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Financial statistics methods and concepts in Switzerland

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Abbreviations used

Abbreviation	Meaning
AHV	Old-age and survivors' insurance
ALV	Unemployment insurance
FSO	Federal Statistical Office
FStatA	Federal Statistics Act
Cst.	Federal Constitution
COFOG	Classification of the Functions of Government
FFA	Federal Finance Administration
EMU	European Monetary Union
EO	Compensation for loss of earnings
ESS	European Statistical System
ESA 2010	European System of Accounts (2010)
EU	European Union
Eurostat	Statistical office of the European Commission
EEA	European Economic Area
FAWG	Financial Accounts Working Group (Eurostat)
FS Model	(National) financial statistics model of Switzerland
FL	Agriculture family allowances
GFSM 2014	Government Finance Statistics Manual 2014 (IMF, Washington, DC)
GFS Model	Swiss implementation of the international GFSM 2014
HAM1	Former Harmonized Accounting Model for the Cantons and Municipalities, Handbook on accounting for government units; 1981 edition
HAM2	New Harmonized Accounting Model for the Cantons and Municipalities
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
IIP	Swiss Federal Institute of Intellectual Property
IPSAS	International Public Sector Accounting Standards
IV	Disability insurance
IMF	International Monetary Fund
NFE	New fiscal equalization and division of tasks between the Confederation and the cantons
NPISH	Non-profit institutions serving households
SNA 2008	System of National Accounts 2008
SNB	Swiss National Bank
SRS-CSPCP	Swiss Public Sector Financial Reporting Advisory Committee

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Purpose of this document

The publication of the results of Switzerland's public finance statistics (i.e. financial statistics) from fiscal 2008 onward and a partial revision of the legacy data from 1990 onward saw the introduction of some new concepts and methods based on the new accounting models for Switzerland's general government sector and international financial statistics standards. This report has been drawn up to explain this new methodology.

This methodology paper is intended as a supplement to the report published by the Financial Statistics Section on Switzerland's public finances, which documents the results of the country's public finance statistics.

This paper is designed to be a non-technical report on the methodology and procedures used in financial statistics. It seeks to present the methods, concepts and definitions used in preparing the financial statistics in a manner that is clear and easy to understand. It has been written for an intended readership of interested specialists.

1 Summary

1.1 Aim of financial statistics

The statistics on Switzerland's public finances, or financial statistics for short, give an overview of the revenue, financial and asset situation of the government units in Switzerland. The financial statistics data is recorded, processed and evaluated according to the so-called FS Model, which ensures the national comparability of the accounting data of Switzerland's government units. The FS Model is also used as a basis for international comparisons, which are carried out in accordance with the guidelines of the Government Finance Statistics Manual 2014 (GFSM 2014[1]) of the International Monetary Fund (IMF) using the so-called GFS Model of financial statistics and with the guidelines of the European System of Accounts (ESA 2010[2]) using the so-called ESA Model of financial statistics.

1.2 Sectoring and data collection

In the case of the general government sector, the various models use the same delimitation criteria for determining the consolidation scope as those used in the national accounts. This sector is subdivided into the economic sub-sectors Confederation (including separate accounts and decentralized administrative units), cantons, municipalities and social security funds. The consolidated general government sector thus covers all government units. Public enterprises are not included.

The data is based on that disclosed in the state financial statements of the Confederation, all cantons, the annual financial statements of all municipalities except for those in four cantons (partial survey and stratified sampling) and the social security funds (old-age and survivors' insurance, disability insurance, compensation for loss of earnings and unemployment insurance, agriculture family allowances, maternity insurance in Geneva). In recent years, the Financial Statistics Section has pushed ahead with the full surveys of all municipalities in a given canton.

1.3 The FS and GFS Models of financial statistics

The Financial Statistics Section publishes two models. The FS Model is based on the Harmonized Accounting Model for the Cantons and Municipalities (HAM2) and allows the financial results supplied by the Confederation, cantons, municipalities and social security funds to be standardized and made comparable. The HAM2 chart of accounts forms the basis for the classification by nature used in the FS Model. The data from the Confederation's

[1] Government Finance Statistics Manual, 2014, IMF https://www.imf.org/external/np/sta/gfsm/
[2] ESA 2010, 2010, https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/ks-02-13-269

separate accounts and state financial statements, as well as the social security funds, is also integrated into this model.

In order to facilitate international comparisons and allow for data deliveries to international organizations, financial statistics are also compiled according to the GFSM 2014 in addition to the national FS Model. The national FS Model is used as the starting point. First, the FS data is mapped to the GFS Model. Then, in a second step, certain statistical operations are performed so as to ensure compliance with the financial statistics standard of the IMF. The Swiss implementation of the GFSM 2014 is referred to as the GFS Model.

Table 1: Overview of the financial statistics models published

	FS Model	**GFS Model**
Basis	National accounting model for the cantons and municipalities (HAM2) and the Confederation (NAM)	International financial statistics guidelines of the IMF (GFSM 2014)
Objective	National comparability of government units	International comparability of the general government sector and its sub-sectors
Results	Statements of financial performance and investments, financing statement and statement of financial position	Operating statement, transactions in non-financial assets and balance sheet
Scope	At the level of the economic sub-sectors and individual budgets (Confederation, cantons, municipalities, social security funds) and the general government sector down to the level of individual budgets (cities and cantonal capitals, cantons, individual social security funds)	Only at economic sub-sector level (Confederation, cantons, municipalities, social security funds) and the general government sector

1.4 The ESA Model

Switzerland's system of national accounts, which is based on the ESA 2010, is a GNP account forming a realistic representation of the Swiss economy, the main objective of which is to determine the value added, i.e. GDP. The Financial Statistics Section is responsible for compiling the general government sector's basic data required for the system of national accounts and supplying it to the Federal Statistical Office. This is done using the ESA Model, which is based on the GFS Model. As both the ESA 2010 and GFSM 2014 are based on the methodology presented in the SNA 2008 (System of National Accounts 2008), both of these approaches use the same rules as regards valuation and the time of recording; their requirements are thus practically the same. However, there is a difference in terms of consolidation. While all transactions between government units are consolidated with the GFS Model, the system of national accounts has only partial consolidation. As a result, general government expenditure and receipts are increased by the same amount relative to the GFS Model and the general government expenditure ratio is thus higher.

2 What is the purpose of financial statistics?

2.1 Definition and aim of financial statistics

Financial statistics are summary statistics. One of the main tasks of financial statistics is to disclose on a comparable basis the revenue, financial and asset situation of the government units and the structure of their expenditure, classified by function (task area). Financial statistics are based on the financial accounting of public bodies and the institutions under their control (e.g. corporations, concordats, special purpose entities, institutions, separate accounts, funds). Especially because of the various options[3] offered by the HAM2 and its purely recommendatory nature, the results are generally not comparable. Only by ensuring national comparability is it possible to aggregate the individual federal levels into the general government sector and thus to view the financial situation of the government units from a macroeconomic perspective. This serves as a basis for deriving numerous financial indicators such as the general government expenditure ratio, deficit ratio, tax-to-GDP ratio and debt ratio. Also, the accounts of the general government sector form a significant component of the system of national accounts and are therefore – together with the other institutional sectors[4] – placed in a wider macroeconomic context.

Ensuring international comparability is likewise one of the main tasks of financial statistics. To this end, the accounting results for the general government sector are reported in accordance with the international financial statistics standards as defined in the IMF's GFSM 2014. This serves as a basis for comparing Switzerland's fiscal policy situation with that of other countries, e.g. with the use of indicators. Government finances are also reported in accordance with EU guidelines for the purposes of the system of national accounts, an obligation that Switzerland signed up to in the Statistics Agreement as part of the second series of bilateral negotiations with the EU (also known as the Bilateral Agreements II).

As part of its publication activities, the Federal Finance Administration (FFA) regularly publishes on its website detailed data on the FS and GFS Models[5], as well as international comparisons and forecasts.

[3] https://www.srs-cspcp.ch/en/implementation-n17991

[4] Financial and non-financial corporations, households, non-profit institutions serving households, and the rest of the world; see the FSO's website on the system of national accounts: https://www.bfs.admin.ch/bfs/de/home/statistiken/volkswirtschaft/erhebungen/vgr.html

[5] https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/daten.html

2.2 Financial statistics survey scope

The entities surveyed in financial statistics are government units and other units under their control. Delimiting the boundaries of the public sector with respect to the private sector and the rest of the world plays a decisive role in fiscal policy and economic analysis. Only government units which in aggregate form make up the general government sector in the system of national accounts are surveyed in financial statistics. However, public enterprises are not included. Government units (general government sector) and public enterprises together form the public sector (for more information, see section 3).

The survey population in financial statistics is the individual government units' accounting results, particularly their financial accounting. Specifically, this includes the statements of financial performance, statements of investments and statements of financial position. With the growing digitalization and interoperability of financial data, the level of detail of financial statistics can be increased. This trend enables higher-quality statistics and fiscal policy analyses based thereon. Examples include the identification of various measures to cushion the impact of the COVID-19 pandemic in 2020 (e.g. joint and several sureties), and the repayment of subsidies by Postauto AG. In addition, the functions are recorded for all line items of the statement of financial performance and the statement of investments.

For data collection, storage and processing and for reporting on financial statistics, all variants of the financial statistics models require an economic classification of the chart of accounts and a functional classification of the general government's tasks. The economic classification reflects the economic stocks and flows while, in the functional classification, the flows that form government receipts and expenditure are allocated to a task area[6].

The survey scope fully covers the state financial statements of the Confederation, all cantons and the annual financial statements of all cities and towns and cantonal capitals. All municipalities of a canton are likewise fully covered, except in the case of four cantons, where the municipalities' annual financial statements are surveyed on a random sample basis and extrapolated. However, the Financial Statistics Section strives to close this data gap and achieve a full survey of the municipalities. The social security funds are also included in full (old-age and survivors' insurance, disability insurance, compensation for loss of earnings and unemployment insurance, agriculture family allowances, maternity insurance in Geneva). Institutions that are counted in the government units but not included in the state and municipal accounts are integrated into the statistics for the sake of comparability and completeness. In contrast, public enterprises that are consolidated in the state and municipal accounts are excluded. For these reasons, the evaluations in the financial statistics do not necessarily

[6] In the database of the Financial Statistics Section (FFA), each amount in the statement of financial performance, statement of investments and financing statement is allocated to a position under both the economic and functional classification systems. The nomenclatures of the models are published on the FFA website: Financial statistics: Economic and functional classification (admin.ch).

correspond to the financial statements published by the Confederation, cantons, municipalities and social security funds. Section 3 discusses the delimitation of the general government sector in more detail.

Due to the vast workload involved in compiling and harmonizing the data caused by the federal structure of the government units, there is generally a time lag of some 18 months before publication of the definitive results for each fiscal year. Estimates can be used for more up-to-date statements and forecasts for aggregates of the entire general government sector and the individual sub-sectors. These should be interpreted with due caution, however.

2.3 Legal framework for financial statistics

2.3.1 Constitutional basis and federal law

The legal framework for the statistics on Switzerland's public finances is based on Article 65 of the Federal Constitution (Cst.) and the Federal Statistics Act derived from this (FStatA, SR 431.01). The FStatA governs the collection of data by the Confederation for the purpose of compiling statistics, including financial statistics. The purpose of federal statistics is to provide representative results in a professionally independent manner on the status of and changes in the population, the economy, society, research, spatial planning and the environment in Switzerland (Art. 3 para. 1 of the FStatA), whereby financial statistics are useful for most of the tasks of federal statistics mentioned in Article 3 of the FStatA.

In the Ordinance on the Conduct of Federal Statistical Surveys (Statistical Surveys Ordinance, SR 431.012.1), the Federal Council specifies which surveys are to be carried out. The annex lists which surveys are carried out in which way and by whom. The survey population for financial statistics according to the annex to the StatO covers the financial statements, budgets and financial plan data of the government units. According to Article 9 paragraph 1 letter c of the Organisation Ordinance for the Federal Department of Finance (OrgO-FDF, SR 172.215.1), the FFA is responsible for compiling financial statistics: "It [the FFA] compiles the public administrations' financial statistics."

Article 4 of the FStatA describes the principles for data acquisition. Insofar as the Confederation has the necessary data available or that such data becomes available to an organization subject to this Act in the implementation of federal law (federal administrative data), separate surveys need not be conducted by federal statistical bodies (Art. 4 para. 1 of the FStatA). In the case of financial statistics, the Confederation does not have the data directly available, except for the data from the Confederation's state financial statements. Here, Article 4 paragraph 2 is decisive. It describes "indirect collection" from cantonal or municipal agencies or from other legal entities under public law. In principle, therefore, cantons, municipalities and other public bodies are obliged to support the Confederation in collecting data for financial statistics.

In this respect, however, the form in which the data should be furnished by the cantons, municipalities or other legal entities under public law is not defined. A legal opinion[7] commissioned by the FFA showed, for example, that there is no constitutional or legal basis that would make it possible to harmonize the accounting of the Confederation, cantons, municipalities and social security funds. This would create a disproportionate administrative burden, would infringe upon the cantons' sovereign right to organize their own affairs and, in particular, would also violate Article 47 of the Federal Constitution (autonomy of the cantons).

2.3.2 The Statistics Agreement with the EU and other international obligations

With the Bilateral II Statistics Agreement, which was ratified in the summer of 2005 and entered into force on January 1, 2007, Switzerland obtained a legal basis for cooperation with the statistical office of the European Commission (Eurostat) and the associated bodies. Since the entry into force of the Statistics Agreement, Switzerland has been a full member (without voting rights) of the European Statistical System (ESS) and can participate in all committees and working groups dealing with the development of statistical standards and methods. The ESS seeks to ensure the production of reliable and comparable statistics. Within the ESS, Switzerland is de facto on an equal footing with the members of the EEA (European Economic Area).

The Statistics Agreement governs the cooperation between Switzerland and the EU with respect to statistics. The production, forwarding and publication of EU-compatible statistical information should be guaranteed in all areas of significance to both parties. The agreement is administered by the "*Joint Committee*" or "*Statistical Committee*". Switzerland and the EU have equal representation on this committee. The Joint Committee ensures appropriate implementation of the Agreement and regular updating of Annex A to the Agreement, which lists all EU regulations of the acquis communautaire[8] that Switzerland has undertaken to comply with, as well as the deadlines for providing data to Eurostat. The last revision of Annex A on December 2, 2019 ensures that the coherence and comparability of statistics between Switzerland and the EU are maintained following the updating of EU legislation.

