li> <li>• High-quality information from reporting entities.</li> </ul>
Internal users	<ul style="list-style-type: none"> <li>• Ability to use high-quality information for performance evaluation and decision-making.</li> <li>• Long-term impacts of current decisions are reflected in financial statements so that intergenerational fairness could be achieved.</li> </ul>
External users	<ul style="list-style-type: none"> <li>• Transparent and comparable information for stakeholders in financial markets, politicians and citizens.</li> <li>• Due to complexity of accrual accounting, ability to interpret numbers and figures is necessary. Thus, the media has an important role to spread financial information towards the general public.</li> </ul>

*Table 14.1: Expected Impacts of EPSAS Implementation for Stakeholder Groups  
Source: PwC (2014) pp.141f.*



Adopting EPSAS means changing the current accounting regime and implementing new accounting standards.<sup>15</sup> This reform process is contingent on **expenses**. The level of costs depends on the accounting maturity of the institutions. Accordingly, the more the government's accounting rules comply with an IPSAS-based benchmark and the higher the accounting maturity, the lower the costs for switching to EPSAS will be. Besides, if accounting maturity varies between or within different government levels, government complexity and thus expected reform costs increase. In addition, the reform costs depend on the government size. The number of processed transactions, amount of data and number of employees increase by government size, so that the reform process is more expensive in large governments. For example, the more employees need training on new accounting procedures and policies, the higher the training costs. Finally, adopting EPSAS needs IT investments capable for accrual-based accounting. Accordingly, the reform costs depend on the IT maturity of the institution. If just adaptations of the current IT system are needed, the costs are lower than if a severe IT system reform for all entities is needed due to low IT maturity. For example, in terms of Austria, the best-case scenario involves costs of about € 40 million, the worst-case scenario costs of approximately € 243 million. Consequently, IT investments are a serious cost driver of adopting EPSAS.<sup>16</sup> However, a high quality IT system improves the effectiveness of control and administrative processes. Increasing efficiency might reduce administrative costs for implementing new IT infrastructure.

**“First-Time Adoption Dilemma”:** The First-Time Adoption of EPSAS can be seen as a dilemma, as (1) assets and liabilities of an entity have to be assessed completely, (2) the most accurate measurement should be used, and (3) there are several restricting factors in terms of time and resources. Due to these problems, it is recommended to restrict the completeness requirement to the most significant assets and liabilities. Furthermore, it is necessary to provide simplification in terms of measurement requirements for selected items and develop concrete guidelines for the preparation of the

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<sup>15</sup> See Hessisches Ministerium der Finanzen (w.y.).

<sup>16</sup> PwC (2014).

EPSAS opening balance sheet. Finally, a standard on first-time adoption of EPSAS with detailed instructions and instruments is recommended<sup>17</sup>.

First studies discuss the challenges of transitioning an accrual-based to a European-harmonised public accounting system<sup>18</sup>. **Challenges of implementing EPSAS** can be discussed, structured by the following dimensions:<sup>19</sup>

- **Policies:** Adopting EPSAS means adapting existing financial rules and regulations and document accounting policies. Furthermore, a comprehensive guidance and manuals as well as concise implementation rules have to be developed for the most complex topics.
- **Processes:** In terms of processes, the transition period has to be managed and the implementation phase has to be monitored. Data quality has to be monitored during the reform process, so that quality control procedures have to be implemented. Data collection procedures have to be set up (e.g. for fixed assets). In addition, compliance with existing regulatory framework has to be ensured.
- **Systems:** The EPSAS reform requires an adaptation of existing IT systems and a development of new IT solutions/modules. Furthermore, organisational processes have to be adapted to the IT environment.
- **People:** Next to IT systems, human resources are essential in terms of the accounting reform. The change of accounting practices requires training programmes for employees and the help of external consultancy. Furthermore, organisational culture must be open for change and political support and commitment is necessary to be successful in the reform process.

#### 4. Conceptual Framework

The conceptual framework (EPSAS CF) encompasses “*a set of concepts and definitions for the development, the adoption, and the publication of*

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<sup>17</sup> Müller-Marqués Berger and Heiling (2015), p.10.

<sup>18</sup> E.g. Hessisches Ministerium der Finanzen (w.y.).

<sup>19</sup> PwC (2014).

*EPSAS and provides guidance for the preparation and the presentation of financial accounting information by public sector entities under the EPSAS basis of accounting*".<sup>20</sup> Furthermore, the EPSAS CF should help users interpreting financial information.<sup>21</sup> The EPSAS Conceptual Framework is required to be developed before the EPSAS standards are introduced.

The EPSAS CF aims at ensuring consistency between the EPSAS and also should support in presenting relevant events and transactions, when guidance is needed due to different interpretations or the lack of a specific standard. The framework should guide public sector reporting entities at all government levels, social security funds and other reporting entities adopting EPSAS as basis of accounting<sup>22</sup>. EPSAS are expected to be applied by public entities belonging to the general government sector.

## 5. Outlook

Figure 14.3 summarises the **timeline for implementing EPSAS**. The implementation of accrual-based accounting (highlighted in white) is distinguished from the development and legal endorsement of EPSAS (highlighted in grey). During the **first stage** of five years, the EC encourages the voluntary introduction of accrual accounting by providing financial support. Furthermore, the conceptual framework should be completed regarding the cells on EPSAS governance principles and principles related to EPSAS standards. EPSAS standards should be prepared, and the consolidation of whole of government accounts should be achieved. Finally, the EPSAS framework and standards should be adopted. In the **second stage**, EPSAS should be gradually implemented by all public entities of EU Member States. Whereas the first stage is supposed to increase financial transparency in the EU Member States, the second stage should improve comparability.<sup>23</sup>

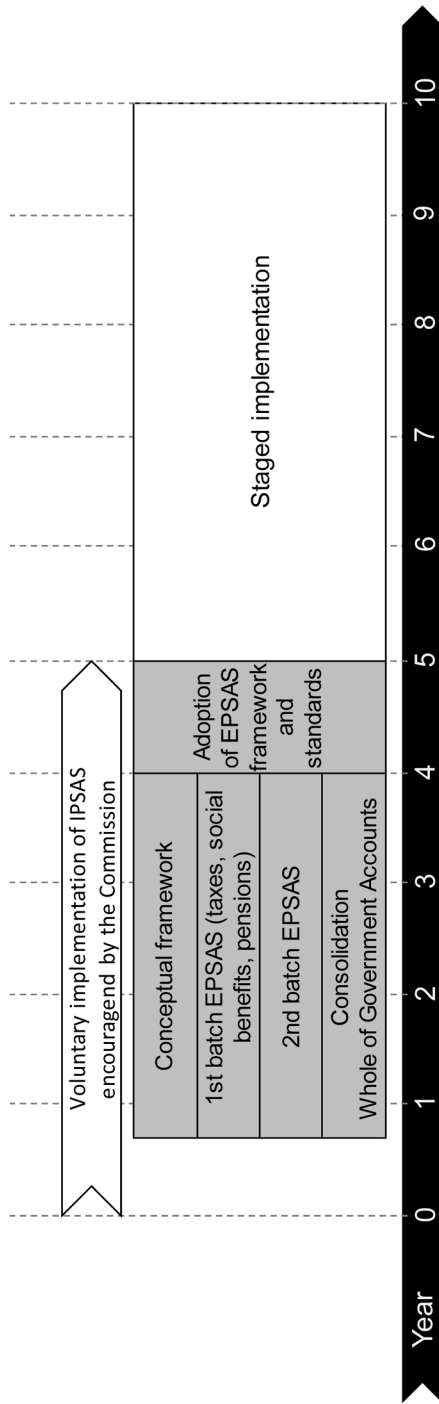
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<sup>20</sup> European Commission (2018), p. 4.

<sup>21</sup> The aims of a conceptual framework are described in detail in Chapter 8.

<sup>22</sup> European Commission (2018).

<sup>23</sup> European Commission (2016).



European Commission (2016), p.2.

Development and legal endorsement

Implementation

Figure 14.3: Timetable for EPSAS Implementation

## 6. Conclusion

EPSAS as the European Public Sector Accounting Standards are accrual-based accounting standards currently being developed for public entities belonging to the general government. Instead of fully applying IPSAS in Europe, the International Public Sector Accounting Standards and the IPSAS CF are used as a basis for EPSAS standard development. In this process of implementing public sector accounting standards for EU Member States, however, it has to be determined to what extent EPSAS can be derived from IPSAS and to what extent EPSAS have to be newly developed. Although some IPSAS standards might be of use for EPSAS development, IPSAS-based accounting standards have to be complemented with corresponding budgeting standards, as IPSAS has not taken budgeting into account. In this regard, rules of consolidation have to be developed in line with a new accounting system, and the design of the IPSAS-based endorsement process has to be adapted. Finally, the costs associated with implementing EPSAS and the related benefits have to be analysed.