The whole area of economic statistics is of particular relevance for financial statistics in the Statistics Agreement with the EU. Specifically, this covers consumer price statistics, economic

[7] Stalder, K. and Röhrs, S. (2005): Prüfung der erforderlichen Rechtsgrundlagen für die Harmonisierung der Rechnungslegung der öffentlichen Haushalte und des öffentlichen Sektors im weiteren Sinne, Institute of Public Finance and Fiscal Law of the University of St Gallen. Legal opinion issued for the attention of the FFA.

[8] "Acquis communautaire" – the body of common rights and obligations that are binding on all EU member states. These include the EU and EC treaties (primary legislation), the regulations, directives, decisions and recommendations issued by the EU governing bodies (European Commission, Council of the European Union and European Parliament) (secondary legislation) and the decisions of the Court of Justice of the European Union (CJEU).

statistics and the system of national accounts[9]. Public finance statistics are not directly mentioned, only the financial accounts of the general government within the framework of the system of national accounts. However, these are based on financial statistics data, which is why there is an indirect obligation to furnish statistical data that is compatible with the EU standards. Financial statistics thus provide some of the basic data required for the production of the system of national accounts. This can be obtained as part of the data collection for the IMF's international model (GFS Model), as this is largely compatible with EU specifications (see section 2.4).

The Statistics Agreement includes the obligation to state the most important financial statistics aggregates at a macroeconomic level according to the rules and standards of the ESA 2010. The ESA 2010 is an internationally standardized accounting framework for a systematic and detailed description of a total economy (i.e. a region, country or group of countries), its components and its relations with other total economies. However, this should not be equated with acceptance of the acquis communautaire and the requirements under the Maastricht Treaty in the area of statistics and, more specifically, financial statistics. The reason for such extensive requirements by the EU for financial statistics is that the financial statistics aggregates obtained using uniform guidelines serve as a basis for assessment for many intra-EU payments and transfers. Financial statistics and the system of national accounts were made legally binding within the framework of the EU and form part of the corresponding regulations that have entered into force. Switzerland complies with the associated mandatory data deliveries.

An additional legal framework for financial statistics in the broader sense is Switzerland's membership of international organizations such as the OECD[10], the IMF[11] or the UN[12]. As a member of these organizations, Switzerland has undertaken to furnish them with the requested information. In this respect, it is recommended that the standards set out in the various international manuals[13] should be adopted. Of particular note is Switzerland's declaration of accession to the Special Data Dissemination Standard (SDDS), submitted on June 11, 1996,

[9] The system of national accounts is based on the European System of Accounts (ESA 2010), which is compatible with the GFSM 2014. Both the ESA 2010 and the GFSM 2014 are based on the standard reference work for national accounts, the System of National Accounts (SNA 2008) of the international organizations (UN, OECD, IMF, World Bank, European Commission).

[10] Federal decree on the OECD Convention of June 14, 1991 (AS **1961**, 869) and especially Articles 1 to 3 of the Convention.

[11] Federal Act on the Participation of Switzerland in the Bretton Woods Institutions (SR 979.1, AS **1992** 2567) and Agreement of July 22, 1944 on the International Monetary Fund (SR 0.979.1, AS **1992** 2571).

[12] Charter of the United Nations; came into effect for Switzerland on September 10, 2002, AS **2003** 866.

[13] Government Finance Statistics Manual 2014 (IMF), System of National Accounts 2008 (OECD, IMF, UN, World Bank, EU/Eurostat).

and to the IMF's more extensive "SDDS Plus" standard on July 1, 2015. Although such accession was optional, Switzerland thereby undertook to comply with this standard.

2.3.3 Ethical principles: Charter of Swiss Official Statistics

Swiss statisticians adopted a Charter of Swiss Public Statistics[14] in May 2002, and this was revised in 2007 and 2012. In this professional code of ethics, the statisticians state that their activities constitute an indispensable public service that meets the needs of our democratic society and those of a modern state. Relevance, quality and credibility of the information published are identified as the primary objectives of public statistics. The six basic principles of public statistics include public information, independence and impartiality, privacy and data protection, economic efficiency, quality and publication.

The Charter of Swiss Official Statistics was officially adopted and signed by the FFA on August 28, 2008. Furthermore, on November 30, 2018, the FFA brought into force a directive on quality assurance for the production and dissemination of statistics in order to reinforce its commitment to the professional independence and high quality of its products and services.[15]

At European level, the EU Statistical Programme Committee adopted a Code of Practice on February 24, 2005 (revised on September 28, 2011 and November 16, 2017), which sets out 16 ethical principles applicable to the European Statistical System.[16] As Switzerland has participated in the ESS since the enactment of the Statistics Agreement on January 1, 2007, the general principles also apply to Switzerland. They are legally binding in nature and are taken into account in the Swiss code of practice.

2.4 Financial statistics history and reform

2.4.1 History of financial statistics

The original financial statistics were based on the old 1981 handbook on accounting for government units (HAM1), and were revised in fiscal 1990. However, new standards for financial statistics and the system of national accounts were defined internationally in the mid-to-late 1990s. Moreover, due to the increasing globalization and internationalization of the world economy, and with public debt spiraling out of control in some countries, there was a rethink in the area of public sector accounting. This led to new accounting standards for the reporting of public finances. The core concept was to apply the principles of commercial

[14] https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/daten.html

[15] Directive on quality assurance of the FFA (PDF, 260 kB, 05.03.2019) (admin.ch)

[16] https://ec.europa.eu/eurostat/web/products-catalogues/-/ks-02-18-142

accounting to government units as well. This resulted in the International Public Sector Accounting Standards (IPSAS), which are heavily based on the private sector's International Financial Reporting Standards (IFRS). In Switzerland, this rethinking is reflected in the Confederation's new accounting model (NAM) from 2007 and the HAM2 from 2008. Both of these use uniform standards with reference to the IPSAS.

Although financial statistics provided a wide range of fundamental financial statistics data, the scope of consolidation, nomenclatures (economic and functional classification systems), delimitations and accounting rules no longer met the requirements specified in the authoritative international standards (SNA 2008[17], ESA 2010 and GFSM 2014), which meant that a reform was necessary.

Moreover, as mentioned in section 1.2, within the framework of the Statistics Agreement from the second series of bilateral agreements, Switzerland undertook to report on the general government sector in accordance with the European System of Accounts of 2010 (ESA 2010). All of this resulted in a reform of the statistics on public finances in Switzerland, the main features of which are outlined below.

2.4.2 Reform of financial statistics

The objective of the financial statistics reform in 2008 was to meet the increased requirements resulting from the second series of bilateral agreements and the introduction of the HAM2, and to ensure more transparent disclosure of the revenue, financial and asset situation of the government units and social security funds based on international standards (GFSM 2014, ESA 2010).

The reform was carried out in three phases. In the first phase in 2008, a new method and system of sectoring was introduced, and the sectoring rules were adapted to the European System of Accounts of 1995 (ESA 95). As a result, the social security funds, which under the system of national accounts are a sub-sector of the general government sector, were also included in the financial statistics. The HAM2 chart of accounts formed the basis for the economic classification used. On the one hand, it was streamlined to simplify matters and on the other, items "not elsewhere classified" were added, as municipalities still partly supplied their accounts according to the earlier HAM1 during the transition phase. The Financial Statistics Section has been publishing FFA data and indicators in accordance with the GFSM 2014 since 2015. The first phase of the methodological reconciliation with the system of national accounts of the Federal Statistical Office (FSO) was thereby completed.

In a second phase, the data concerning balance sheet stocks and non-financial transactions previously reported under the GFSM 2014 was reconciled with the system of national accounts

[17] System of National Accounts 2008, OECD, IMF, UN, Eurostat.

in 2017. In the final phase, the 2020 revision, financial transactions in financial assets and liabilities, as well as other economic flows,[18] were reconciled with the system of national accounts and published in accordance with the GFSM 2014 (GFS Model). Where justified, the adjustments related to the full time series from 1990 onward. This step completed the reform. For more detailed information on the individual phases, please refer to our website, Methods (admin.ch), and scroll down to the Technical notes section.

With this revision, the differences between the GFS Model of financial statistics and Switzerland's system of national accounts for the general government sector are limited to the different views chosen for presenting the results and the scope of consolidation. The GFS Model presents the financial statistics from the viewpoint of fiscal analysis and policy, whereas the system of national accounts focuses on production or added value, respectively.

The comprehensive revision of the basic methodology, and particularly the sectoring in financial statistics, produced a structural break in the historical series, which are available in electronic format from 1990 onward. Therefore, the results of fiscal 2008 are not fully comparable with those of previous years. In addition, the 2007 federal financial statements were converted to the new accounting model NAM, which further complicates any comparisons over time.

2.5 Financial statistics models currently published

As a result of the reform mentioned in the previous section, the scope of Swiss financial statistics has expanded significantly. The tasks can be divided into the following areas:

- Consolidated and harmonized financial reporting of the Confederation, cantons, municipalities and social security funds on the basis of the new accounting models of the Confederation (NAM) and of the cantons and the municipalities (HAM2) with the objective of national comparability
- Production and reporting of internationally comparable statistics on Switzerland's public finances in accordance with the GFSM 2014
- Preparation of data on public finances as a basis for drawing up Switzerland's system of national accounts within the context of the Statistics Agreement from the second series of bilateral agreements, based on the ESA 2010

These three tasks are performed using three Swiss financial statistics models, which build on one another in the order mentioned:

[18] The GFSM 2014 classifies operations affecting assets and liabilities as non-financial or financial transactions (can be controlled by fiscal policy) or else as other economic flows (cannot be controlled, for understanding changes in net worth), see section 5.2.3

- **FS Model**: Data collection, compilation, processing, evaluation, reporting and analysis with reference to the HAM2 of the Swiss Public Sector Financial Reporting Advisory Committee (SRS-CSPCP)
- **GFS Model**: Data processing, evaluation, reporting and analysis on the basis of the GFSM 2014 issued by the International Monetary Fund (IMF)
- **ESA Model**: Data evaluation, reporting and analysis on the basis of the ESA 2010 manual of the statistical office of the European Union (Eurostat)

First, national comparability is achieved with financial statistics reporting according to the FS Model, which is based on the accounting models of the Confederation (NAM) and of the cantons and the municipalities (HAM2); for more on the FS Model, see section 4. Then, where necessary, the data is subject to statistical operations in accordance with the GFSM 2014 to map it to the Swiss GFS Model); for more on the GFS Model, see section 5. It can thus be used for international comparisons. Since the GFSM 2014 and ESA 2010 concepts are based on SNA 2008 and are identical except in terms of consolidation, GFS Model data can also be mapped to the ESA Model of financial statistics (for more on the ESA Model, see section 6) and be integrated into the Swiss system of national accounts as the general government sector.

The Federal Finance Administration publishes the FS Model and the GFS Model. This dual reporting approach covers both national and international needs. The publication of results on the basis of the ESA falls within the remit of the Federal Statistical Office.

3 Delimitation of the general government sector (sectoring) and data collection

To present the revenue, financial and asset situation of government units in terms of financial statistics, it is necessary to define how and where to set the limits between the private sector and the public sector, on the one hand, and, within the public sector, between the general government sector per se and public enterprises, on the other. This means delimiting the scope of consolidation and defining which institutional units (households and government units, enterprises by legal form and purpose, institutions, publicly owned enterprises, cooperatives, associations and special purpose entities, churches, etc.) do and do not belong to the general government sector.

Public finance statistics are limited to the compilation of financial statistics statements for the general government sector (Confederation, cantons, municipalities and social security funds), with the same delimitation criteria and definitions being used in all models. The same delimitation is used in the system of national accounts as a result of the 2008 reform.

The federal state structure means that the financial statements of the Confederation, cantons, municipalities and social security funds are prepared on a different basis – very different in some cases. This is particularly true of the question of the allocation of institutional units to the general government sector. The application of uniform sectoring rules may therefore lead to different results in the financial statistics than in the case of public administrations.

The sectoring concept is based on the ESA 2010. It starts by classifying the government units and social security funds in accordance with the ESA 2010. In a second step, criteria and a decision tree are developed for sector allocation according to the nature and type of government activity. Processing rules are then defined to produce either a generally applicable sector allocation for certain activities or a case-by-case evaluation of certain economic agents. Finally, individual activities are examined using the decision tree and the processing rules are applied.

3.1 Institutional units and sectors

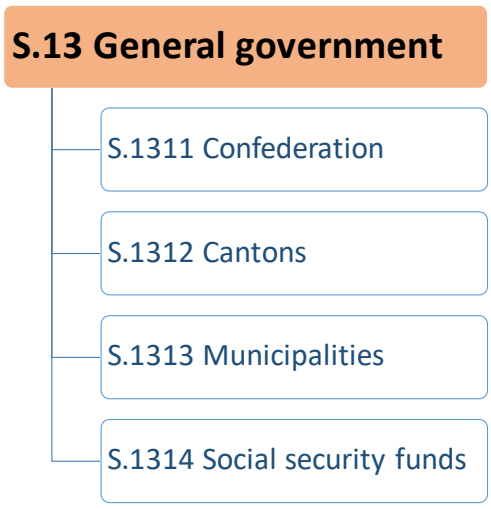
In the system of national accounts, economic agents (institutional units) are aggregated in categories called institutional sectors. Such sectors group together all units that have a similar type of economic behavior. Figure 1 shows all sectors and characterizes them according to the different producer categories, whereby a basic distinction is made between market and non-market producers, and between private and public producers. This figure shows that government activities can be assigned to different sectors. For example, public market producers do not belong to the general government sector, but rather are classified as non-financial corporations or financial corporations. Therefore, to determine the boundaries for financial statistics, the question of whether a unit can be described as a market producer or non-market producer is of particular importance.

Figure 1: Institutional sectors in the system of national accounts

S.11 Non-financial corporations	Private and public market producers
S.12 Financial corporations	Private and public market producers
S.13 General government	Public non-market producers
S.14 Households as consumers or entrepreneurs	Market producers or private non-market producers for own final use
S.15 Non-profit institutions serving households	Private non-market producers

The institutional sectors are then divided into sub-sectors. Essentially, the sub-sectors of the general government sector (S.13) follow the federal structure of the state itself. For Switzerland, this means that the Confederation, the cantons and the municipalities form sub-sectors (see Figure 2). The social security funds are posted separately. In such a heavily decentralized system as Switzerland, it should be noted that the sector of social security funds government units may contain institutional units of different levels of government, e.g. maternity insurance in the canton of Geneva.

Figure 2: General government sub-sectors



3.2 Criteria for allocation to the general government sector

Allocation to a particular sector generally depends on the type of activity and on who controls the unit. An economic agent is allocated to the general government sector if:

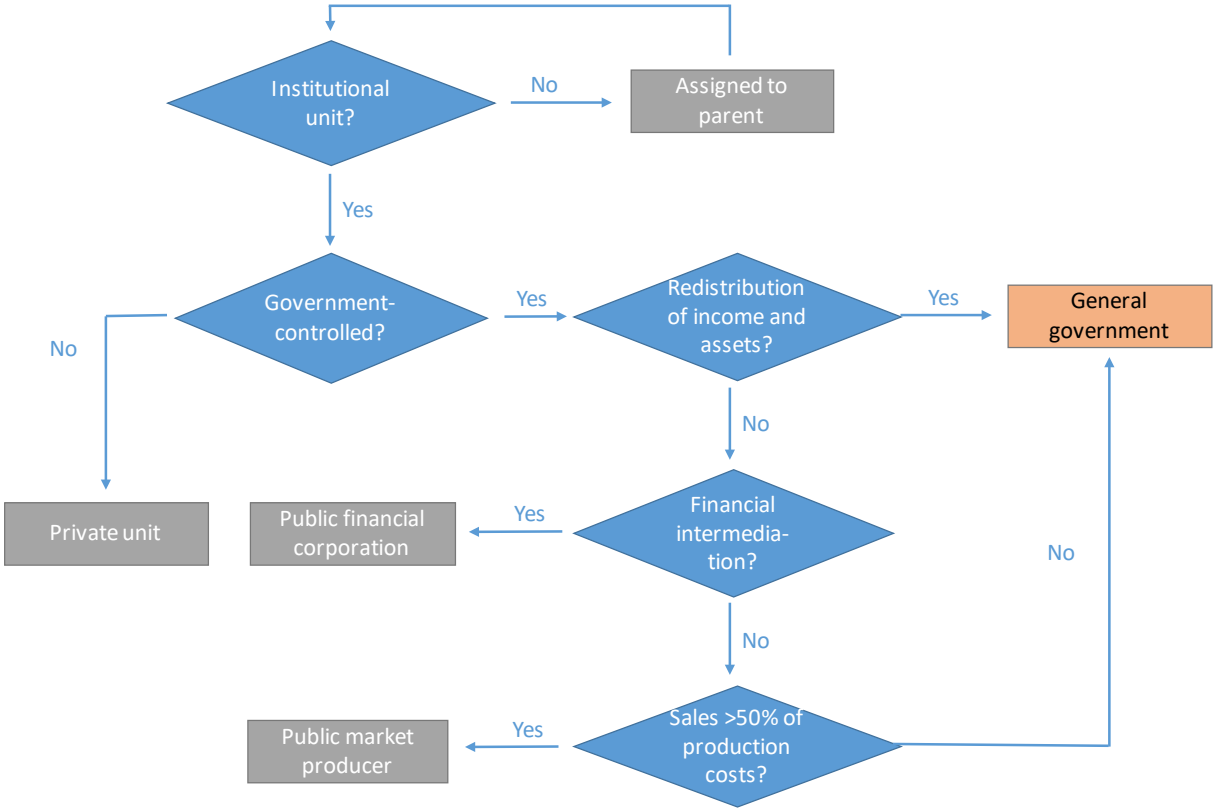
- (I) it is an institutional unit and also
- (II) is government-controlled and either
- (III) its main function is the redistribution of income and assets

or

- (IV) its main function is not as a financial intermediary and
- (V) it does not deliver its goods and services at economically significant prices.

The decision tree for such allocation is shown in Figure 3 and explained in further detail below.

Figure 3: Decision tree for allocation to the general government sector



Criterion I: Institutional unit

The first step is to decide whether the transactions to be recorded are economic activities of a separate institutional unit. According to the ESA 2010, an institutional unit is an entity that

- is entitled to own goods or assets in its own right and is therefore able to exchange the ownership of goods or assets
- is authorized to make economic decisions and engage in activities, and to carry out transactions with other units, for which it is itself responsible and liable
- is entitled to enter into commitments and contracts in its own name
- has a complete set of accounts or would be able to compile a complete set of accounts if necessary

If this is not the case, the unit should be treated as part of the unit that controls it, i.e. its parent. In practice, the existence of a separate set of accounts or the ability to compile such accounts is of particular significance in financial statistics. A unit will be withdrawn from or included in the parent only if the unit concerned prepares at least a balance sheet and operating account, and preferably also a statement of investments.

The first three of the aforementioned conditions can be simplified as a question of business independence, which can be said to exist if the activities in question are performed not within the central administration but in the context of a separate operational organization and a separate management board.

Criterion II: Government-controlled

Government control of an institutional unit refers to the ability to determine the general strategy and business policy of that unit. The following indicators of control, among others, are to be considered:

- ownership of more than 50% of the voting interest
- rights to appoint, veto or remove a majority of the governing board
- de facto control by virtue of a law, ordinance or special statute to define the corporate policy and appoint company management

While the first two conditions are relatively easy to implement due to the quantitative requirement, the last condition is subject to considerable discretion. In practice, one of the deciding factors should be whether the unit's corporate policy is so heavily influenced by the government that its financial performance can be largely controlled by the government.

If a unit is not government-controlled, it is deemed a private unit. As such, it can belong to any sector except the general government sector.

Criterion III: Redistribution as a main function

If the main function of a government-controlled institutional unit is to redistribute income and wealth, it is classified in the general government sector. An institutional unit is said to have a redistribution function if its primary task is to

- collect taxes
- pay subsidies
- provide social benefits or
- provide goods and services for collective consumption

The last condition refers to the production of classical public goods for which the exclusion principle does not apply. This also includes the entire legal system, for example.

Basically, all public units have a redistribution function if their goods/services are available to beneficiaries free of charge and/or are financed by compulsory payments for which the amount and basis of assessment bear no relation to the cost of the individual goods/services obtained. These are typically goods/services financed by direct or indirect taxes or other deductions, including for example income-dependent social security contributions for old-age and survivors' insurance, disability insurance, compensation for loss of earnings and unemployment insurance. The government goods/services in question should be distinguished from goods/services financed in part or in full by fees, where the amount of the individual fee payments depends on the individually received government goods/services, i.e. there is no redistribution involved.

Criterion IV: Financial intermediation

Financial intermediation is the activity in which units acquire financial assets and at the same time incur liabilities on their own account by engaging in financial transactions. Government-controlled institutional units whose main function involves financial intermediation are classified as public market producers and as such do not belong to the general government sector.

Examples of public and private market producers with financial intermediation activities include:

- commercial banks, savings banks, asset managers and other financial intermediaries
- insurance companies and health insurers
- pension funds

Criterion V: Supply of output at economically significant prices

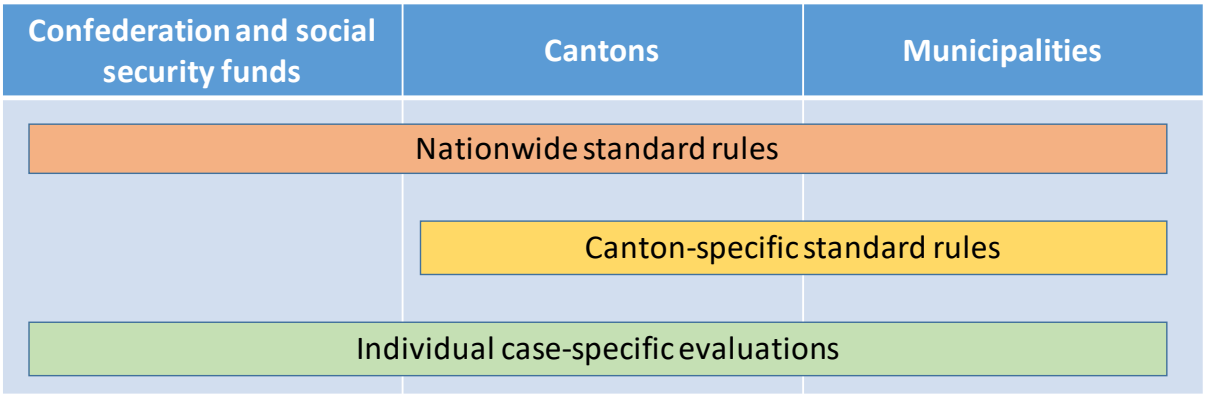
This criterion seeks to determine whether or not a unit's output is produced for the market. According to the ESA 2010, a producer is a market producer if it sells its output at economically significant prices. A price is said to be economically significant if it has a significant influence on supply and demand. However, this theoretical and relatively abstract rule is difficult to

implement in practice. Therefore, according to the ESA 2010, output is said to be sold at economically significant prices when more than 50% of the production costs are covered by sales. Clearly, the definition of production costs and sales is also decisive in evaluating this criterion. According to the ESA 2010, sales include all payments made by the government that are granted to any kind of producer in this type of activity, i.e. all payments linked to the volume or value of output are included, but taxes on products and any payments to cover an overall deficit are excluded. Production costs are the sum of intermediate consumption, compensation of employees, consumption of fixed capital and other taxes on production and other subsidies, excluding all costs for own-account capital formation. When applying the criterion, a multi-year view of sales and production costs is required. Short-term fluctuations should not affect the sector allocation.

3.3 Standardized processing rules and their implementation

To perform statistical operations on government units and social security funds for sectoring purposes, the accounts of a wide variety of units have to be consolidated or separated. Moreover, the financing and activities of numerous institutional units are based on national or – in the case of the municipalities – cantonal rules applicable to all units. In such cases, in particular, the statistics should take account of not only the five criteria in the previous section, but also the comparability of government units.

Figure 4: Outline of sectoring rules



In the financial statistics, processing rules are thus defined for the majority of transactions to be recorded. The objective of such rules is either to allocate certain institutional units with the same main function to a particular sector on the basis of criteria I to V or to decide on a case-by-case basis. The allocation of an activity is applicable across the board if the vast majority of units observed meet the allocation criteria. There are four different types of rule for such general allocations:

- ***Nationwide standard rules**:*
  These define institutional units with the same or a similar function that are allocated to a specific sector on a nationwide basis.

- ***Canton-specific standard rules**:*
  These are used at the level of the individual canton to define institutional units with the same or a similar function that are allocated to a specific sector on a cantonal basis.
- ***Individual case-specific evaluations**:*
  An individual evaluation should be made for institutional units that, despite having the same or a similar activity, have very different ownership structures and financing concepts at the various government levels.

The following sections show the results obtained after implementing the above sectoring criteria and processing rules for the individual sub-sectors of the general government sector. These guidelines ensure that the statistical data can be compared among the individual government units and internationally. This means having to add certain administrative units not included in the government accounts and, at the same time, removing others that should not be in the general government sector according to the sectoring guidelines. Once a year, the tables showing the units added to or removed from the various general government sub-sectors are updated within the scope of the financial statistics and are published on the FFA website[19].

The separate accounts that have been added are consolidated with the government accounts of their controlling units, i.e. internal transfers are eliminated to prevent double-counting.

3.3.1 The Confederation sub-sector (S.1311)

Applying the above sectoring rules to the Confederation sub-sector, the results are as follows:

Table 2: Delimitation of the Confederation sub-sector

Institution	Separate unit?	Government control?	Redistri-bution?	Financial intermediary?	Sales > 50%?	Sector
Central Federal Administration						
MeteoSwiss	Yes	Yes	No	No	No	S.1311
Decentralized Federal Administration						
Fund for major railway projects (FinPT)	No					S.1311
Railway infrastructure fund (RIF)	No					S.1311
Infrastructure fund (IF)	No					S.1311
Motorway and urban transportation fund	No					S.1311
ETH Domain	Yes	Yes	No	No	Yes	S.1311
Swiss Alcohol Board (SAB)	Yes	Yes	Yes	No	No	S.1311

[19] Scope of the 2018 financial statistics (XLS, 60 kB, 07.09.2020) (admin.ch)

Institution	Separate unit?	Government control?	Redistri-bution?	Financial intermediary?	Sales > 50%?	Sector
Swiss Fin. Market Supervis. Auth. (FINMA)	Yes	Yes	No	No	Yes	S.12[20]
Swiss Fed. Inst. for Voc. Educ. + Train. (SFIVET)	Yes	Yes	No	No	No	S.1311
Swiss Federal Nuclear Safety Inspectorate (ENSI)	Yes	Yes	No	No	Yes	S.11[21]
Swiss Federal Institute of Intellectual Property (IIP)	Yes	Yes	No	No	Yes	S.11
Federal Audit Oversight Authority (FAOA)	Yes	Yes	No	No	Yes	S.12
PUBLICA	Yes	Yes	No	Yes	Yes	S.12
Swiss Export Risk Insurance (SERV)	Yes	Yes	No	Yes	Yes	S.12
Swiss Association for Hotel Credit	Yes	Yes	No	Yes	Yes	S.12
Swiss National Museum	Yes	Yes	No	No	No	S.1311
Switzerland Tourism	Yes	Yes	No	No	No	S.1311
Swissmedic	Yes	Yes	No	No	Yes	S.11
Federal Institute of Metrology (METAS)	Yes	Yes	No	No	No	S.1311
Innosuisse	Yes	Yes	No	No	No	S.1311
Companies with a federal stake						
BLS Netz AG, AlpTransit Gotthard AG, Swiss Post AG, SBB, RUAG Schweiz AG, Skyguide AG, as well as SIFEM AG and Swisscom AG	Yes	Yes	No	No	Yes	S.11
Other organizations						
Swiss National Science Foundation	Yes	Yes	No	No	No	S.1311
Swiss Arts Council Pro Helvetia	Yes	Yes	No	No	No	S.1311
Building Foundation for Int. Organisations (FIPOI)	Yes	Yes	No	No	No	S.1311
Feed-in remuneration at cost foundation (CRF)	Yes	Yes	Yes	No	No	S.1311
Movetia	Yes	Yes	No	No	No	S.1311

As Table 2 shows, all administrative units of the central Federal Administration that are included in the federal financial statements belong to the Confederation sub-sector. The disaggregation of the units of the decentralized Federal Administration and the treatment of significant interests closely resembles the scope of consolidation used by the FFA in the Confederation's consolidated financial statements, although it is not identical. For instance, Swissmedic and the IIP do not fall within the sectoring scope used in financial statistics, but