For those EU Member States having refused to implement IPSAS so far, applying EPSAS is related to enormous application and switching costs and efforts. A successful implementation of EPSAS means adapting the national budget law and empowering European budget monitoring.

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## **Discussion topics**

- Does adopting EPSAS provide more benefits than using national standards or IPSAS?
- What are the differences between IPSAS and EPSAS?
- What are possible challenges in developing EPSAS?
- What are possible challenges in adopting EPSAS for governments?

## CONCLUSION

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This book presents a general overview about PSA in Europe. However, it is not intended to provide a full overview about the PSA systems in each member state in the European Union. Instead, the objective is to provide insights into different views of PSA in Europe focusing on the DiEPSAm project partner countries (Austria, Germany, Finland, Portugal, UK). Therefore, this book is not particularly about EPSAS. Nevertheless, these final remarks open up the possibility of drawing conclusions for the EPSAS project.

The book demonstrates that PSA has a long history and did not only evolve since the 1980s together with the reforms of the ‘New Public Management’ movement. This also includes the evolution of different accounting systems (such as cash *versus* accrual accounting) and accounting techniques (such as single *versus* double entry bookkeeping). Each of the systems and techniques has its advantages and disadvantages. The



idea of the book is to sensitise the reader to existing differences and (dis-)advantages.

In addition, each EU member state does have a specific accounting tradition (may it be, e.g., rather neutral or prudent valuation of assets and liabilities) as well as its own accounting standards in place. All of these facts make harmonization of PSA in the EU member states a very challenging task. This book also discusses reasons for and against harmonisation within the EU, in particular with respect to the EPSAS project.

Nevertheless, the aim is to show that the reference of PSA to private sector accounting standards is not naturally given, as there are indeed some specificities of the public sector to be considered. Therefore, according to the view of some of the chapters' authors, the adoption of IFRS or the IFRS-based IPSAS needs to be carefully evaluated.

A further issue to be considered is the high relevance of budgeting and budgetary accounting and reporting for PSA. Currently, the EPSAS project does not foresee to change any budgetary accounting rules of its EU member states – as such, the EU PSA harmonisation project does not cover an essential part of the public sector reporting. In consequence, this could mean that EU member states would run their financial reporting systems with accrual-based EPSAS and their budgetary systems with their own systems, be they cash, modified cash, modified accrual, or accrual-based. This could possibly lead to frictions in the delivery of data for statistical purposes and contradict the starting point of the EPSAS project.

Presently (as of June 2019), regarding the future of EU PSA harmonization, one needs to wait for the further steps to be taken by the EPSAS project. To date, the EC (via the Eurostat) is conducting an impact assessment in order to assess four different scenarios:<sup>1</sup>

- 1) Binding European Conceptual Framework (CF) and binding EPSAS;
- 2) Binding European CF with recommended, but voluntary EPSAS;

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<sup>1</sup> EC (2017), p. 5.

- 3) Recommended but voluntary European CF with recommended but voluntary EPSAS; and
- 4) Discontinue completely the work on EPSAS.

Interestingly, on common scenario (as the IPSAS setting) is missing (binding standards coming along with a non-binding CF). Obviously, scenario one leads to the highest degree of comparability between the member states, although its practicability could fail due to legal barriers. Scenario one avoids problems that could arise under scenarios two and three, as a non-binding CF can lead to problems in the development and interpretation of EPSAS. An indication that scenario four will not come to happen could be the fact that the EPSAS working group has now become a regular part of Eurostat. Also according to the EPSAS progress report, the second phase of the EPSAS project is now entered with the objective to “address comparability within and between Member States by implementing EPSAS.”<sup>2</sup>

Last but not least, it has to be stated, that for some countries with very heterogeneous accounting systems in the public sector, such as Germany, the EPSAS project could offer a unique chance for a country-wide and all government level encompassing harmonisation, as there are different accounting systems in place, not only differing between government levels (central, state and local), but also differing at the same level of government, such as municipalities within one state (Bundesland).

Against this backdrop, it will be interesting to see the future development of the EPSAS project and its consequences (e.g. for Germany, the last eager opponent of accrual accounting among all EU member states at least at central level), which might even lead to a second edition of this book. Until then, any feedback and suggestions for improvement are very welcome.

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<sup>2</sup> EC (2019), p. 2.

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## **ADDITIONAL MATERIAL:**

### **1. Questions**

#### **Chapter 1**

#### **Multiple-choice questions (always select the option that is *true*)**

1) According to the European System of Accounts (ESA), the public sector consists of:

- a) All institutional units, resident in the economy that exercise non-market activities.
- b) Those public organisations, which provide utilities and services to the community.
- c) All institutional units, resident in the economy that are not private corporations.
- d) All institutional units, resident in one economy that are controlled by the government.

2) In the public sector, budgeting and budgetary accounting is seen as the most important source of accounting information because:

- a) It relies on single entry bookkeeping and is therefore easy to understand.
- b) The approved budget is legally binding and serves as an authorization for any future expenditure.
- c) It contains the main information about the financial situation and resource consumption of a public entity.
- d) Budgetary norms are internationally equal and therefore budgets are comparable at an international level.

- 3) Conceptually, the difference between assets and liabilities is called:
- a) Net liabilities.
  - b) Revaluation surplus.
  - c) Net assets in the public sector and equity in the private sector.
  - d) Surplus in the public sector and profit in the private sector.

### Open questions

- 1) Why are the DiEPSAM project countries of interest for discussing the harmonisation of public sector accounting in Europe?
- 2) Describe the difference between individual and consolidated financial statements and name reasons for setting up consolidated financial statements.

## Chapter 2

### Multiple-choice questions

- 1) From the sentences below select the one that is *false*:
  - a) All major civilisations have developed different approaches to public sector accounting.
  - b) Different civilisations have had different objectives for public sector accounting.
  - c) Public sector accounting has gradually become more effective over time as techniques have been refined.
  - d) Public sector accountants have used different media to record their accounts including bone, pottery, wood and papyrus.
- 2) From the sentences below select the one that is *false*:
  - a) Cameral accounting is based on the following equation: balances carried forward = balances brought forward + current dues – actuals.
  - b) The English approach to public sector accounting evolved from the French approach after the Norman invasion of 1066.

- c) The French approach is based around the segregation of duties between two sets of officials.
  - d) The English approach to public sector accounting has always been based on budgetary control in a parliamentary democracy.
- 3) From the sentences below select the one that is *true*:
- a) The movement from the feudal charge-discharge system of public sector accounting to parliamentary control of the budget was a long process that took hundreds of years to achieve.
  - b) The public sector has always attempted to follow best practices from the private sector.
  - c) There are few governments in history where public sector accounting of any degree of sophistication has been developed.
  - d) The history of public sector accounting in Europe suggests that the adoption of private sector accounting developments happened quickly after their initial adoption.

### **Open questions**

- 1) Using one or two examples from this lecture, consider the differences between public sector accounting in historic civilisations and the current approach in Europe.
- 2) Consider the challenges involved for governments with different traditions of public sector accounting when adopting a uniform approach.

## **Chapter 3**

### **Multiple-choice questions**

- 1) From the sentences below select the one that is *false*:
  - a) There are several major differences between the circumstances around public and private sector accounting.

- b) The ideas of New Public Management, including the adoption of private sector style financial statements, has been gradually spreading around the world over the last few decades.
- c) Taxpayers are the major users of public sector financial statements.
- d) Accountability to parliament on behalf of the wider citizens is central to public sector accounting.

2) From the sentences below select the one that is *false*:

- a) Budgets are central to the system of public sector accountability.
- b) Accounting is better developed in the private sector and so these best practices should be adopted by the public sector.
- c) Private sector balance sheets provide indications to holders of company debt that they will be able to get their money back if the company becomes insolvent.
- d) In the public sector, the audit report is central to effective accountability.

3) From the sentences below select the one that is *true*:

- a) One of the key roles of government should be to reduce inequality in society to an acceptable level.
- b) In the US all accounting standards bodies support the adoption of private sector accounting approaches by the public sector.
- c) Public sector bodies often fail due to poor financial management.
- d) The public sector is an inefficient drain on wealth production by the private sector.

### **Open questions**

- 1) What do you think are the main reasons for governments to adopt a private sector style approach for their financial statements?
- 2) It has been argued that budgets are more important than financial statements in the public sector. What is your view?

## Chapter 4

### Multiple-choice questions

- 1) Which of the following claims are *more wrong than right*?
  - a) In public sector entities, the allocation principles of expenditure and income items to the budget (and budgetary accounting) and financial accounting are necessarily kept on different bases.
  - b) Cash budgeting serves money usage control and accountability purposes well.
  - c) Capital budgets as separate budget parts show investment cash flow effects but have no significant operative cost effects.
  - d) Budget rules can, practically considered, consist of only financial budget rules and not of non-financial budget rules.
  - e) Accrual-based budgeting includes more reliable data than cash-based budgeting.
- 2) Which of the following claims are *right*?
  - a) IPSAS standards do not require that actual amounts presented on a comparable basis to the budget shall, where the financial statements and the budget are not prepared on a comparable basis, be reconciled.
  - b) Examples of items that usually are not included in budgetary appropriations include the following: Provisions and depreciations.
  - c) Virement rules are a process of controlling the transfer of funds from one budget head to another.
  - d) If net budgeted revenues are more than estimated in the budget, the entity may always by its own decision increase its expenditure.
  - e) According to Schick, accrual budgeting is not ready for widespread application as a budget decision rule because of its complexities.

### Open questions

- 1) What are the different functions of budgeting in the public sector and how are they different from private sector budgeting?



- 2) What is the role of financial and non-financial information in budgets and budget outturn reports? How have these two dimensions been merged in output-based budgets?

## Chapter 5

### Multiple-choice questions

- 1) Which of the following claims are *wrong*?
- a) Assets = Financial capital is the basic equation of the entity theory of accounting.
  - b) Fair value cannot be lower than the historical transaction-based price.
  - c) The realisation principle accepts revaluations, holding gains and holding losses in the income statement.
  - d) Current value as the basis of the valuation of an asset is the amount which it would currently cost to obtain it.
  - e) Matching in public sector accounting is not possible.
- 2) Which of the following claims are *right*?
- a) Depreciations are recognised in the private sector accrual accounting but not in the public sector accrual accounting.
  - b) Neutrality principle in the public sector means care in estimating incomes so that they are not exaggerated and care in estimating expenditures so that they are not underestimated.
  - c) The Initial measurement reflects the value at the transaction date.
  - d) The IASB assumes that financial accounting information that satisfies the needs of shareholders and creditors also satisfies the information needs of other users of the financial statements.
  - e) Holding gains are realised non-exchange transactions.

### Open question

Local government X owns a school building in a rural village. It was built in 1955, and its book value after several renovations and depreciations

in the 2018 financial statement is 500,000 €. **However, later it becomes probable that the usage will end.** If the old building is taken again into governmental service use, it requires a renovation costing 200,000 €. A small school building with capacity for the same number of pupils is now estimated to cost about 650,000 €.

Local government X tried to sell the building via an estate agent but received no offers. After the competitive bidding, a local artist suddenly made an offer to buy the schoolhouse for 50,000 €.

Think about what is the historical cost, fair value, replacement cost and settlement amount of the school.

### Case study question

A local government has the following transactions, events and decisions during the one-year accounting period. Money units are in 1,000 units. In its accounting, the local government obeys precisely all the accounting rules valid in the country. The example is simplified from real life: for instance, value-added-taxes are not taken into consideration. However, all obligatory financial statements (the budget statement reports excluded) are presented in the Case Appendix.

1. The opening balance includes real estate, a school, a health care centre, bank money, own capital and long- and short-term debts.
- 2a. The local government collects own tax incomes in its bank account of 10,000.
- 2b. It received a state grant into its bank account of 10,000.
3. It pays the special health care hospital 1,000 as compensation for services consumed by its inhabitants.
4. It orders materials for use in street construction and recognises a liability of 1,000.
5. It buys medicines to its own health care centre inventory for 500. It uses 450 during the accounting period. The opening balance of the inventory was 0.

6. It receives a facility from a construction company, the acquisition cost was 4,000. The depreciation plan for the facility is 40 years. The straight-line depreciation per year ( $4000/40$ ) is 100. The facility is taken to use 1.7., and the half year depreciation is 50.
7. The local government owns real estate (opening balance) bought for 2,000 during the previous accounting period. At the book closure date, it has an external reliable assessment that the selling price would probably be 3,000. The local government would like to recognise the increase in the value in the balance sheet, but because of carefulness it recognises an appreciation of 800.
  - 8a. It pays short-term liabilities connected to wages of 1,000.
  - 8b. Furthermore, it pays salaries to wage-earners of 10,000.
  - 8c. The wage-earners have earned during the accounting period a certain amount of annual vacation days that they will use next year. The wage cost of this annual vacation will be 1,000.
  - 9a. It has borrowed 10,000 from a bank.
  - 9b. Instalments are not paid during the accounting period but at the book closing date interest has accrued of 50. This will be paid next year.
  - 9c. The interest on the old loan of 100 is paid.
  - 9d. Instalment of the old loan of 500 is paid as well.
10. It has placed surplus cash money in a stock portfolio held for active trading of a total of 1,000. At the time of book closure the value of the placement was 1,500.
11. It has an old waste water utility that has been totally depreciated but can still be used for 5 years. After 5 years it must be demolished because of new effluent regulations and a new sewage treatment plant must then be built. The estimation of the demolition works is 2,000.
12. It has taken a hedging derivative (no speculative traits) instrument for the 10,000 loan, which has a variable interest rate. It makes a Swap agreement with another bank than the bank that offered the loan. The Swap has no acquisition cost at the time of signing the agreement. The Swap changes the variable rate to a fixed rate. The bank that sold the Swap announces that the market value of the Swap agreement at the book closing date is 1,000.

- 13a. It pays 2,000 to a service company that installs equipment for leisure and play to local government parks.
- 13b. It grants 1,000 to several local non-governmental organisations in December. The organisations must show a plan and their latest annual reports in February next year to the local government in order to get the promised money.
14. The local government forbids the usage of two polluted beaches.
15. The local government school receives maintenance services from the local government facility management unit and makes an internal payment of 1,000.
16. The local government decides that it will close its industrial development office next year and buy the corresponding services of a regional joint venture. The estimated annual savings are estimated to be 500 per year.
17. Shortly before finalising the financial statement of the accounting period and closing the books in February of the next year, the local government receives a notice from the Tax Authority that it has to pay back tax revenues that it received in excess and has to return 2,000 in April (the year following the year of the accounting period).
18. It receives a financial statement of the fully municipality-owned company and decides that the CEO must be changed. The board of the company dismisses the CEO and nominates a new CEO.
19. The local government plans to sell its real estate next year and includes a selling revenue of 3,000 in the next year's budget.
20. The council decides to add 1,500 to the current budget's transferable appropriation of 5,000 for constructions. By the end of the current year, 6,300 has been consumed of this transferable appropriation, and 200 has been left over to the next year.
21. The depreciations of the school are 100 and of the health care centre 200.
22. The local government receives from an art collector a donation of valuable sculptures. The donation incorporates restrictions that the collection must be in the museum benefitting the public and that selling it is forbidden. The sculptures will inevitably increase the number

of visitors and ticket revenues in the future. On the other hand, the collection causes some conservation and maintenance costs. The museum has collections of heritage assets and donated art items.

## Assignments

- a) The accounting entries and the financial statements are all shown in the Appendix. Check how the entries have been done to the T-accounts and also the financial statement calculations. There are two items that seems to be missing from the balance sheet. If you were a certified auditor, you should notice them.
- b) Earlier we stated that we can discern two different accounting methods as reference frames that have an impact upon determining the of elements of financial statements, recognition and measurement criteria. These are the revenue-expense-led approach and the asset and liability-led approach. What signs of these methods do you find in the example? In particular, what valuation methods have been used?
- c) Point out places where you find signs (or lack of signs) of the following accounting conventions/principles/concepts:

1. Accounting entity	6. Consistency
2. Money measurement	7. Prudence
3. Going concern	8. Accruals principle
4. Cost concept	9. Matching
5. Realization principle	10. Periodicity

- d) Think about the budgeting in the local government: what would the budget look like if it was made on a cash basis, a modified cash basis or an accrual basis. You do not have to write any answers, just return to Chapter 4 to review this.