[20] Financial corporations

[21] Non-financial corporations

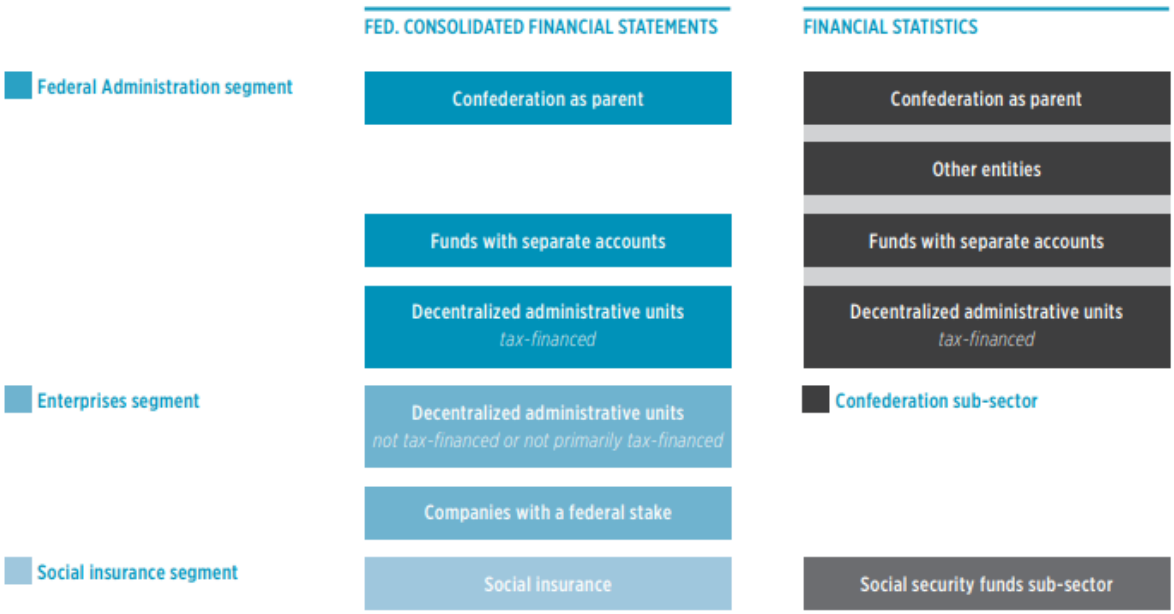
they are included in the Confederation's consolidated financial statements[22]. According to the ESA 2010 sectoring criteria, these units are market producers, as they are mainly funded by way of fees. Furthermore, companies with a federal stake are entered in the consolidated financial statements, but they appear under public financial or non-financial corporations in the financial statistics, rather than the general government sector. Conversely, unlike in the case of the consolidated financial statements, the Swiss National Science Foundation, Pro Helvetia, the FIPOI and Movetia are also part of the Confederation sub-sector. Although these are independent in terms of their organization and expenditure decisions, they are not self-financing and receive support from the Confederation in the form of flat-rate contributions. With regard to the ETH Domain, the Confederation's financial contribution is distributed almost entirely according to volume- or performance-based indicators, and thus cover more than 50% of the production costs. The ETH Domain would therefore be a market producer, meaning that its accounts should not be consolidated with the Confederation as parent entity. For schools and universities, however, the ESA specifies an exception regarding criterion V: "*The payments by the general government can be linked to the number of pupils but be the subject of negotiation with the general government. In such a case, these payments need not be regarded as sales though they have an explicit link with the volume of output, e.g. with the number of pupils. This implies that a school mainly financed by such payments is another non-market producer. When the school is a public producer, i.e. when it is mainly financed and controlled by the government, it should be classified in the general government sector. When the school is a private other non-market producer, it should be classified in the NPISH sector*".[23] The ETH Domain falls under the first category and is therefore assigned to the general government sector and consolidated like in the federal consolidated financial statements.

Figure 5 provides a summary comparison of the scope of consolidation of the consolidated financial statements with that of the financial statistics. In the financial statistics, the units to be incorporated into the general government sector are determined on the basis of the criteria laid down in the ESA 2010. In contrast, the consolidated financial statements follow the accounting standard control criterion (IPSAS). As a result, the consolidation scopes of the financial statistics and the consolidated financial statements are not absolutely identical.

[22] https://www.efv.admin.ch/efv/en/home/finanzberichterstattung/finanzberichte/konsolidierte_rg_bund.html

[23] ESA 2010, §3.36 and 3.37

Figure 5: Comparison of the consolidation scopes of the consolidated financial statements and of the financial statistics



3.3.2 The cantons and concordats sub-sector (S.1312)

The sectoring criteria are somewhat more complicated to apply to the cantons and concordats than in the case of the Confederation, particularly with respect to hospitals and care homes, as well as higher education institutions.

Table 3: Delimitation of the cantons and concordats sub-sector

Institution	Allocation	Reason
Special financing (animal health, fire fighter funds, etc.)	S.1312	Not an institutional unit
Secondary schools (upper sec. level schools, baccal. schools)	S.1312	Not an institutional unit
Funds, public foundations	S.1312	Not an institutional unit
Loterie Romande and Swisslos	S.15	See reason in the text
Legacies/private foundations	S.15	Private unit
Prisons and penitentiaries	S.1312	Sales < 50% of production costs
Driver and vehicle licensing offices	S.1312	Redistribution function
Cantonal social security funds	S.1312	Redistribution function
Cantonal compensation funds (AHV, disab. Ins., family allow.)	S.12	Financial intermediation services
Credit funds	S.12	Financial intermediation services
Insurers	S.12	Financial intermediation services
Cantonal pension funds	S.12	Financial intermediation services
Transportation companies	S.11	Sales > 50% of production costs
Care homes	S.11	See reason in the text
Hospitals	S.11	See reason in the text

Institution	Allocation	Reason
Universities	S.1312	See reason in the text
Universities of applied sciences	S.1312	See reason in the text
Regional employment center (RAV)	S.1312	See reason in the text
Other institutions in cantonal accounts	Case-by-case decision	No clear allocation

Many hospitals generate their own sales in excess of 50% of production costs. In the case of some, though, it is not possible to clearly identify the extent to which cantonal contributions are volume or product-dependent. However, federal legislation suggests that hospital financing is predominantly performance-based. For one thing, a large proportion of the generally insured services and all additional insured services are covered by health insurance companies. Moreover, inter-cantonal rules provide for performance-related compensation in the case of treatment outside the canton. For this reason, all cantonal hospitals and care homes are classified as market producers.

Also among higher education institutions, a large proportion of the contributions are performance and volume-dependent. This is particularly evident in the inter-cantonal university agreement, whereby cantons are liable to pay the university cantons a contribution toward the education costs of their inhabitants. The same applies for universities of applied sciences, particularly those organized on a pan-regional basis. Furthermore, higher education institutions also receive substantial receipts from private funds. Some of these higher education institutions should thus be classified as public market producers. With regard to schools, however, the ESA 2010 exception applies here too (see ETH Domain), meaning that universities and universities of applied sciences are allocated to the cantons and concordats sub-sector.

The special financing, funds, separate accounts managed by the cantons or even schools not included in the state financial statements are not independent units according to the sectoring criteria and are allocated to the relevant parent entity.

Loterie Romande and Swisslos are special constructs. These cooperatives manage lotteries in Switzerland and are independent institutional units. They are classified in the NPISH sector (S.15). However, the funds raised by these lotteries are distributed to distribution bodies of the participating cantons, i.e. cantonal committees that distribute the lottery funds to beneficiary institutions (foundations, etc.). As these committees are not independent institutional units, they are allocated to the general government sector. The cantons' distribution bodies and the funds they redistribute are therefore included in the general government sector.

The cantonal social security funds (unemployment insurance, family allowances, etc.) belong to the general government sector; however, they are not consolidated with the cantonal accounts and are instead allocated to the economic sector of the social security funds government unit. This also applies to maternity insurance in Geneva.

In contrast, all inter-cantonal agreements, concordats, are allocated to the cantons sub-sector, which is why it is called the "cantons and concordats" sub-sector. Concordats are independent units that perform a public task, although they are financed by different cantons simultaneously. To prevent the concordats from distorting the financial statistics statements of any individual canton, they are integrated into the financial statistics as a fictitious 27th canton called "concordats". Concordats between the cantons exist mainly in the fields of health and education, but also for regional employment agencies and driver and vehicle licensing offices.

3.3.3 The municipalities sub-sector (S.1313)

The sectoring of the municipalities varies widely and is not always easy to carry out given the large number of separate accounts and special purpose entities that differ greatly from one another at an institutional level. Table 4 gives an overview of how the sectoring rules are implemented at municipal level.

In the area of wastewater and waste disposal, for example, more than 50% of production costs are financed by fees. However, these activities do not fulfill the decisive criterion of an institutional unit. They are therefore allocated to the relevant parent entity, i.e. the municipality that controls them. In contrast, independent wastewater treatment plants and waste incineration plants can be regarded as market producers by virtue of their performance-related financing. Gas and electricity utility companies and heat producers also fall into this category.

Table 4: Sectoring at municipal level

Institution	Allocation	Reason
Waste disposal	S.1313	Not an institutional unit
Sewage disposal	S.1313	Not an institutional unit
Fire-protection services	S.1313	Not an institutional unit
Fund	S.1313	Not an institutional unit
Forestry	S.1313	Not an institutional unit
Cemeteries	S.1313	Not an institutional unit
Welfare/guardianship	S.1313	Not an institutional unit
Land registries	S.1313	Not an institutional unit
Carcass disposal	S.1313	Not an institutional unit
Police services	S.1313	Not an institutional unit
Shooting ranges	S.1313	Not an institutional unit
Social services	S.1313	Not an institutional unit
Civil protection	S.1313	Not an institutional unit
Registry offices	S.1313	Not an institutional unit
Libraries	S.1313	Sales < 50% of production costs
Legacies/private foundations	S.12	Private unit
Churches	S.15	Private non-market producers

Institution	Allocation	Reason
Emergency medical services	S.11	Private market producers
Retirement and nursing homes	S.11	Sales > 50% of production costs
Electr. power plants, gas, distr. heat., etc.	S.11	Sales > 50% of production costs
Wastewater treatment plants	S.11	Sales > 50% of production costs
Hospitals/clinics	S.11	Sales > 50% of production costs
Spitex	S.11	Sales > 50% of production costs
Citizens' communities	Decided on cantonal basis	Rules differ by canton
School communities	Case-by-case decision	See reason in the text
Other schools	Case-by-case decision	See reason in the text
Childcare facilities	Case-by-case decision	No clear allocation
Cultural associations	Case-by-case decision	No clear allocation
Emergency slaughterhouses	Case-by-case decision	No clear allocation
Planning associations	Case-by-case decision	No clear allocation
Sports facilities	Case-by-case decision	No clear allocation
Water supply	Case-by-case decision	No clear allocation
Other institutions of the municipalities	Case-by-case decision	No clear allocation

As educational institutions, school communities are allocated to the general government sector, as is the case at cantonal level. Private schools, however, are classified as private non-market producers. Citizens' communities have different rules depending on the canton. Individual allocation rules are thus drawn up for them in the individual cantons.

Intercommunal agreements also exist at municipal level for the performance of public tasks (special purpose entities). These normally have their own accounts. Where these special purpose entities are not primarily funded by way of fees or other product and service-related payments, they are allocated to the municipalities sub-sector based on the above criteria. In the financial statistics, a separate fictitious government unit is added for each canton, broken down by function. Thus, in the FS Model and GFS Model, the special purpose entities – when allocated to the general government sector – are integrated into the municipalities sub-sector.

3.3.4 The social security funds sub-sector (S.1314)

The social security funds are economic units that insure the population against social risks or needs and/or provide social benefits; they are mainly financed by the government or by mandatory contributions. However, despite their government control, regulation and obligatory nature, not all social security funds are automatically allocated to the general government sector. Also, many social benefits such as housing subsidies, educational grants or social welfare are provided directly by a government unit. When delimiting the boundaries of the social security funds sub-sector (S.1314) of the general government sector, an individual evaluation was again carried out for the different units. Cantonal social security funds can also

be allocated to this sub-sector. Income and assets are redistributed by old-age and survivors' insurance, disability insurance, compensation for loss of earnings, agriculture family allowances and unemployment insurance. These are classified in the social security funds sub-sector and thus the general government sector.[24] The cantonal social security funds are allocated to the social security funds sub-sector rather than to the cantons sub-sector. The cantonal social security funds are thus added to sub-sector S.1314.

Table 5 shows the disaggregation of the individual institutions in the area of social security:

Table 5: Delimitation of the social security funds sub-sector

Institution	Separate unit?	Government control?	Redistri-bution?	Financial intermediary?	Sales > 50%?	Sector
Old-age and survivors' insurance AHV	Yes	Yes	Yes			S.1314
Disability insurance IV	Yes	Yes	Yes			S.1314
Compensation for loss of earnings EO	Yes	Yes	Yes			S.1314
Agriculture family allowances FL	Yes	Yes	Yes			S.1314
Maternity insurance canton of Geneva	Yes	Yes	Yes			S.1314
Unemployment insurance ALV	Yes	Yes	Yes			S.1314
Cantonal social security	Yes	Yes	Yes			S.1314
Confederation's fund for agriculture family allowances	No					S.1314
AHV compensation funds, disability insurance offices or public unemployment funds	If yes	Yes	No	Yes		S.12
	If no					S.1311, S.1312 or S.1313
Private unemployment funds	Yes	No	No	Yes		S.12
SUVA	Yes	Yes	No	Yes		S.12
Public pension funds	Yes	Yes	No	Yes		S.12
Health insurance funds	Yes	Yes	No	Yes		S.12

A distinction should be made between social security funds on the one hand and the actual processing of contributions and insurance benefits and the clarification of entitlement to contributions on the other. These tasks are performed by the cantonal AHV compensation funds, the cantonal disability insurance offices and the unemployment benefits offices, and are implemented very differently in the cantons in terms of organization. As a rule, the AHV compensation funds and the disability insurance offices are independent institutions under public law whose services are compensated by the relevant social security funds.

[24] Unlike the other family compensation funds, more than 50% of agriculture family allowances are financed by contributions from the Confederation and the cantons

Internationally too, such offices are not regarded as social security funds per se, but rather as service providers for the insurers. By definition, these services could also be furnished by private or independent institutions under public law not classified in the social security funds sub-sector. Therefore, these offices are not classified as social security funds government units, but – where they can be called independent institutional units – as public enterprises (insurance services).

The unemployment funds have been entrusted with the task of implementing unemployment insurance from the very beginning. Their job is to verify the claims for entitlement and disburse the various insurance benefits. By law, unemployment funds are either public cantonal funds or association funds of employee or employer organizations. In principle, the cantonal unemployment funds are integrated into the cantonal administration and are therefore not classified as separate institutional units. The association funds of employee or employer organizations are private units and, where these are independent, are market producers.