## Appendix to case study questions

	Opening balance		
Bank money	1,000	6,000	Own capital
Real estate	2,000	3,000	Loan (long-term)
School	3,000	1,000	Short-term liabilities
Health care centre	4,000		
<b>Total</b>	<b><u>10,000</u></b>	<b><u>10,000</u></b>	<b>Total</b>

	Bank account		
Opening balance	1,000	1,000	3.
2a.	10,000	500	5.
2b.	10,000	4,000	6.
9a.	10,000	1,000	8a.
		10,000	8b.
		500	9d.
		100	9c
		2,000	13a.
		6,300	20.
		1,000	10.
		<b>4,600</b>	<b>Balance</b>
<b>Total</b>	<b><u>31,000</u></b>	<b><u>31,000</u></b>	<b>Total</b>

	Income statement		
Health care exp.	1,000	8,000	Tax revenues
Material exp.	1,000	10,000	State grants
Medicine exp.	450		
Salaries	11,000		
Depreciations	350		
Interest	150		
Awarded grants	1,000		
Demolishing exp.	2,000		
<b>Balance = Surplus</b>	<b>1,050</b>		
<b>Total</b>	<b><u>18,000</u></b>	<b><u>18,000</u></b>	<b>Total</b>

	<b>Balance sheet</b>		
School	2,900	6,000	Own capital
Health care centre	3,800	800	Capital appreciation fund
Facilities	3,950	<b>1,050</b>	<b>Surplus</b>
Constructions	8,300	2,000	Reserves
Real estates	2,000	10,000	New loan
Asset appreciations	800	2,500	Old loan
Trading assets of stocks and bonds	1,000	5,050	Short term liabilities
Inventory	50		
Bank money	4,600		
Total	<b><u>27,400</u></b>	<b><u>27,400</u></b>	

<b>Funds flow statement</b>				
<b>Operational activities</b>		2a.	10,000	Tax revenues
		2b.	10,000	State grants
	Service payments		1,000	3.
	Material payments		500	5.
	Wage payments		11,000	8.
	Interest payments		100	9.
	<b>net</b>		<b>7,400</b>	
<b>Investment activities</b>		Facilities	4,000	6.
		Park	2,000	13.
	Other constructions		6,300	20.
	Stocks & bonds		1,000	10.
	<b>net</b>		<b>-13,300</b>	
<b>Net cash flow after operations and investments</b>				
			<b>-5,900</b>	
Financing activities		9.	10,000	New loan
			500	Installments of old loan
<b>Change in cash money</b>			<b>3,600</b>	
Check:				
Cash money; opening balance			<b>1,000</b>	
Change in cash money			3,600	
Cash money; ending balance			<b>4,600</b>	

## T-accounts

<b>Tax revenues</b>	<b>State grants</b>	<b>Health care service costs</b>	<b>Construction materials</b>
2a. 10,000	2b. 10,000	1,000 3.	1,000 4.
2,000 17.			
8,000			
<b>Medicine expenditure</b>	<b>Medical inventory</b>	<b>Salaries</b>	<b>Loan interest expenses</b>
450 5b.	500 5.	10,000 8b.	50 9b.
	5b. 450	1,000 8c.	100 9c.
	50	11,000	150
<b>Facilities</b>	<b>Depreciations</b>	<b>Real estates</b>	<b>Capital appreciation fund</b>
4,000 6.	50	2,000 7., opening balance	7b. 800
6b. 50	300		
3,950	350		
<b>Trading assets of stocks and bonds</b>	<b>Awarded grants</b>	<b>Reserves</b>	<b>Demolishing service expenses</b>
1,000 10.	1,000 13b.	11. 2,000	2,000 11.
<b>SWAP instruments</b>	<b>SWAP liabilities</b>	<b>Contracting construction costs</b>	<b>School</b>
0 12.	12. 0	2,000 13a.	3,000 Opening balance
		6,300 20.	21. 100
		8,300	
<b>Internal maintenance costs</b>	<b>Internal maintenance revenues</b>	<b>Health care center</b>	<b>Asset appreciations</b>
1,000 15.	15. 1,000	4,000 Opening balance	800 7b.
		21. 200	
<b>Short-term liabilities</b>	<b>Long-term liabilities (loan)</b>	<b>Museum art collections, heritage assets</b>	
Opening balance 1,000	Opening balance 3,000	0 22.	
1,000 8a.	9a. 10,000		
4. 1,000	500 9d.		
8c. 1,000			
9b. 50			
13b. 1,000			
17. 2,000			
5,050			



## Chapter 6

### Multiple-choice questions (always select the option that is *true*)

- 1) GFS stands for ...
  - a) Government Finance Statistics.
  - b) General Fiscal Standards.
  - c) Gorgeous Fiscal Show.
- 2) The economic value of a harmonisation is....
  - a) A higher level of infrastructure budgets.
  - b) A higher level of social budgets.
  - c) Less transactions costs.
- 3) The International Financial Reporting Standards (IFRS) are standards and interpretations published by the...
  - a) International Accounting Standards Board (IASB).
  - b) International Accruals Setting Board (IASB).
  - c) International Asset Speculation Board (IASB).

### Open questions

- 1) What is the conceptual difference between accrual accounting and GFS?
- 2) What is the difference between the harmonisation paths of international private sector accounting and public sector accounting?

## Chapter 7

### Multiple-choice questions (always select the option that is *true*)

- 1) The IPSAS standards are derived from the...
  - a) IFRS standards.
  - b) IFCS standards.
  - c) IDW standards.

- 2) The IPSAS encompass ...
  - a) Only accrual-based standards.
  - b) Only cash-based standards.
  - c) Both accrual-based and cash-based standards.
- 3) Who is expected to use IPSAS?
  - a) International companies only.
  - b) Public sector entities at a global level.
  - c) European countries only.

### **Open questions**

- 1) Why should a state apply IPSAS? And why not?
- 2) What are challenges in adapting the national accounting system to IPSAS?

## **Chapter 8**

### **Multiple-choice questions**

- 1) According to the IPSAS CF, which of the following *better reflects* the pre-requisites for an item to be recognised as an asset in a public sector entity:
  - a) To be a resource presently controlled by the entity.
  - b) The control of that item by the entity must result from a past event.
  - c) The item must have service potential or the ability to generate future economic benefits.
  - d) All of the above pre-requisites are required.
- 2) In the IPSAS CF, the Net Financial Position of a public sector entity results from:
  - a) The difference between ownership contributions and ownership distributions.

- b) The difference between revenue and expense.
- c) The difference between assets and other resources and liabilities and other obligations.
- d) The difference between assets and legal obligations only.

3) From the sentences below regarding measurement criteria of assets and liabilities, please select the *false* one:

- a) The net selling price may be used for assets as an exit value.
- b) The value in use may be used for assets as an observable entry value.
- c) The assumption price may be used for liabilities as an entry value.
- d) The market price may be used for assets as an observable exit value.

### **Open questions**

- 1) Referring to the IPSASB CF, discuss who the users of GPFRs of a public sector entity might be, as well as their needs. Give examples of what type of information needs may be particularly proper to citizens at large.
- 2) Considering the financial information qualitative characteristics in the IPSAS CF, what is the difference between relevance and faithful representation? Refer also to the main concepts associated with each of those attributes.

## **Chapter 9**

### **Multiple-choice questions**

- 1) Which of the following is *not correct* if an entity presents a statement of financial performance by function:
  - a) Expenses are displayed considering their allocations, for example to health, housing, economic affairs, education and other programs the entity develops.

- b) Expenses are displayed considering their nature, i.e. origin, such as wages, consumables, depreciation, impairment losses, financial costs, among others the entity may have incurred.
- c) Revenues are displayed considering their nature, i.e., origin, such as taxes, transfers and grants, revenue from exchange transactions, among others.
- d) The surplus/deficit of the period is presented, highlighting the part belonging to non-controlling interest, if existent.

2) Transfers received by a local authority from the central government to cover current expenditure, according to the IPSAS 2 – Cash flow statements:

- a) Are classified as a cash flow from operating activities.
- b) Are classified as a cash flow from financing activities.
- c) Are classified as a cash flow from investing activities.
- d) Should not be included in the cash flow statement.

3) GPFER audits ensure fair presentation, financial regularity and legality of the public sector entities' accounts. Which of the following is *true*:

- a) Legality audits aim essentially at fighting exaggerating or underestimating figures in the reporting.
- b) Fair presentation audits aim essentially at assessing conformity with the law, namely the budget.
- c) Financial statements audits are generally carried out by Supreme Audit Institutions, such as Courts of Audit.
- d) Financial statement audits assess conformity with accounting and reporting standards and are based on professionals' pronouncements.

### **Open questions**

- 1) Please identify the main components of the GPFER of a public sector entity using IPSAS, briefly describing the information each of those statements convey. In addition, please give examples of types of statements that are part of the annual accounts in some jurisdictions in the EU, namely those not adhering to IPSAS.

- 2) Please briefly explain the importance of disclosing audited GPFs to improve public sector entities' transparency and political accountability.