SUVA is also classified as a market producer in accordance with criterion IV, as it operates as a financial intermediary in insurance. Because it is government-controlled on the basis of legislation, it is allocated to public insurance corporations. The fact that such insurance is obligatory is irrelevant in the sectoring process. The same applies for the legal obligation for an occupational pension. As public pension funds and health insurance companies also perform a financial intermediary function and are thus market producers, they are classified as public insurance corporations and therefore are not part of the general government sector.

Delimitation with respect to social security statistics

Apart from financial statistics, Switzerland also has two other types of statistics dealing with social insurance and, in particular, social security: Swiss social insurance statistics[25] and total social security accounts (TSSA)[26]. These statistics have different objectives and thus differ quite considerably in terms of their methodology and results.

The Swiss social insurance statistics from the Federal Social Insurance Office focus on presenting the expenditure, receipts and capital of the various public and private social insurance branches in accordance with the accounting standards stipulated by law for such institutions. Consequently, these statistics are suitable for studies focusing primarily on the national viewpoint and on issues of individual forms of social insurance or on social insurance as an overall system. In contrast, the total social security accounts (TSSA) published by the Federal Statistical Office cover a range of social policy measures that goes beyond social insurance. Aside from private and public social insurance, this includes the following areas of

[25] Swiss social insurance statistics (admin.ch)

[26] https://www.bfs.admin.ch/bfs/en/home/statistics/social-security/total-social-security-accounts.html

social security: social welfare, subsidies for the healthcare system, asylum or educational grants.

Unlike these two other types of statistics concerning social security, the financial statistics for public social insurance concentrate solely on determining the revenue, financial and asset situation of the insurance branches belonging to the general government sector in accordance with the national and international financial statistics models. The total expenditure of the general government sector for social security is likewise reported in accordance with the functional classification. This does not include the expenditure of public enterprises not belonging to the social security funds sub-sector or that of the private sector.

3.3.5 Other economic sectors

The other economic sectors play an important role in the system of national accounts and in the reporting of the public sector as a whole, and are briefly described below for the sake of completeness:

Public and private corporations (S.11 and S.12): Non-financial corporations (S.11, non-financial corporations from manufacturing, industry, construction, services, etc.) and financial corporations (S.12, financial corporations such as financial intermediaries and insurance companies) can be classified as public or private corporations, depending on who controls them.

Households (S.14): The households sector consists of individual and multi-person households, as well as families. This sector includes all individuals acting as consumers and as entrepreneurs producing market goods, provided that the production is not by separate entities (quasi-corporations). It also includes individuals as producers of goods and non-financial services for exclusively own final use.

Non-profit institutions serving households, NPISH (S.15): This sector consists of non-profit units which are separate legal entities and which provide goods and services to households. The main resources of these units come from the voluntary contributions of households or from general government transfers. Examples are trade unions, consumer associations, political parties, churches and welfare organizations, and many cultural institutions. NPISHs are generally exempt from income and wealth tax. Business associations, however, are treated as private enterprises.

Rest of the world (S.2): The rest of the world is a grouping of non-resident units that carry out transactions with the aforementioned resident units. Foreign units (embassies) and international organizations based in Switzerland are also included.

3.3.6 Consequences of sectoring

The sectoring of government units presented here was conducted on the basis of the financial statements of the Confederation, cantons and individual towns and cantonal capitals. It does

not claim to be exhaustive, but merely sets standard guidelines for the efficient and uniform processing of separate accounts and special purpose entities. The system also comprises over 30 standard allocations for the statistical processing of the institutions in question.

It is expected that uniform processing will produce greater transparency and a simpler consolidation process. The standard rules should not vary to any great extent, so as to ensure comparability between the individual accounting periods. This is in line with the ESA 2010, which requires that the relevant criteria be met over a period of several years. New or additional economic agents that are evaluated on a case-by-case basis but always in the same way may lead to a new standard rule (e.g. due to a change in ownership structure or the sales structure). To ensure that the comparability of individual years is not impaired and to avoid excessive irregularities in the allocation due to the above-mentioned fluctuations, the fixed allocations are reviewed at regular intervals of four years (benchmark revision), thereby striking a balance between relevance and comparability.

The rules for the sectoring method and system in line with the ESA 95 framework, which were introduced with the 2008 reform of financial statistics, complicate comparisons over time before and after 2008. Comparisons of expenditure and receipts by function are affected, for instance. At cantonal level, receipts and expenditure are revised downward quite substantially, particularly as public hospitals are not allocated to the general government sector from 2008 onward. In contrast, tax receipts are hardly affected, be it at the level of the sub-sectors or the general government sector.

A structural break can also be observed in the balance sheet items, particularly on the assets side, where administrative assets accounted for a substantially higher share of total assets in 2008 than in earlier years. The balance sheet assets for the cantons and concordats were divided equally between non-administrative and administrative assets in 2008. Meanwhile, the structural break is somewhat less pronounced on the liabilities side of the balance sheet, as those positions of the FS Model of relevance in calculating debt, in particular, changed very little, and the new sectoring rules, particularly the withdrawal of hospitals, has no impact on the debt of the cantons and municipalities.

3.4 Survey methods: full census and sample surveys

3.4.1 Overview of the survey methods

Following a detailed discussion of the delimitation of the general government sector and the survey population for financial statistics in the previous sections, this section briefly describes the survey methods used in financial statistics (full census and random sampling).

Table 6: Overview of the survey methods

Survey population	Survey method
Confederation (S.1311)	Full census
Cantons and concordats (S.1312)	Full census
Municipalities (S.1313)	Stratified sample: cantons of FR, JU, VD and VS Full census: other cantons
Social security funds (S.1314)	Full census

3.4.2 Full census

In a full census, all individual units (e.g. a single canton) of a population (e.g. all cantons and concordats) are included and entered in the survey. The Financial Statistics Section conducts a full census for the Confederation, cantons and social security funds sub-sectors. In the municipalities sub-sector, significant progress has been made with the full census in recent years, thanks to optimizations in the data collection and processing process.

3.4.3 Partial survey – stratified sample

The partial survey distinguishes between random and non-random sampling methods. In the case of four cantons (FR, JU, VD and VS), the financial statistics of the FFA use stratified sampling as part of the random sampling procedure for the municipalities sub-sector. This procedure divides the population into one or more strata to reduce estimation errors. The two stratification levels of the financial statistics are based on the assumption that the accounts of the municipalities depend on their size (number of inhabitants), as well as on the canton to which they belong. The different tax and subsidy regimes of the cantons can have a significant impact on the direction and characteristics of the respective municipal accounts. The structure of the municipal accounts may also be determined by the size of the municipality.

In the financial statistics, therefore, municipalities are divided into strata with the following stratification characteristics: large (>=5,000 inhabitants), medium-sized (<5,000 and >=4,000 inhabitants), medium-sized-small (<4,000 and >=1,000 inhabitants) and small (<1,000 inhabitants). All four stratification characteristics are used for drawing the sample of municipalities in the cantons of Vaud and Valais. In contrast, only the stratification characteristics (small, medium-small and medium-large) are relevant for drawing the sample of municipalities in the cantons of Fribourg and Jura, as all municipalities with more than 5,000 inhabitants are surveyed in full in these cantons. The sampling is carried out annually because of municipality mergers.

Once the sample has been drawn with the municipalities to be included, the corresponding financial statements are surveyed. If it is not possible (e.g. for technical reasons) for a municipality to provide data, this municipality is replaced by another of the same size. If there is no longer a municipality of the same size that has not yet been surveyed in the stratum, the replacement municipality is drawn from the next biggest stratum, surveyed and extrapolated to the total of the municipalities in the canton in question. Any special purpose entities in which the drawn municipalities are involved are also statistically included and processed.

The data collected is extrapolated using the number of inhabitants[27] in the sample and in the canton as a whole. The extrapolation factor per canton is calculated based on the sum of the inhabitants of the municipalities in the sample relative to the number of inhabitants of the municipalities in the canton.

[27] The reference figure for drawing the sample is the permanent resident population on January 1 and, for carrying out the extrapolation, it is the permanent resident population on December 31 of the fiscal year (source: FSO).

4 The Swiss financial statistics model: FS Model

The FS Model serves as a basis for data collection and processing. In a first step, all financial data of the government units is fed into the FS Model. In a second step, the data undergoes statistical operations, sectoring and adjustments for consolidation of the various levels of government (elimination of double entries). Switzerland's FS Model of financial statistics aims to ensure national comparability of the government units and forms the basis for reporting on Switzerland's public finances.

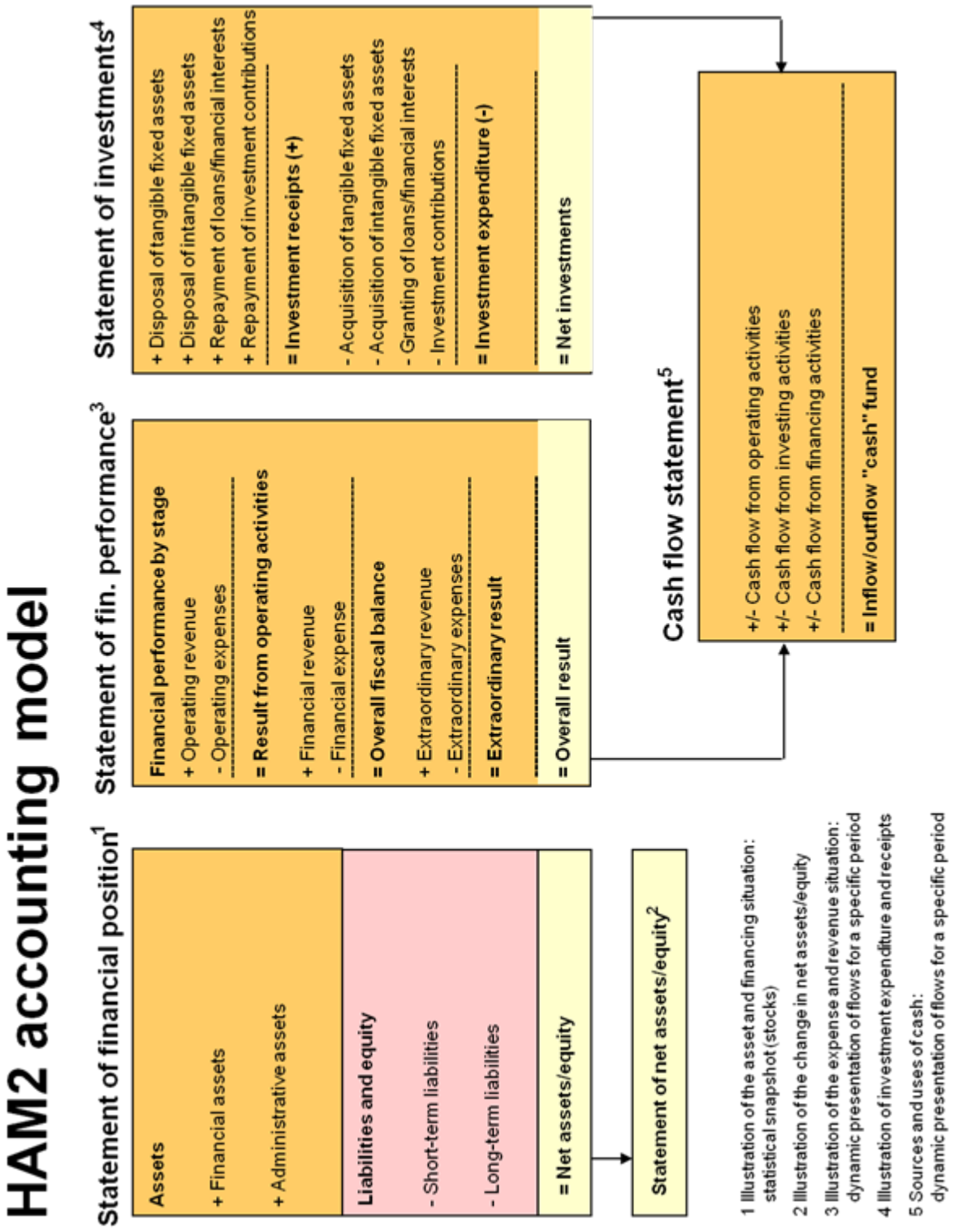
As already mentioned in section 2.4.2, the FS Model was developed with reference to the HAM2, which is why we will briefly discuss the HAM2 below.

4.1 The HAM2: the basis for the FS Model

The Harmonized Accounting Model for the Cantons and Municipalities (HAM2), adopted by the Conference of Cantonal Finance Directors in January 2008, replaces the HAM1 from 1981. The HAM2 was developed with reference to the IPSAS and in coordination with the Confederation's NAM. For the sake of comparability, the results of the Confederation and of the social security funds are also stated in the FS Model.

The basic components, i.e. the statement of financial position, the statement of financial performance and the statement of investments, show the asset, expense and revenue situation, as well as investing activity. A cash flow statement gives an overview of the liquidity situation and the change in the capital and asset structure. Another component is a separate statement of net assets/equity (see Figure 6).

Figure 6: Basic components of the HAM2 accounting model



The HAM2 manual contains 21 standards on various areas of public sector accounting, together with explanations, examples and charts. The sample Financial Budget Act is harmonized insofar as possible with the Federal Financial Budget Act and its implementing ordinance. There are four parts to the standard schedule of accounts, the first two of which (three including the statement of financial position) are the same as in the Confederation's

standard schedule of accounts (NAM). The functional classification takes account of the continuing development of public activities, as well as international requirements and those concerning fiscal equalization and the division of tasks (NFE).

Among other things, aside from the technical recommendations on the basic components, there are also specialist recommendations on the following topics:

- Generally accepted accounting standards
- Prepaid and accrued expenses, and accrued and deferred income
- Value adjustments
- Tax revenue
- Special financing and advance financing
- Provisions and contingent liabilities
- Fixed assets and asset accounting
- Consolidated view
- Financial ratios
- Procedure for the transition to the HAM2
- Financial instruments

Further information can be found on the SRS-CSPCP website: Recommendations of the Conference of the Cantonal Finance Directors.

All cantons have now introduced the HAM2, which was adopted in 2008, with a transition period of around ten years, or in some cases have fully adopted the IPSAS. The introduction date differed from canton to canton. For example, four cantons (ZH, BL, GL and NW) introduced the HAM2 within the first three years, i.e. by 2011, while the last three cantons did not do so until fiscal 2018 (NE, SH and VS). The introduction of the HAM2 at municipal level mostly took place in a second step, after the introduction in the corresponding canton. It will take until 2022 for implementation by all municipalities.