## Chapter 10

### Multiple-choice questions (always select the option that is *true*)

- 1) Which can be the consequences of applying the revaluation model for subsequent measurement of PPE?
- a) An impairment test is not necessary any more.
  - b) If the revaluation model is applied for one item of PPE, it needs to be used for all other PPE as well.
  - c) Assets with a definite useful life do not need to be depreciated any more.
  - d) The revalued amount of an item may exceed its initial carrying amount.
- 2) How is a non-exchange transaction, in which the transferred asset partly also holds a condition, to be accounted for?
- a) The asset is capitalized at its fair value minus the unfulfilled obligation and a revenue is recorded.
  - b) The asset is capitalized at its fair value, a revenue is recorded for the fulfilled obligation and a liability for the unfulfilled obligation.
  - c) The asset is capitalized at its fair value minus the fulfilled obligation, and a revenue is recorded.
  - d) The asset is capitalized at its fair value minus the fulfilled obligation, and a liability is recorded.
- 3) How is a service concession asset to be initially measured?
- a) At the discounted value of the sum of unearned revenues.
  - b) At its net cost minus the finance cost.
  - c) At fair value at the point of recognition.
  - d) It is not measured because it is not controlled by the public entity.

## Open questions

- 1) Why are inflows from non-exchange transactions recorded in surplus and deficit (i.e. as revenues)?
- 2) Which are the differences between the financial liability model and the grant of a right to the operator model according to IPSAS 32? Please provide examples and reasons why to choose one or the other model.

## Chapter 11

### Multiple-choice questions

1) A public entity uses the revaluation model for subsequent measurement of an asset of PPE (carrying amount 100 kEUR, 10 years useful life). For the first revaluation in the first year of use, a straight-line depreciation of 10 kEUR is accounted for. Then, its market value determined by appraisal is found to be 130 kEUR. What is the respective accounting record for the revaluation?

- |                        |         |                            |         |
|------------------------|---------|----------------------------|---------|
| a) Revaluation reserve | 40 kEUR | to PPE                     | 40 kEUR |
| b) PPE                 | 40 kEUR | to Reversal of impairment  | 10 kEUR |
|                        |         | Revaluation reserve        | 30 kEUR |
| c) PPE                 | 40 kEUR | to Revaluation reserve     | 40 kEUR |
| d) PPE                 | 40 kEUR | to Income from revaluation | 40 kEUR |

2) What needs to be considered when determining the value in use for a non-cash generating asset according to IPSAS 21?

- a) If the fair value less costs to sell is lower than the carrying amount of the asset, the value in use does not need to be determined.
- b) The age and wear of the asset needs to be taken into account by determining the value in use based on depreciated replacement costs.

- c) The non-cash generating assets are to be clustered into cash generating units.
- d) A sound interest rate based on public sector bonds for discounting the cash flows needs to be found.

3) What is the accounting record for a tax receipt through bank transfer by a public sector entity?

- a) Bank account           to           Tax authority
- b) Tax liability           to           Bank account
- c) Bank account           to           Tax authority
- d) Bank account           to           Tax revenue

### Open questions

- 1) Why are inflows from non-exchange transactions recorded in surplus and deficit (i.e. as revenues)?
- 2) Which are the differences between the financial liability model and the grant of a right to the operator model according to IPSAS 32? Please provide examples and reasons why to choose one or the other model.

## Chapter 12

### Multiple-choice questions (always select the option that is *true*)

- 1) According to entity theory of consolidation:
  - a) CFS are compiled as extended SFSs of the controlling entity by recognizing the proportionate share of the assets and liabilities of the controlled entity.
  - b) CFS are compiled from the perspective of the economic entity assuming that the controlling and the controlled entities are dependent permanent operations of the economic entity.
  - c) CFS are compiled from the perspective of the non-controlling interests recognizing the proportionate share of the assets and liabilities of the economic entity.

- d) CFS are compiled from the perspective of the controlling entity assuming that the controlling entity has the power to control the assets and liabilities of other entities to the full extent.
- 2) Whole of government financial reports present:
- a) The overall financial position of a single controlling public sector entity (e.g. a local government) and are prepared via the consolidation of the financial statements and transactions of all the entities controlled by this entity.
  - b) A comprehensive overview of financial and non-financial performance information of public sector programs and services.
  - c) A public entity's assets, liabilities and net assets at a specific point in time.
  - d) The overall financial position of the government of a particular jurisdiction via the consolidation of the financial statements and transactions of all the entities controlled by the jurisdiction's government.
- 3) Full consolidation means that:
- a) The assets and liabilities as well as expenses and revenues of the controlled entities are included in the CFS depending on the controlling entity's share in the net assets of the controlled entities.
  - b) The assets and liabilities as well as expenses and revenues of the controlled entities, the associated entities and the joint arrangements are included in full in the CFSs, irrespective of the controlling entity's share in the net assets of the controlled entities.
  - c) The owned share of the controlled entity's net asset and the share of the net operating income are included in full in the CFS.
  - d) The assets and liabilities as well as expenses and revenues of the controlled entities are included by 100% in the CFS, irrespective of the controlling entity's share in the net assets of the controlled entities.



## Open questions

- 1) What are reasons for difficulties to adopt private sector consolidated accounting in the public sector?
- 2) Why FS II and III are prepared?

## Chapter 13

### Multiple-choice questions (always select the option that is *true*)

- 1) According to IPSAS 35, an entity has power over another entity when, for example:
  - a) The entity has the right to direct the financial and operating policies of another entity.
  - b) The entity owns 50% of the voting rights of another entity.
  - c) The entity has potential rights that give it future ability to direct the relevant activities.
  - d) The entity exercises regulatory over control another entity.
- 2) According to IPSAS 35, a controlling entity shall:
  - a) Adjust its own accounting policies to its controlled entities accounting policies to ensure uniformity.
  - b) Present non-controlling interests in the consolidated statement of financial position together with the net assets of the owners of the controlling entity.
  - c) Prepare CFS that consist of a statement of financial performance and a statement of financial position only.
  - d) Present non-controlling interests in the consolidated statement of financial position within net assets separately from the net assets of the owners of the controlling entity.
- 3) According to IPSAS 36, the equity method is to be used for
  - a) Joint ventures and associate entities.
  - b) Joint arrangements.

- c) Joint ventures and controlled entities.
- d) Joint arrangements and associate entities.

### **Open questions**

- 1) Which entities have to present CFSs according to IPSAS 35?
- 2) What are the differences between full consolidation, proportionate consolidation and the equity method?

## **Chapter 14**

### **Multiple-choice questions (always select the option that is *true*)**

- 1) The EPSAS standards are expected to be...
  - a) Cash-accounting based standards.
  - b) Triple helix based accounting standards.
  - c) Accrual-accounting based standards.
- 2) The EPSAS project is...
  - a) A German initiative to reform public sector accounting.
  - b) An initiative by Italy to reform European public sector accounting.
  - c) A reform initiative of Eurostat in the aftermath of the financial crisis of 2010.
- 3) The potential benefits of information delivered by future EPSAS-based financial statements are...
  - a) A better measurement of the fiscal situation in EU member states.
  - b) A better environmental protection.
  - c) Less debtiness in national budgets.

### **Open questions**

- 1) Who is the standard setter for the EPSAS?
- 2) How stable and robust is the EPSAS standards setting process from right – or left-wing political influence?

## 2. Solutions

### Chapter 1

- 1) d
- 2) b
- 3) c

### Chapter 2

- 1) c
- 2) d
- 3) a

### Chapter 3

- 1) c
- 2) b
- 3) a

### Chapter 4

- 1) The following claims are more wrong than right: a; c; d; e.
- 2) The following claims are right: b; c; e.

### Chapter 5

- 1) The following claims are wrong: b; c; e.
- 2) The following claims are right: c; d.

### Case study of Chapter 5

The local government is an accounting entity. Money measurement is present in most of the numbered descriptions, but not in all. It uses the accrual principle.

The local government is steadily good in a going concern, if not merged with another local government. But inside the budget entity, some units may be closed, as in description 16. Based on description 18, it is a parent for a subsidiary, but it does not make a consolidated financial statement (there is no such in the financial statement collection).

Regarding the cost concept, it seems that the historical cost concept is used with some exemptions, see description 7. Appreciations are not done in description 10, seemingly because the country probably mainly follows the realisation and prudence principles, and in current assets the historical cost or the lower value of the selling price.

The matching and periodicity principles are present in several points, for instance description 6. The prudence principle is also present in description 7.

Based on description 12, it seems that local governments are forbidden to take any speculative derivative instruments in the country in question.

If the Swap is identical to the bank loan in all relevant aspects, it seems probable that the local government may show the market value that is not realised only in the notes to the disclosure.

At first glance, there seems to be a problem with consistency because it seems that in description 13a no depreciations are recorded regarding the park equipment. However, the explanation must be that the local government has received the park equipment at the end of the year, and depreciations are not recorded before the next year's accounting period.

According to the description number 18 the local government has a subsidiary. The local government owned shares are not shown in the balance sheet, which is an error. This omission may be significant and the auditor must probe deeper in to the accounting books.