4.2 Implementation of the HAM2 in financial statistics: FS Model

4.2.1 Overview

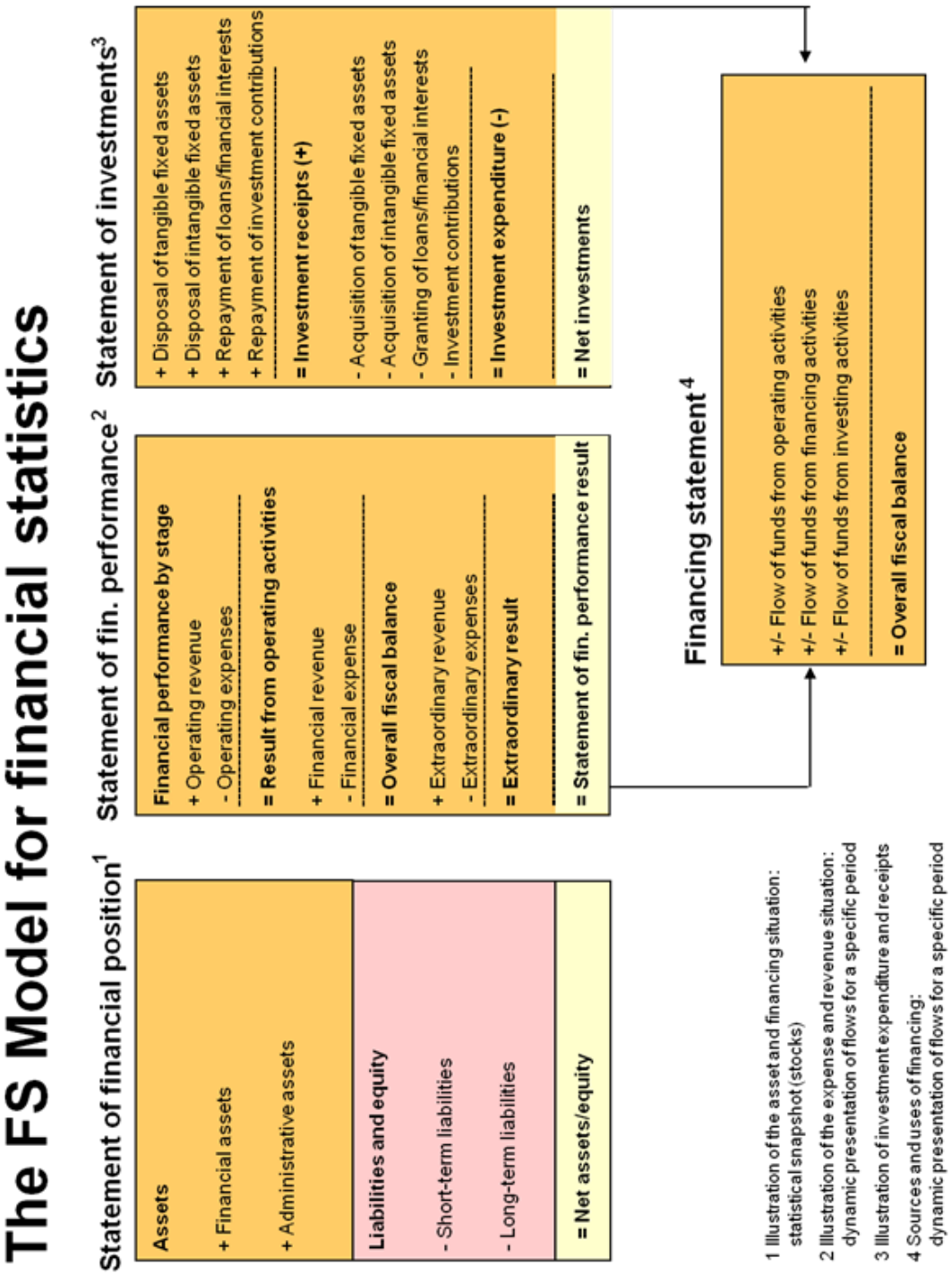
The HAM2 does not provide uniform consolidation guidelines. Therefore, in order to ensure consolidated and harmonized financial reporting by the Confederation, cantons, municipalities and social security funds, as well as international comparability, the sectoring guidelines of the ESA 2010 are already applied in the FS Model. The results of the accounts for government units reported in the financial statistics (Confederation, cantons, towns and cantonal capitals) may thus differ from the accounts published by the public bodies themselves.

The basic structure of the national FS Model of financial statistics is identical to the HAM2, with a few exceptions. Aside from the fact that the FS Model does not include a statement of net

assets/equity and notes to the financial statements, the differences are mainly limited to the use of a financing statement instead of a cash flow statement in the FS Model. Certain deviations or special features also have to be accepted in the context of data collection and processing, as well as consolidation, in order to be able to establish comparability between the institutional units. The following sub-sections deal with these topics in more detail.

The national reporting for cantons, concordats and municipalities is structured as shown in Figure 7. The same structure is also used for evaluations for the other sub-sectors (Confederation and social security funds) and for the general government sector as a whole. The report on Swiss public finances and a comprehensive set of tables are published on the FFA website.

Figure 7: The national FS Model of financial statistics



4.2.2 Financing statement

The FS Model does not include a cash flow or flow of funds statement, but it does include a financing statement. The financing statement is derived from the total revenue and expenses from the statement of financial performance and the receipts and expenditure from the statement of investments, less *purely book-entry items*. These include:

- Depreciation and amortization

- Value adjustments
- Deposits in and withdrawals from funds and special financing, as well as net assets/equity
- Dissolution of capitalized investment contributions
- Own investment contributions

However, in the case of the cantons, municipalities and social security funds, the financing statement still includes entries that do not directly affect cash and are carried forward to the next fiscal year or from the previous year as prepaid and accrued expenses, and accrued and deferred income. An example is the recognition of an accrued expense for goods/services already received but not yet invoiced. However, this distinction can be made in the accounts of the Confederation as parent entity.

4.2.3 Data capture and data processing

4.2.3.1 Nomenclatures and mapping

As the HAM2 is only a recommendation or because of the federal structure in Switzerland, the comparability of cantonal and municipal administrations is limited in practice despite the introduction of the HAM2. For this reason, the Financial Statistics Section defined a uniform nomenclature and various mapping tables. The mapping tables are used for the harmonized transfer of data from other accounting models and statistical legacy data into the FS nomenclature. The FS classification by nature (account group structure)[28] is streamlined relative to the HAM2 chart of accounts, but the same explanations apply to the individual items of the economic and functional classification in accordance with Appendix A/B to the HAM2 manual.[29]

4.2.3.2 Sectoring and statistical operations

Additions and eliminations: once the individual accounts have been entered, the sectoring is checked and, in the next step, individual units are added to and removed from the parent entity (see section 3.3). For example, plants and operations that are not allocated to the general government sector and are in the parent entity's accounts are eliminated. Any surplus/deficit and the net investments of such a unit are also cancelled out by means of a statistical change. A unit that is additionally entered and booked to the parent entity is called a non-parent entity.

As part of the statistical operation, the accounts are harmonized especially with respect to the following points:

[28] https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/daten.html

[29] https://www.srs-cspcp.ch/en

Taxes: tax receipts are to be entered according to the information from the canton. It must be ascertained that the canton furnishes the actual tax receipts after deduction of any unrealizable taxes. An explanation should be given for any substantial differences between the canton's information and the figures recorded. Church taxes are not entered, as churches are not part of the general government sector.

Internal charging refers to cost allocations within an individual government unit or within an accounting unit (parent entity and non-parent entity). If in the case of a government unit separate accounts are charged in addition to the parent entity, transfers between these entities are reclassified as internal charging rather than transfers (see section 4.2.4). The parent entity and separate accounts, i.e. non-parent entity, thus become a single unit.

The internal charging of expenses and revenue between the offices of a government unit is performed using account groups 39 and 49. The debits in account group 39 must correspond to the credits in account group 49. To ensure the comparability of the government units, it is also important to split internal charging between the functions and categories for which the expenditure is intended.

Statistical changes: if any errors are detected in the data furnished with respect to the allocation of categories or functions or if this is not in line with the rules of the FS Model, they must be corrected. All other modifications, whether they affect the balance or not, are booked as statistical changes.

Correction to the statement of financial position: in the state financial statements, the items in the statement of financial position of units that, by definition, do not belong to the government unit are eliminated. In the municipalities' accounts, a correction should be made only if the hived-off entity has a separate statement of financial position.

4.2.4 Consolidation and double entries

In financial statistics, consolidation refers to the combination and adjustment of the accounts of individual government units to form a set of consolidated financial statements, usually for a general government sub-sector[30]. In the consolidated results, transfers between the units to be consolidated are deducted. For instance, if the municipalities of a canton are posted as one unit, all transfers between these municipalities are deducted. This ensures that the consolidated expenditure and receipts are not overstated by the value of these transfers (double entries).

Each transfer within a consolidated sector or sub-sector has a paying and a receiving government unit. As the accounts of the individual government units are not uniform and standardized, transactions are often booked differently. The resulting statistical differences are

[30] Usually Confederation, cantons, municipalities, social security funds, and canton and its municipalities

reconciled or harmonized within the framework of statistical operations in financial statistics. These operations lead to changes in the account balances, which are not insignificant in terms of amount, especially when reconciling double entries between the Confederation and cantons. In order not to distort the basic data of the individual government unit, the reconciliation of double entries is performed with the help of fictitious reconciliation municipalities per canton or a reconciliation canton. In these equalization budgets, any discrepancies between credits and debits for double entries are reconciled for each function.

For the most part, differences between the transfer expenditure of the paying unit and the transfer receipts of the recipient unit occur as a result of

- a different definition of the scope of consolidation,
- a different allocation or level of detail by function,
- a different breakdown of the statement of financial performance and the statement of investments,
- different accounting year boundaries, and
- net entries.

In the context of data capture and statistical operations, the counterparty for transfer payments between public bodies is generally not known. It is seldom apparent whether a contribution made by municipality A has been booked by the recipient municipality B for the same amount and under the same function. Nonetheless, when all the municipalities of a canton are added up, the transfer expenditure to municipalities should be identical to the transfer receipts from municipalities. This ideal situation occurs very rarely, though.

For this equalization of double entries, consolidation rules were defined (see Table 7), specifying whether the correction should be made with respect to the transfer donors (expenditure, or debit side of the equalization government unit) or the transfer recipients (receipts, or credit side of the equalization government unit). However, this principle need not be observed in certain cases where this makes sense in the interests of obtaining good quality statistics. Unadjusted transfers, and thus remaining statistical differences, occur particularly with the data imported from the legacy financial statistics from fiscal 1990 to 2007[31]. The correction of double entries concerns the following items in the classification by nature (categories) of the equalization government unit:

- 36/386 Transfer expenditure/extraordinary transfer expenditure
- 46/486 Transfer revenue/extraordinary transfer revenue

[31] In the earlier consolidation practice, double entries between the municipalities or the canton and its municipalities were harmonized, but those between the cantons or between the Confederation and the cantons were not. According to the new consolidation practice, these transfers are now also harmonized, which greatly simplifies the consolidation process. The new consolidation rule results in statistical differences for the years 1990 to 2007 due to the absence of harmonization in the double entries between the Confederation and the cantons, as well as between the cantons.

- 57/587 Investment contributions/extraordinary investment contributions, expenditure
- 67/687 Investment contributions/extraordinary investment contributions, receipts

Table 7: Consolidation rules for financial statistics

Transfers	Consolidation rule
Municipalities – municipalities	Basis[1)] for consolidation: receipts Correction and equalization[2)]: expenditure
Cantons – municipalities/ Municipalities – cantons	Basis for consolidation: data from the canton Correction and equalization: municipalities
Cantons – cantons	Basis for consolidation: receipts Correction and equalization: expenditure Exception: In the case of horizontal financial equalization of the cantons, the cantonal data is adjusted to the accrual values in accordance with cantonal ordinances per fiscal year.
Social security funds – social security funds	Basis for consolidation: receipts Correction and equalization: expenditure
Confederation – cantons/ Confederation – municipalities	Basis for consolidation: Confederation Correction and equalization: cantons and municipalities
Confederation – social security funds	Basis for consolidation: Confederation Correction and equalization: social security funds
Social security funds – cantons Social security funds – municipalities	Basis for consolidation: social security funds Correction and equalization: cantons

[1)] The basis for consolidation is the receipts or expenditure item or the item in the statement of financial position that is known to be correctly classified and is not modified.

[2)] Correction and equalization refer to the receipt, expenditure or statement of financial position item of the counterparty which is corrected and whose difference with respect to the basis is entered as a statistical change.

4.3 The functional classification of the FS Model

The functional classification categorizes by function all revenue and expenses in the statement of financial performance and all receipts and expenditure in the statement of investments. This forms the basis for various statistical analyses in the area of public finances and allows for cross-referencing between the economic and functional classification.

The functional classification used in financial statistics is virtually the same as that used in the HAM2 (see Appendix B to the HAM2 manual), with just a few exceptions. The HAM2 takes

account of international standards (e.g. COFOG[32] as used by the IMF, OECD and Eurostat), as well as Switzerland's specific federal circumstances. Moreover, the Confederation's classification of functions in accordance with the NAM was included.

Table 8 below shows the first level of detail of the functional classification system. The SRS-CSPCP website[33] lists all detailed items and provides a comprehensive index of terms and definitions in French, German and Italian.

Table 8: FS Model: functional classification

FS code.	Description
0	General administration
1	Public order and security, defense
2	Education
3	Culture, sport and leisure, church
4	Health
5	Social security
6	Transportation and telecommunications
7	Protection of the environment and spatial planning
8	National economy
9	Finances and taxes

In the case of government unit data deliveries, the following issues can cause difficulties in financial statistics and lead to structural breaks.

Non-uniform implementation: the functional classification is implemented quite differently by the various public bodies. While some of them break down transactions precisely according to the given nomenclature, others report these differently[34] or only globally. This not only narrows the relevance of the statistical data, but also creates problems during consolidation. The financial statistics therefore assign transfers among the public bodies (double entries) to the same function.

Product groups: the widespread introduction of new public management concepts has raised considerable implementation problems where the product groups cannot be allocated to a

[32] Classification of the Functions of Government, OECD, 1999 (2011)

[33] https://www.srs-cspcp.ch/en

[34] For example, according to a government units' institutional breakdown (organizational structure). This form of classification is determined by business and political needs, and depends on the size of the administration.

position in the functional classification under the HAM2 (or HAM1). To ensure comparability among the public bodies, the products are allocated to a function according to the HAM2 nomenclature. This is also stipulated in the HAM2 manual for a product definition system.