It seems also that the local government does not recognise donated art items or heritage items to the balance sheet (description 22). It is probable that it keeps a record of all museum items in a way that will satisfy planning and control purposes. The museum makes budget plans containing all expenditures, incomes and investments. The management of the museum seems to think that recognising these items with an infinite life cycle and no initial transaction prices to the balance sheet as assets would not make sufficient sense.

However, a transparent control of donated assets requires that given items with restrictions must be recognised as commissioned assets and as commissioned capital on the liability side.

**Chapter 6**

- 1) a
- 2) c
- 3) a

**Chapter 7**

- 1) a
- 2) c
- 3) b

**Chapter 8**

- 1) d
- 2) c
- 3) b

**Chapter 9**

- 1) b
- 2) a
- 3) d

**Chapter 10**

- 1) d
- 2) b
- 3) c

**Chapter 11**

- 1) c
- 2) b
- 3) d

**Chapter 12**

1) b

2) d

3) c

**Chapter 13**

1) a

2) d

3) a

**Chapter 14**

1) c

2) c

3) a

## Glossary and keyword index

Pages

<b>Accountability:</b> Is the means by which an agent provides explanations for their actions to their superior or controlling body. From the perspective of public sector entities, it covers the obligation for public officials to report on the usage of public resources and answerability of government to the public, to meet stated performance objectives. Also, objective of IPSAS GPFs (Preface of IPSAS CF Par. 23).	27, 48, 56, 68 f., 78, 81, 83, 132, 157, 164, 188 ff., 244 ff., 378
<b>Accounting entity:</b> The purpose of the entity concept is to characterize the accounting boundary and make a clear distinction between the economic affairs of the accounting entity and those of other entities.	31, 125, 217, 320
<b>Accounting standards:</b> Detailed explanations of the accounting approaches by different bodies that should be adopted to ensure that comprehensive and comparable financial statements are produced.	41, 74, 144, 166, 374
<b>Accounting year:</b> The period covered by the accounts or financial statements, the period over which all the receipts and payments are summarised to form the accounts.	52, 130, 227
<b>Accounting basis:</b> Leads to accrual accounting, cash accounting or other basis of accounting.	37, 159
<b>Accrual accounting:</b> Resource-based accounting system in which revenues are recognized in the period earned and expenses in the period in which these are incurred.	39, 77 f., 129, 155, 169, 174
<b>Asset:</b> Resource presently controlled by an entity as a result of a past event, expected to hold service potential or to generate future economic benefits (IPSAS CF 5.6).	76, 78, 86, 89 f., 135, 154, 164, 255, 378
<b>Associate:</b> Entity over which the investor has the power to exercise a significant influence (see IPSAS 38.8).	312 ff., 341 ff., 367

<b>Assurance:</b> Confidence provided in financial statements usually by an auditor that they have been compiled in line with the budget and Financial Regulations.	48, 81, 88, 245
<b>Auditor:</b> A person who provides assurance to stakeholders that the accounts have been prepared properly. Independence of the auditor from the accountant is vital for their role, the details of this can vary from one government to another.	50, 53, 63, 88, 98, 147, 186, 247, 381
<b>Balance sheet:</b> A financial statement that compares information of (current and non-current) assets and liabilities, in order to evidence the net worth (called net assets or equity) of the entity at a reporting date, usually at the end of the reporting period. It is prepared under accrual accounting; also referred to as statement of financial position (e.g., by the IPSASB).	33, 64, 82, 87, 89, 155, 197, 208, 218 ff., 226 ff., 240 ff., 253, 278, 376
<b>Bookkeeping:</b> Recording of financial impacts of economic transactions or events of an entity.	37 f., 66 f., 123 ff., 174, 277 ff.
<b>Budget:</b> An estimation of expenditure/expenses to provide public goods and services, to suppress public needs, as well as the estimated revenue to cover those expenditures/expenses. It is an annual statement by the government approved by parliament that indicates the government's financial plans for the coming year and authorises a certain level of payments on specified goods and services.	32, 56, 81, 83, 96 f., 159
• <b>Annual budget:</b> Approved budget for one year. It does not include published forward estimates or projections for periods beyond the budget period.	32, 97 f.
• <b>Approved budget:</b> The expenditure authority derived from laws, appropriation bills, government ordinances and other decisions related to the anticipated revenue or receipts for the budgetary period.	32, 106
• <b>Budget appropriation:</b> Authorisation granted by a legislative body to allocate funds for purposes specified by the legislature or similar authority.	100 f., 105 f.
• <b>Budget out-turn report:</b> A report summarising all the receipts and payments in comparison with the budget agreed by parliament. This may typically be quarterly or annual.	56, 61, 63

- **Final budget:** The original budget adjusted for all reserves, carryover amounts, transfers, allocations, supplemental appropriations and other authorised legislative, or similar authority, changes applicable to the budget period. 98

**Budgetary**

- **Budgetary accounting and reporting:** Recording of transactions related to the actual documentation of the actual payments and receipts (or expenditures and revenues) in a budgetary year and comparison with the previously agreed annual budget. 33, 96, 113, 192

- **Budgetary basis:** The accrual, cash or other basis of accounting adopted in the budget that has been approved by the legislative body, or similar authority. 37, 97 f., 103, 105 f.,

- **Budgetary control:** Procedures to ensure that receipts and especially payments are only made properly in line with the budget approved by parliament. 59, 98

- **Comparable basis:** The actual amounts presented on the same accounting basis, the same classification basis, for the same entities and for the same period as the approved budget. 114

**Budgeting:** The process of developing, setting up and approving the budget. 32, 48 ff., 65 ff., 83 ff., 100

**Cash accounting:** Accounting regime, in which revenues and expenses are only recognized when the cash inflow or outflow occur. 39, 169, 378

**Cash flow statement:** A financial statement that explains changes in the amount of a funds of an entity consisting of cash and cash equivalents over a certain economic period. Basically, changes occur as cash in- and out-flows. These cash flows might be organized in different ways and the statement is prepared under cash or accrual accounting. According to the IPSASB, it is under accrual accounting and the cash in- and out-flows are to be allocated to operating, investment and financing activities. 196, 218 ff., 220, 234 ff., 240 ff.

**Citizens:** Those people who have the right to vote for a government and so hold it to account for its actions including financial management. 64, 81, 167, 244, 375



**Consistency:** Continuity of accounting methods and rules (e.g. 125 ff., 177, between accounting periods). 384

**Consolidated accounts manual:** Guideline for the controlling entity 319, 342 and the controlled entities which incorporates the accounting, disclosure and measurement methods for the economic entity. It may consider structures in the economic entity, reporting structures and the accounting environment and may also prescribe a chart of accounts to be used. Those guidelines will vary between different groups (economic entities) because of individual decisions in fields where options and management judgement has to be exercised.

**Consolidated financial statements:** Financial statements of an 43, 146, economic (public sector) entity (group) that combine the controlling 307 ff., 336 f. entity and all entities under control, joint control and significant influence of the controlling entity.

**Consolidation:** The process of setting up consolidated financial 314 ff., 345 ff., statements. The procedures contain steps like (1) combining items 349 ff. such as assets, liabilities, net assets, revenue, expenses and cash flows of the controlling entity with those of its controlled entities; (2) offsetting the carrying amount of the controlling entity's investment in each controlled entity and the controlling entity's portion of net assets of each controlled entity; and (3) elimination in full intra-economic entity assets, liabilities, net assets, revenue, expenses and cash flows relating to transactions between entities of the economic entity (IPSAS 35.40).

**Consolidation of revenue and expenses:** Consolidation task that 328, 364 aims to eliminate intra-economic entity transactions in terms of revenue and expenses in the consolidated balance sheet. Elimination can be achieved by reclassification, adjustment or transferral.

### **Control:**

- **Control with respect to resources:** Ability of an entity to use 197 f., 207, a resource so as to derive the benefit of the service potential or 256 f. economic benefits embodied in the resource (IPSAS CF 5.11).