Reorganizations: the reclassification or merger of units and offices as a result of a reorganization often leads to a loss of information and thus to major shifts in the reporting by task area, even though the tasks are essentially the same. This produces distortion or structural breaks in the statistical time series by task area. If units with different task areas are combined to form a single administrative unit, there should at least be a distribution key for the various functions. In the past, the financial statistics reform also led to some considerable structural breaks in the time series at the lowest level of the functional classification.

4.4 Financial indicators and ratios based on the FS Model

The HAM2 recommendation number 18 advises calculating various financial ratios at two priority levels for assessing the financial situation of an individual government unit. In the financial statistics, the following indicators are calculated and published according to the HAM2 definition for both the general government sector as a whole and the economic sub-sectors of the general government.

Priority 1

- *Net indebtedness ratio*
- *Self-financing ratio*
- *Interest burden ratio*

Priority 2

- *Proportion of gross debt*
- *Proportion of investment*
- *Proportion of debt servicing*
- *Proportion of self-financing*

A detailed description of how these financial indicators and ratios are calculated, as well as information on their intended use, can be found in the HAM2 manual (Appendix C).

In addition to the aforementioned financial indicators and ratios that we publish for the general government sector, the Confederation, the cantons and concordats, the municipalities, special purpose entities and social security funds, the Financial Statistics Section also calculates the following per capita indicator:

- *Gross debt per capita*[35]

[35] https://www.data.efv.admin.ch/Finanzstatistik/e/fs_staat/staat_schuld.xlsx

Since fiscal 2008, the denominator for this indicator has been Switzerland's permanent resident population as of December 31[36].

[36] Until fiscal 2007, the average number of inhabitants was used for per capita calculations. The concept of permanent resident population had to be introduced in 2008 following changes in the methods used in population statistics (census).

5 The IMF financial statistics model: GFS Model

5.1 Overview

Alongside Switzerland's national FS Model, statistics are also compiled according to the IMF's financial statistics standard, the GFSM 2014, so as to facilitate international comparisons and allow for data deliveries to international organizations. The GFSM 2014 as adopted in Switzerland includes some minor adjustments to address national circumstances. The Swiss implementation of the GFSM 2014 is referred to as the GFS Model of financial statistics.

The GFSM 2014 is consistent with the standards of the national accounts systems of the international organizations (including UN, OECD, IMF) and the EU. Like the IPSAS, the GFSM 2014 is a standard for the financial reporting of government units. However, whereas the IPSAS focus more on the business or individual economic units, the GFSM 2014, as a standard for summary statistics, emphasizes macroeconomic and overall fiscal-policy control and the comparability of government units. Nonetheless, both the IPSAS and the GFSM 2014 seek a more transparent and comprehensive disclosure of public financial management. Fundamentally, they share the same requirements and the same objective: to present a true and fair view of the revenue, financial and asset situation of the public sector.

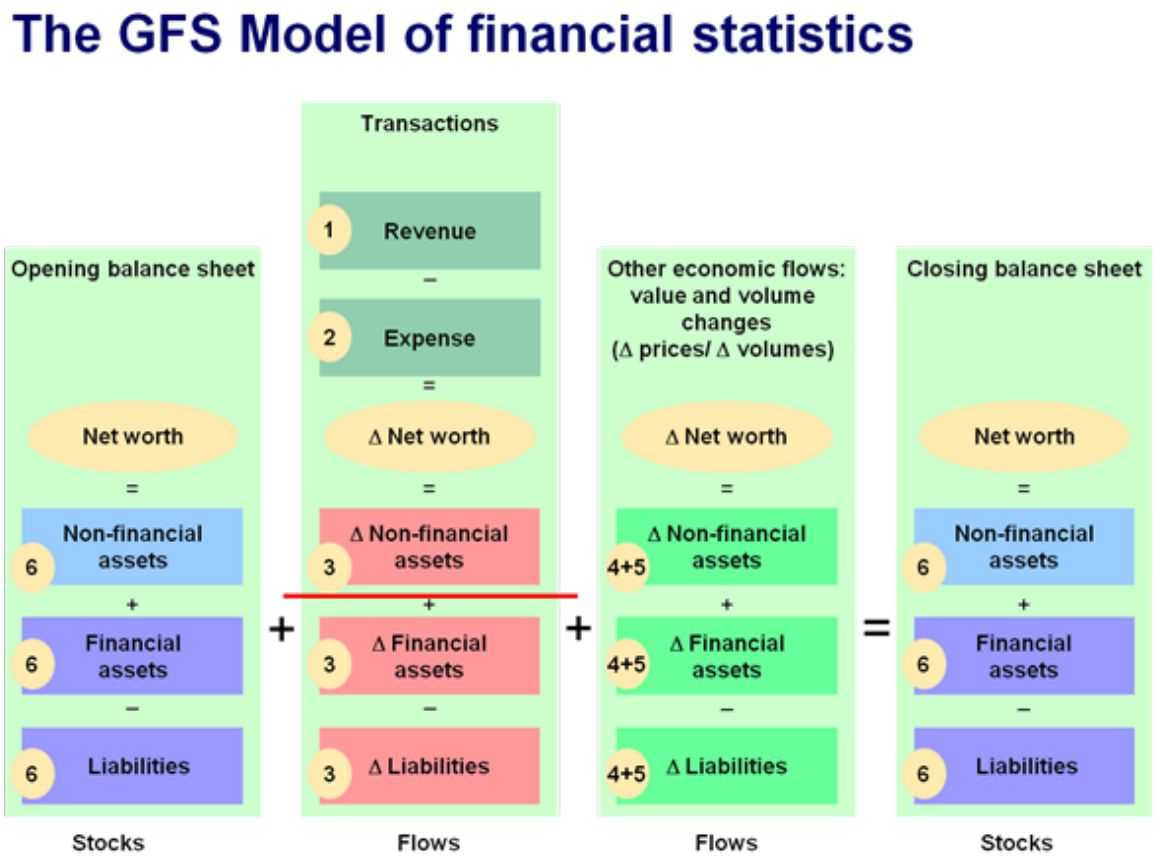
In principle, the GFS Model – like the FS Model – posts all transactions and indicators on an accrual basis. However, there are some differences between the two models, which are discussed in section 5.5.2.

5.2 The basic structure of GFSM 2014 and its chart of accounts

The GFSM 2014 is an integrated system of stocks and flows used to present the economic activities in which the public sector engages. Such uniform presentation is necessary to calculate a coherent set of figures that are both relevant and comparable internationally. This financial statistics standard comprises accounting and valuation rules to record economic transactions (flows) and assets and liabilities (stocks) in terms of substance, time and place. The corresponding manual contains definitions, classification systems and guidelines for reporting on public finances.

Figure 8 gives an overview of the GFSM 2014 accounting model.

Figure 8: GFSM 2014 accounting model and its chart of accounts



The GFSM 2014 begins and ends with the *balance sheet*, one side of which shows the non-financial and financial assets (current and non-current assets) and the other side the liabilities. The balancing item is called net worth. The closing balance sheet (CB_1) at the end of the year corresponds to the opening balance sheet (OB_2) for the following year. The change in net worth is made up of the changes produced by current operations/transactions (T) *(*T_1 = *revenue – expense = net operating balance)* and those resulting from other economic flows (OEF_1). This relationship, expressed in the following equation, must always apply in the accounts ex post:

(1) $\mathbf{OB_1 + T_1 + OEF_1 = CB_1 \equiv OB_2}$

The GFSM 2014 breaks down its standard schedule of accounts into the following six **account categories, or classification codes**, using the numbering system proposed by the IMF:

1 Revenue

2 Expense

3 Transactions in assets and liabilities

31 Net acquisition of non-financial assets
32 Net acquisition of financial assets
33 Net incurrence of liabilities

4 Other economic flows: holding gains and losses

5 Other economic flows: other volume changes

6 Stocks of assets and liabilities (opening/closing balance sheet)

Using this model, the following key **statements** can be prepared for the consolidated general government sector and for each individual sub-sector:[37]

- **Balance sheet**
- **Statement of operations**
- **Statement of other economic flows**

5.2.1 Balance sheet

The main feature of the balance sheet in the GFSM 2014 is its classification by instrument and by term, and its separation into domestic and foreign items. These requirements came about through the IMF's need to assess the stability of a country's financial market. Table 9 shows the structure of the balance sheet. On the assets side, a distinction is made between financial and non-financial assets. Instead of net assets/equity, the GFSM 2014 shows net worth. This is the sum of financial and non-financial assets less liabilities.

Table 9: GFS Model: balance sheet

GFS code	Balance sheet structure
6	**Assets and liabilities**
61	**Non-financial assets**
611	**Fixed assets**
6111	Buildings and structures
6112	Machinery and equipment
6113	Other fixed assets
612	**Inventories**
613	**Valuables**
614	**Non-produced assets**
62	**Financial assets**
621	**Domestic**
6212	Currency and deposits
6213	Securities other than shares
6214	Loans
6215	Shares and other equity
6216	Insurance technical reserves
6217	Financial derivatives

[37] The GFSM 2014 includes other statements that can be generated directly from these classification codes, such as the statement of sources and uses of cash, and the statement of total changes in net worth.

GFS code	Balance sheet structure
6218	Other accounts receivable
622	**Foreign (same breakdown as for Domestic)**
623	***Monetary gold and SDRs***
63	**Liabilities**
631	**Domestic (same breakdown as for Financial assets)**
632	**Foreign (same breakdown as for Financial assets)**
	Net worth = 61 + 62 – 63

5.2.2 Statement of operations

The statement of operations distinguishes between financial and non-financial transactions. Non-financial transactions are posted under the transactions affecting net worth and transactions in non-financial assets, whereas financial transactions are transactions in financial assets and liabilities and are shown in the financing statement.

The results (balances) of these three accounts are designated as follows:

- **Transactions affecting net worth:** net operating balance, which corresponds to the change in net assets (net worth) in a period
- **Transactions in non-financial assets:** net acquisition of non-financial assets
- **Transactions in financial assets and liabilities (financing)**: net lending/net borrowing

The transactions recognized in the statement of operations are economic flows established between two institutions by mutual agreement or by statutory requirements. In this case, mutual agreement means that there was prior knowledge of the transaction and therefore a certain degree of controllability. However, the transaction does not necessarily have to be voluntary. For example, the payment of taxes is also a transaction, as they are prescribed by statutory requirements.

The following two tables show the most important items regarding **transactions affecting net worth**:

Table 10: GFSM 2014: transactions affecting net worth – revenue

GFS code	Classification of revenue
1	REVENUE
11	Taxes
12	Social contributions
13	Grants
14	Other revenue

Table 11: GFSM 2014: transactions affecting net worth – expense

GFS code	Classification of expense
2	EXPENSE
21	Compensation of employees
22	Use of goods and services
23	Consumption of fixed capital
24	Interest
25	Subsidies
26	Grants
27	Social benefits
28	Other expense

A complete list of the individual items can be found in the GFSM 2014 manual or, supplemented with all Swiss economic classification items (Switzerland's GFS Model), in the Financial statistics: Economic and functional classification file on the FFA website.

Non-financial transactions in non-financial assets are recognized under **transactions in non-financial assets**. Transactions in non-financial assets refer to the acquisition and disposal of non-financial assets and the consumption of fixed capital. Consumption of fixed capital is calculated based on the replacement value of an asset with respect to its remaining service life. The balance is the net acquisition of non-financial assets.

Table 12: GFSM 2014: transactions in non-financial assets

Heading	Transaction	GFS code
Transactions in non-financial assets	+ Acquisition	31
	./ Disposals	-31
	./. Consumption of fixed capital	-23
Balance	= Net acquisition	

All other changes in assets and liabilities are posted as **transactions in financial assets and liabilities** (financing). The resulting **net lending/borrowing** corresponds to the changes in financial assets (GFS code 32) and liabilities (GFS code 33). Their classification is the same as that of the related balance sheet items (GFS codes 62 and 63), and is shown in detail in Table 12.

The following table summarizes how the individual sub-accounts are related:

Table 13: GFSM 2014: non-financial and financial transactions

GFS code	Transactions
1	Revenue
2	Expense
	Net operating balance (1 - 2 = 31 + 32 - 33)
31	Net acquisition of non-financial assets
	Net lending/borrowing (1 - 2 - 31 = 32 - 33)
32	Net acquisition of financial assets
33	Net incurrence of liabilities

The individual transactions concerning expense and revenue (GFS codes 1 and 2) are reflected in either the net acquisition of non-financial assets (GFS code 31) or the net change in financial assets and liabilities (GFS codes 32 and 33). Net lending/borrowing can thus be derived from the difference between the net operating balance in the operating statement minus the net acquisition of non-financial assets or directly from the difference between the net acquisition of financial assets and the net incurrence of liabilities. This system can be described as vertically closed.

5.2.3 Other economic flows

Unlike transactions, which can be controlled by fiscal policy and produce the key figures needed for fiscal policy analyses, flows that are unforeseeable and cannot be controlled are classified as other economic flows. These are actual changes in either the value or the volume of the individual balance sheet items, and are divided into two categories:

Holding gains and losses (classification code 4): this term encompasses all price gains and losses and all unforeseeable adjustments resulting from an unexpected increase or decrease in value. They may concern the consumption of fixed capital resulting from technical obsolescence on the assets side of the balance sheet, for example, or changes in the prices of derivatives on the liabilities side.

Other changes in the volume of assets (classification code 5): this covers all other economic flows that do not come under the definition of holding gains and losses, for example, losses due to destruction as a result of a natural disaster, seizures without compensation, donations or inventory corrections.

5.3 Accounting and valuation principles

As is customary in commercial accounting, the GFSM 2014 is based on **double-entry accounting** principles. In addition, like with the IPSAS, it is recommended that transactions be entered on an accrual basis (**accrual accounting**), particularly if the relevant information is available in financial accounting. Accrual accounting means that flows or the associated

assets and liabilities are recorded or recognized when economic value is created, transformed, exchanged, transferred or extinguished. In other words, an economic event is recorded in the period in which it occurs.

Assets and liabilities are generally **valued** at market prices. If no market prices are available, alternative valuation methods have to be used:

- For non-financial assets, the price of a similar asset can be used. Alternatively, production costs or the discounted value of future revenue may be used.
- In the case of financial assets and liabilities that are not traded on an active market (e.g. loans), the nominal value can be used. This corresponds to the amount owed on the reporting date, i.e. the sum of the nominal value of the liability and accrued interest.