- **Control with respect to entities:** An entity controls another entity when the entity is exposed, or has rights, to variable benefits from its involvement with the other entity and has the ability to affect the nature or amount of those benefits through its power over the entity (IPSAS 35.14). 310, 343
- **Controlled entity:** Entity that is controlled by another resp. by the controlling entity (IPSAS 35.14). 308, 318, 326 ff., 337, 344
- **Controlling entity:** Entity that controls at least one other entity (IPSAS 35.14). 308 f., 324 ff., 337, 344 ff.
- Debt consolidation:** Consolidation procedure that aims to eliminate intra-economic entity items of debts and receivables in the consolidated balance sheet. It includes the identification of intra-economic entity items in terms of debt, consolidation (by leaving off debts and (loan) receivables) and clearance of any differences. 327 f., 362 f., 368
- Decision usefulness:** Objective of IPSAS GPFs (Preface of IPSAS CF Par. 23). For example, [...] the amount and sources of cost recovery and the resources available to support future activities [...] will also be useful for decision-making by users of GPFs including decisions that donors and other financial supporters make about providing resources to the entity (IPSAS CF 2.1). 27, 132 f., 140
- Depreciation:** Accounting technique of systematically allocating the depreciable amount of an asset over its useful life. 78, 80, 130
- Double entry bookkeeping:** Coherent bookkeeping technique, in which for each transaction there are at least two related recordings, balancing between each other. 37, 54, 123
- Economic benefits:** Cash inflows or a reduction in cash outflows possibly generated by an asset (IPSAS CF 5.10). 137 ff., 197 f., 256 f.
- Economic entity:** A controlling entity and its controlled entities. Also called group in the private sector context. 154, 308
- Elimination of unrealised gains or losses:** Consolidation of intra-economic entity transactions where goods and services of the sending entity are capitalised by the receiving entity based on transfer prices, that are not yet realised with external third parties. Finally, those items have to be measured at acquisition or conversion cost from an economic entity perspective. 330, 364

<p><b>EPSAS:</b> European Public Sector Accounting Standards (EPSASs) are a (to be developed) set of accounting standards issued by the European Commission (specifically based on a proposal of Eurostat) for use by public sector entities (containing all government levels and social security funds) in the EU member states in the preparation of financial statements.</p>	<p>19 ff., 27 ff., 160, 379 ff.</p>
<p><b>Equity method:</b> Method of accounting for an associate or a joint venture whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets of the associate or joint venture (IPSAS 38.8).</p>	<p>325 ff., 345, 367</p>
<p><b>Fair value:</b> This is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between knowledgeable, unrelated willing market participants at the measurement date.</p>	<p>134 ff., 155, 176, 256 ff.</p>
<p><b>Financial accounting:</b> Recording of all economic transactions and presentation of an overview of the resources, i.e. assets, and sources of finance (liabilities and net assets), as well as an overview of the resource consumption and creation, i.e. expenses &amp; revenues; cash in- and out-flows, during the reporting period. The accounting procedures are needed to produce the annual financial statements of an entity.</p>	<p>33, 74, 91, 113, 152</p>
<p><b>Financial auditing:</b> A type of auditing to the financial statements, usually carried out by professional bodies (e.g., auditing firms). It might be determined by law but based on professionals' pronouncements, aiming at assessing conformity with accounting and reporting standards (fair presentation stated in the auditor's report accompanying the accounts).</p>	<p>243 ff., 248</p>
<p><b>Financial liability model:</b> Model of subsequent measurement of a service concession arrangement which is prevalent if the grantor has an unconditional obligation to pay for the construction, development, acquisition or upgrade of the asset (IPSAS 32.18).</p>	<p>270, 297</p>
<p><b>Financial regulations:</b> A set of fairly detailed rules covering all financial procedures that are to be followed by all officials in a public sector entity or across the whole of government.</p>	<p>56, 83</p>

<b>Financial reporting:</b> The process of producing and maybe publishing documents containing financial statements or selected financial statement information with the aim of enabling users to understand the financial affairs of the entity and to assess the relative success of its financial management.	33, 68, 74, 146, 378
<b>Financial statements:</b> Reports prepared by an entity's management to present the financial performance for a reporting period and financial position at a point in time. A set of <b>financial statements</b> usually includes a balance sheet, income statements, and statement of cash flows. In the public sector context, these also may contain tables of amounts of receipts and payments made by an entity compared to the annual budget approved by parliament and/or the figures for the previous year.	43, 78, 81, 83, 144, 146, 166, 253 ff., 277 ff.
<b>General Purpose Financial Reporting / Reports – GPFR(s):</b> Set of statements, including financial statements, as well as other statements demonstrating compliance with the approved budget, management performance and service delivery, and also descriptive narrative non-financial information (e.g. in the notes). Because it aims at satisfying information needs of diverse users, none in particular having the power to require (individually tailored) specific purpose reporting, it is designated of 'general purpose'.	36, 188 ff., 214 ff.
<b>Going concern:</b> Assumption that the entity is a continuing one, at least in the near future, and not on the verge of cessation.	125 ff., 131, 184
<b>Goodwill:</b> An asset representing the future economic benefits arising from other assets acquired in an acquisition that are not individually identified and separately recognised (IPSAS 40.5).	327 ff., 351 f.,
<b>Grant of a right to the operator model:</b> Model of subsequent measurement of a service concession arrangement for which there is no unconditional obligation to pay by the grantor to the operator, but the operator is given the right to earn revenue from third-party users or another asset (IPSAS 32.24).	271, 300
<b>Group:</b> A controlling entity and its controlled, jointly controlled or significantly influenced entities in the private sector. Also called "economic entity" in the public sector context.	308, 343 ff.

<p><b>Heritage assets:</b> Assets with a (1) cultural, environmental, educational or historical value, which are, in addition, characterised by (2) sale prohibitions or restrictions laid upon those assets, (3) the difficulty to estimate their useful lives, and (4) their irreplaceability (IPSAS 17.10).</p>	<p>255, 296</p>
<p><b>Historical cost concept:</b> Historical cost is the price paid to acquire or the resources consumed to produce an asset or the amount received pursuant to the incurrence of a liability in an actual exchange transaction.</p>	<p>137, 155</p>
<p><b>IFAC:</b> International Federation of Accountants. The IFAC was established in 1977 and aims to promote international harmonisation of accounting.</p>	<p>74, 77, 165</p>
<p><b>IFRS:</b> International Financial Reporting Standards (IFRSs) are a set of accounting standards issued by the International Accounting Standards Board (IASB) for global use by private sector entities in the preparation of separate or consolidated financial statements. They are the basis for the IPSAS development.</p>	<p>146, 166</p>
<p><b>Impairment:</b> A loss in the future economic benefits or service potential of an asset. With respect to depreciable assets it exceeds the systematic recognition of the loss of the asset's future economic benefits or service potential through depreciation (IPSAS 21.14).</p>	<p>259, 265, 287</p>
<p><b>Income statement:</b> A financial statement that reports on the revenues obtained and expenses incurred during a certain economic period, evidencing the entity's deficit or surplus at the end of that reporting period; this bottom line is to be included in the net assets in balance sheet. It is prepared under accrual accounting. Also designated as statement of financial performance (e.g., by the IPSASB). Excluded are (other comprehensive income transactions leading to) revenues or expenses that are directly recorded in equity (resp. net assets).</p>	<p>78, 107, 140, 200, 218 ff., 229 ff., 240 ff.</p>
<p><b>Integrated Reporting:</b> Process of presenting clearly and concisely how a public entity creates and sustains value (e.g. public welfare) in an interconnected way, taking into account economic, social and environmental factors and the value creation in the short, medium and long run. Might be based on the International Integrated Reporting Council (IIRC) Framework.</p>	<p>34 f.</p>

<b>Internal control:</b> Procedures introduced and individually designed by an reporting entity to avoid loss of goods or money, to ensure that the Financial Regulations are followed and accurate financial statements and other accounts are prepared.	54 f.
<b>IPSAS:</b> International Public Sector Accounting Standards (IPSASs) are a set of accounting standards issued by the IPSAS Board for global use by public sector entities in the preparation of separate or consolidated financial statements. IPSASs are based on IFRSs.	114, 166, 181-305
<b>International Public Sector Accounting Stad Board (or IPSASB):</b> The IPSASB is developing the IPSAS and consists of 18 members.	165 ff.
<b>Joint arrangement:</b> Arrangement of which two or more parties have joined control (IPSAS 36.8).	168, 341, 345
<b>Joint control:</b> Consent of at least two independent parties to decide about the relevant activities of an arrangement unanimously (IPSAS 36.8).	312, 345 ff.
<b>Joint venture:</b> Joint arrangement whereby the parties, that have joint control of the arrangement, have rights to the net assets of the arrangement (IPSAS 38.8).	312 ff., 367
<b>Liabilities:</b> Debts and related amounts of money that are expected to be paid by an entity in a future financial year. In IPSAS CF 5.14 defined as “present obligation of an entity for an outflow of resources that results from a past event”.	86 f., 89, 135, 154, 166, 378
<b>Management accounting:</b> A system that allows for the calculation of the resource consumption (costs) of organizational units or product/service units for control or pricing purposes.	34, 97
<b>Matching:</b> Accounting principle for the accrual and deferral of expenses and income, where expenses are recognized when the income is realized or revenues are recognized as income when they are probable and the related expenses have been incurred.	232
<b>Measurement criteria:</b> Bases to determine monetary values for elements to be recognized in the financial statements, e.g., historical cost, replacement cost, market value, or value in use.	135, 201 ff.

<b>Money measurement:</b> The common accounting convention is to measure transactions with (constant) monetary terms.	125
<b>Multi-year budget:</b> An approved budget for more than one year. It excludes published forward estimates or projections for periods beyond the budget period.	97
<b>Net assets/equity consolidation:</b> Consolidation task to offset (eliminate) the carrying amount of the controlling entity's investment in a controlled entity and the controlling entity's portion of the net assets/equity of the controlled entity.	327, 358
<b>New Public Management:</b> The approach to public sector management adopted by some governments in recent decades that emphasises efficiency, encourages privatisation and outsourcing and the adoption of private sector style management tools by public sector entities.	48, 65, 75, 83
<b>Non-controlling interest (NCI):</b> Also referred to as minority interest. Specifically used in relation to controlled entities included in consolidated financial statements to specify the interest in net assets that is held by outside investors rather than the controlling entity preparing the consolidated financial statements. The outside investor's share of ownership in net assets gives them no influence on how the company is run. The outside investor's portion of the surplus or deficit and net assets/equity of a controlled entity has to be disclose separately.	232, 313 ff., 351 f.
<b>Non-exchange transactions:</b> Transactions in which a public entity receives/pays resources and provides/receives no or nominal consideration (IPSAS 23.9).	80, 172, 258, 266, 294
<b>Notes:</b> Additional financial and non-financial information that complements the financial statements within GPFR, helping users to better understand, interpret and place in context the information reported in the different financial statements (e.g. statement of financial position or of cash flows). They should include also a summary of the main accounting policies.	239, 254
<b>Original budget:</b> The initial approved budget for the budget period.	110
<b>Periodicity:</b> This means that the life of an accounting entity must be divided into constant periods, usually into one-year periods, for reporting purposes.	125

**Power:** Consists of existing rights that give the current ability to direct the relevant activities of another entity (IPSAS 35.14). 311, 314, 343

**Private sector accounting:** The style of external financial accounting adopted by not state-owned for profit companies that includes a profit and loss accounting indicating the annual profit earned by the company and a balance sheet that indicates how its debts will be funded in cases of bankruptcy or insolvency. The private sector might encompass charities and non-profit organisations. 30, 75, 79 f., 145

**Property, plant and equipment:** Tangible (i.e. physical) assets for the purposes of production or supply of goods or services, administrative purposes or rental to others, which are expected to be used during more than one reporting period (i.e. as non-current assets) (IPSAS 17.13). 255 ff., 278 ff.

**Prudence principle:** Two notions exist. Cautious prudence means care in e.g. estimating budget incomes so that they are not exaggerated and care in estimating budget expenditures so that they are not underestimated. Asymmetric prudence means that e.g. unrealized losses are recognized, but not unrealized gains. Asymmetric prudence is one of the core principles for preparing financial statements in Germany, whereas the cautious prudence notion prevails in IPSAS financial statements. 99, 131

**Public sector accounting:** The means by which governments, ministries, departments and agencies record, analyse and report their economic transactions. It depends on the system of accounting and accounting technique used. In some jurisdictions, it includes a comparison of cash receipts and payments actually undertaken in comparison with the annual budget approved by parliament. 48, 75, 164

**Public sector:** All institutional units, resident in the economy that are controlled by government, including social security funds (ESA 1.35). 30

**Qualitative characteristics:** Attributes financial information must fit the main objectives of accounting. Qualitative characteristics are principles that might interact and must be outweighed against each other. Qualitative characteristics of elements of IPSAS financial statements should ensure for usefulness of the information provided for several users, namely for the purposes of accountability and decision making. Examples are neutrality, comparability and timeliness. 124, 182, 185, 194 ff., 201, 209



<b>Realisation:</b> Refers to the initial recognition of revenue. Revenues can only be realised after they have been earned. They are earned and only recognized e.g. in sales transactions in that point or period in time, when the underlying goods associated with the revenues have been delivered or the services have been provided.	128, 131, 328 f.
<b>Recognition criteria:</b> Features to be accomplished by an item in a transaction, in order to include that item in the financial statements. Usually, recognition criteria relate to the definition of an element in the financial statements, such as asset, liability, revenue or expense. In order to be included as such, the definition and recognition criteria must be fulfilled. The latter include the reliability of the measurement.	155, 207 ff.
<b>Regularity auditing:</b> A type of auditing in a government or public sector entity, aiming at assessing conformity with legal form, assuring propriety and probity (explicit in the law) of records of transactions, and transactions themselves. Regularity audits also include assessing whether transactions conform with the budget or not. They are generally carried out by Supreme Audit Institutions (SAI), following rules from the International Organization of SAI (INTOSAI).	246 f.
<b>Replacement cost:</b> The price that would be paid to acquire an asset with equivalent ability to generate economic benefit or service potential in an orderly market transaction at the measurement date.	34, 127, 137
<b>Reporting entity:</b> A government or other public sector organization, program or identifiable area of activity of the public sector, that prepares GPFs; it might not have juridical/legal personality (IPSASB CF 4.1, 4.4).	34, 146, 155, 217 ff.
<b>Reporting unit:</b> The entity, formally or informally existent, that produces reporting.	154, 337
<b>Resource:</b> An item with service potential or the ability to generate economic benefit (IPSAS CF 5.7).	196 ff., 220 f., 254, 294
<b>Separate financial statements (SFS):</b> Financial statements presented in addition to consolidated financial statements or in addition to financial statements by an investor that does not have controlled entities but has investments in associates or joint ventures (IPSAS 34.7).	337

<b>Service concession arrangement:</b> Binding agreement between a grantor and an operator, whereby the operator uses an asset to provide a public service on behalf of the grantor for a specified period of time; and the operator is compensated over the service concession period (IPSAS 32.8).	270, 297
<b>Service concession asset:</b> Asset which is alternatively either a) provided by an operator, who constructs, develops or acquires the asset for the grantor or an existing asset of the operator or b) provided by the grantor as an existing asset of the grantor or an upgrade to an existing asset of the grantor (IPSAS 32.8).	270, 297
<b>Service potential:</b> An asset's capacity to provide services that contribute to an entity's objectives (without necessarily generating net cash inflows) (IPSAS CF 5.8).	198 ff., 203, 256
<b>Settlement amount:</b> This is the amount at which an asset could be realised or a liability could be liquidated with the counterparty, other than in an active market.	134, 136
<b>Significant influence:</b> Power to participate in the financial and operating policy decisions of another entity but, is not control or joint control of these policies (IPSAS 38.8).	312, 345
<b>Single entry bookkeeping:</b> Simple bookkeeping technique, in which each transaction is only recorded once, with no counterpart entry; generally associated to the cash-basis accounting regime, in single entry only cash inflows and cash outflows are recorded.	39, 123
<b>Stakeholders:</b> The key groups of people that a private sector company or a public sector entity are accountable to for the quality of their management.	81 f., 88
<b>Sustainability Reporting:</b> Process of delivering an overview of an economic, environmental and social performance of an organization consisting of financial and non-financial information, but in contrast to Integrated Reporting. The Global Reporting Initiative (GRI) is a global de facto standard setter for sustainability reports.	34

<b>Taxation:</b> The main source of public sector or government income; mandatory payments to be made on the receipt of income by a person or company or for a variety of other reasons including purchase or ownership of land or property.	48, 51, 54, 86 f., 268
<b>Taxes:</b> Economic benefits or service potential compulsorily paid or payable to a public sector entity other than fines or other penalties (IPSAS 23.7), but such as the receipt of income by or for a variety of other reasons.	51, 268
<b>Transfers:</b> Inflows from non-exchange transactions other than taxes such as cash or non-cash assets, debt forgiveness, bequests, donations, and goods and services in-kind (IPSAS 23.7).	266
<b>Transparency:</b> Unfettered access by the public to timely and reliable information on decisions and performance in a reporting entity.	144, 164, 224 ff., 245, 378
<b>Treasurer:</b> The government official who is responsible for the Treasury, may be the most senior financial official in a government or the Ministry of Finance.	48, 50
<b>Treasury:</b> The central department in the Ministry of Finance which is responsible for collection of receipts, making payments, recording these transactions and ensuring liquidity and taking care of financial planning.	48, 50, 58 f.
<b>Users of GPFR:</b> Several addressees of the financial reporting in a broad sense, who usually do not have the power to require (individually tailored) specific purpose reporting to satisfy their financial information needs. They are, e.g., citizens, the Parliament, investors in markets, national statistics institutes and the media.	132, 190, 245

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