Transactions are generally *recognized on a gross basis*. However, there are situations where net accounting is used. For example, tax revenue is recognized net of refunds, while increases and decreases in a specific inventory category are recognized on a net basis.

Relationship with the IPSAS

The accounting principles of the GFSM 2014 and the IPSAS are similar in many respects. Both are based on the principle of accrual accounting with the objective of presenting a true and fair view of the revenue, financial and asset situation. However, there are also some significant differences in the area of accounting and valuation.

- While under the IPSAS all assets and liabilities are generally recognized as soon as they meet the recognition criteria (past event, future inflows/outflows are probable and can be measured reliably), the GFSM 2014 defines exceptions in the area of provisions. This primarily concerns conventional provisions, e.g. for legal cases or contaminated sites, as well as provisions for financial guarantees, which, unlike with the IPSAS, are not recognized as liabilities. The IMF justifies this by citing a lack of symmetry, i.e. the non-existent or later recognition of a corresponding asset on the side of the counterparty.
- While the GFSM 2014 generally uses market prices as the valuation method, the IPSAS use various valuation methods. Depending on the purpose for which an asset/liability is held, the procurement cost, value in use or replacement value may be used in addition to the fair value based on market prices.

5.4 Classification of outlays by functions of government (COFOG)

The GFSM 2014 classifies all government expenditure by function in accordance with the internationally recognized COFOG nomenclature (Classification of the Functions of Government). This nomenclature divides government expenditure into ten first-level, or two-digit, categories, referred to as divisions (see Table 14). Outlays on general public services; defense; public order and safety; economic affairs; environmental protection; and housing and

community amenities represent collective consumption. This includes public goods that are provided simultaneously to all members of the community or all members of a particular section of the community. Meanwhile, government outlays on health; recreation, culture and religion; education; and social protection represent individual consumption, as these are used for the benefit of specific individuals or groups. This does not include certain sub-groups concerning R&D or outlays on general administration, regulations, etc., which are also classed as collective consumption.

Table 14: GFSM 2014: Functional classification (COFOG)

GFS code	Classification of outlays by functions of government
7	**Total outlays**
701	General public services
702	Defense
703	Public order and safety
704	Economic affairs
705	Environmental protection
706	Housing and community amenities
707	Health
708	Recreation, culture, and religion
709	Education
710	Social protection

COFOG is a general standard, and the functional classification actually used by individual countries may differ to a greater or lesser extent. As this generally plays an important role in the budgeting and planning of public finances, it has to be relatively flexible in order to be able to highlight sizable expansions in expenditure groups at any time. It is therefore particularly important to have an allocation formula allowing for conversion to the original COFOG codes.

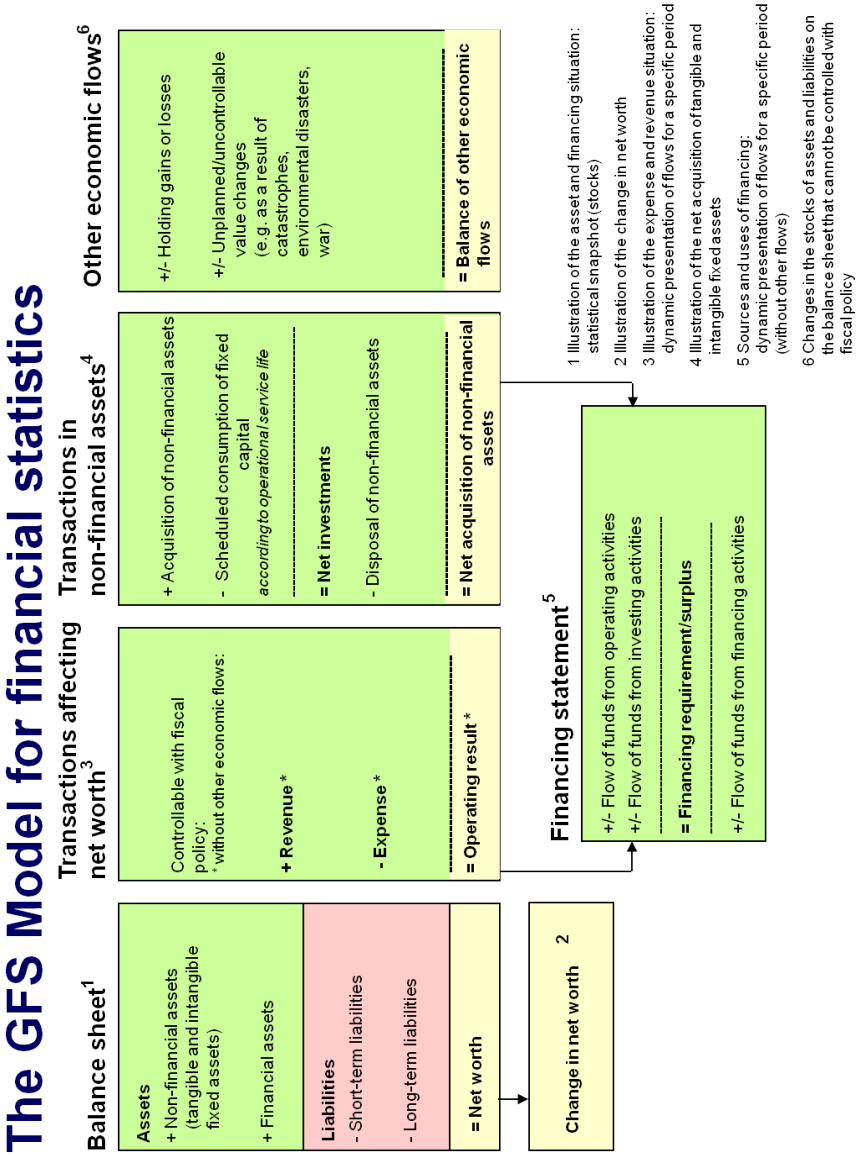
5.5 Implementation in Swiss financial statistics: GFS Model

5.5.1 Overview

The starting point for adoption of the GFSM 2014 in Switzerland's financial statistics is the national FS Model, as mentioned in the introductory section 2.5. First, all financial statistics data is mapped to the GFS Model. Then, in a second step, certain statistical operations are performed so as to ensure compliance with the financial statistics standards.

Figure 9 shows the main elements of the GFS Model.

Figure 9: Government finances according to the GFS Model



5.5.2 Mapping in the GFS Model

The electronic availability of the data of Swiss government units at the fourth level of economic classification, at least, and the information available on the functional classification of the FS Model allow for automatic mapping to the Swiss GFS Model. After mapping, as in the FS Model, each amount reported in the GFS Model is assigned a code from the *GFS economic classification (GFSM 2014 chart of accounts)* and the *GFS Classification of the Functions of Government (COFOG)*. The GFS Model is thus the basis for data storage and evaluation using the GFSM 2014 methodology.

Various aspects that have to be taken into account in order to respect the different methodological foundations are reflected in the mapping. Differences in scope relative to the HAM2 or IPSAS, and thus in most cases also relative to the FS Model, and different definitions

of the individual aggregates explain the extent of the differences between the levels of the reported aggregates in the two models (FS and GFS) and the balances and ratios derived from them (see next section).

5.5.3 Key differences between the GFS Model and the FS Model

Statement of investments: the GFS Model does not make the credit law distinction otherwise made in Switzerland and the FS Model between non-administrative assets and administrative assets. Consequently, it does not have a statement that corresponds to the Swiss statement of investments. As is customary in private sector accounting, investments are not recognized as expenditure, but directly via transaction accounts for balance sheet items.

Investment contributions: the concept of economic investment in the GFS Model differs from that used in the FS Model. In particular, investment contributions to other government units are not to be regarded as investments, but rather as capital grants. They therefore have a direct impact on income and do not appear in the balance sheet. Depreciation and amortization over the useful life of the financed investment are not taken into consideration either. This results in differences, especially for the cantons and municipalities, where the FS Model recognizes investment contributions in the statement of financial position and depreciates them. In the case of the Confederation, investment contributions in the FS Model are immediately depreciated via transfer expenses, which is in line with IPSAS requirements.

Consumption of fixed capital and value adjustments: in the operating statement, expense comprises only the depreciation on non-financial assets after their economic service life. Unplanned depreciation or value adjustments resulting from changes in the valuation situation and all so-called depreciation on financial assets or liabilities are not classed as such in the GFS Model and are assigned to other economic flows. "Depreciation for fiscal policy reasons", which the FS Model shows on the basis of the HAM2, is not included either. Depreciation in the GFS Model (referred to as "consumption of fixed capital") therefore comprises only the planned depreciation after the service life. Unplanned depreciation and any additional depreciation are posted under other economic flows.

Provisions: as already mentioned in the section concerning the relationship with the IPSAS, provisions are not recognized as a liability. The provisions recognized for employees (vacation, overtime, and compensation time credits), coins in circulation, and military insurance, which are considered liabilities rather than provisions according to the GFSM 2014, are an exception.

5.5.4 Statistical operations in the GFS Model

The mapping of the financial statistics data from the FS Model to the GFS Model meets the requirements of international standards only in part; certain statistical operations still have to be performed. These statistical operations complete the GFS Model.

The main reasons for statistical operations are as follows:

- **Market value adjustments:** balance sheet items are adjusted to external market values, e.g. financial interests recognized at equity values, cantonal stakes in the SNB (Swiss National Bank), government units' debt securities.
- **Consistency with the system of national accounts:**
  - Recognition of the government's claims on the SNB in the amount of the currency and distribution reserves shown in the SNB's balance sheet.
  - Research and development expenses are considered investments in the GFSM 2014 and are recognized under non-financial assets.
  - Depreciation and amortization are calculated based on the stock of fixed assets valued at the purchasers' prices of the current period, rather than historical cost as is customary in financial accounting.
  - Breakdown of tax receipts by economic sector for various types of taxes. The codes used are taken from the system of national accounts.
- **Consistency within the data:**
  - Breakdown of financial assets and liabilities into domestic and foreign. Use of a distribution key based on the SNB's financing statement.
  - Transactions in assets and liabilities and other economic flows: for transactions in financial assets and liabilities, the necessary information often cannot be obtained directly from the individual government accounts, but only indirectly by comparing the opening and closing balance sheets. The difference between the transactions recognized and the gap between the opening and closing balance sheets is posted to other economic flows.

5.6 GFS data deliveries

The IMF requires its member countries to submit financial statistics statements in accordance with the GFSM 2014 accounting model (balance sheet, transactions, and other economic flows) on an annual basis.

In addition, the IMF requires quarterly data for selected aggregates within the framework of the SDDS Plus (Special Data Dissemination Standard Plus). The SDDS Plus is an international reference framework. The IMF developed it in the wake of the 2008 financial crisis, which highlighted the need for more timely economic and financial data. The standard facilitates cross-country comparisons and thus allows for better monitoring of the global economy and systemic risks. It is aimed in particular at countries with a systemically important financial sector. The SDDS Plus extends the existing SDDS standard by nine additional categories in the areas of national accounts, public finances, financial sector and foreign trade. Switzerland has been providing quarterly data according to the SDDS Plus since December 1, 2020.

5.7 GFS financial ratios

The international financial statistics indicators are mostly stated using the international GFS Model. Only the Maastricht debt ratio is calculated according to the EU's definition[38]. The indicators for the general government sector and its sub-sectors (Confederation, cantons, municipalities and social security funds) are based on five aggregates from the operating statement and the balance sheet, each of which is expressed as a percentage of nominal GDP in accordance with the ESA 2010. They serve primarily as a basis for international comparisons.

5.7.1 Receipt ratio

The receipt ratio is calculated as the ratio of receipts to nominal GDP.

Receipts comprise the following:

Receipts (=)		
+	11	Taxes
+	12	Social contributions
+	13	Grants
+	14	Other revenue

5.7.2 Tax-to-GDP ratio

The tax-to-GDP ratio is calculated as the ratio of tax receipts (taxes) to nominal GDP.

Taxes are a sub-set of receipts and comprise the various tax receipts and social contributions (social security contributions to the social security funds).

Tax receipts (=)		
+	11	Taxes
+	12	Social contributions

5.7.3 General government expenditure ratio

The general government expenditure ratio is calculated as the ratio of government expenditure to nominal GDP.

Government expenditure is the sum of expense and net acquisition of non-financial assets.

Government expenditure (=)		
+	2	Expense
+	31	Net acquisition of non-financial assets

[38] Eurostat (2019): Manual on Government Deficit and Debt – Implementation of ESA 2010, Part VIII, Luxembourg

As the above table omits the consumption of fixed capital, government expenditure can also be calculated from the sum of the following individual items:

Government expenditure (=)		
+	21	Compensation of employees
+	22	Use of goods and services
+	24	Interest
+	25	Subsidies (to companies)
+	26	Grants
+	27	Social benefits
+	28	Other expense
+	31.1	Acquisitions of non-financial assets
./.	31.2	Disposals of non-financial assets

5.7.4 Deficit/surplus ratio

The deficit/surplus ratio is calculated as the ratio of net lending/borrowing to nominal GDP.

Net lending/borrowing is equivalent to the net operating balance minus the net acquisition of non-financial assets.

Net lending/borrowing (=)		
+	1-2	Net operating balance
./.	31	Net acquisition of non-financial assets

Alternatively, the deficit/surplus ratio can be calculated directly from the difference between the government expenditure ratio and the receipt ratio.

5.7.5 Gross debt ratio (IMF)

The gross debt ratio (IMF) shows the ratio of gross debt as defined by the IMF relative to nominal GDP.

Gross debt (IMF) is comprised of the following:

Gross debt as defined by the IMF (=)		
+	63	Liabilities
./.	6305	Shares and other equity
./.	6307	Financial derivatives

Gross debt as defined by the IMF encompasses virtually all borrowing. Negotiable liabilities have to be recognized at fair value.

6 The Eurostat financial statistics model: ESA Model

Switzerland's system of national accounts, which is based on the ESA 2010, is a GNP account forming a realistic representation of the Swiss economy, the main objective of which is to determine the value added, i.e. GDP. GNP is calculated from the point of view of production, consumption and distribution, taking into account all domestic economic sectors of the Swiss economy, which includes the general government sector, and those abroad.

6.1 Sequence of accounts of the system of national accounts

The system of national accounts presents the individual aggregates for the entire economy, as well as for an individual sector, and thus also for the general government sector, in a sequence of accounts. This sequence of accounts always begins with the production account, whose balancing item is the value added. The balancing items of each account for the generation, distribution and use of GNP form the opening item in the next account of the sequence. The complete sequence of accounts for the general government sector comprises the following accounts:

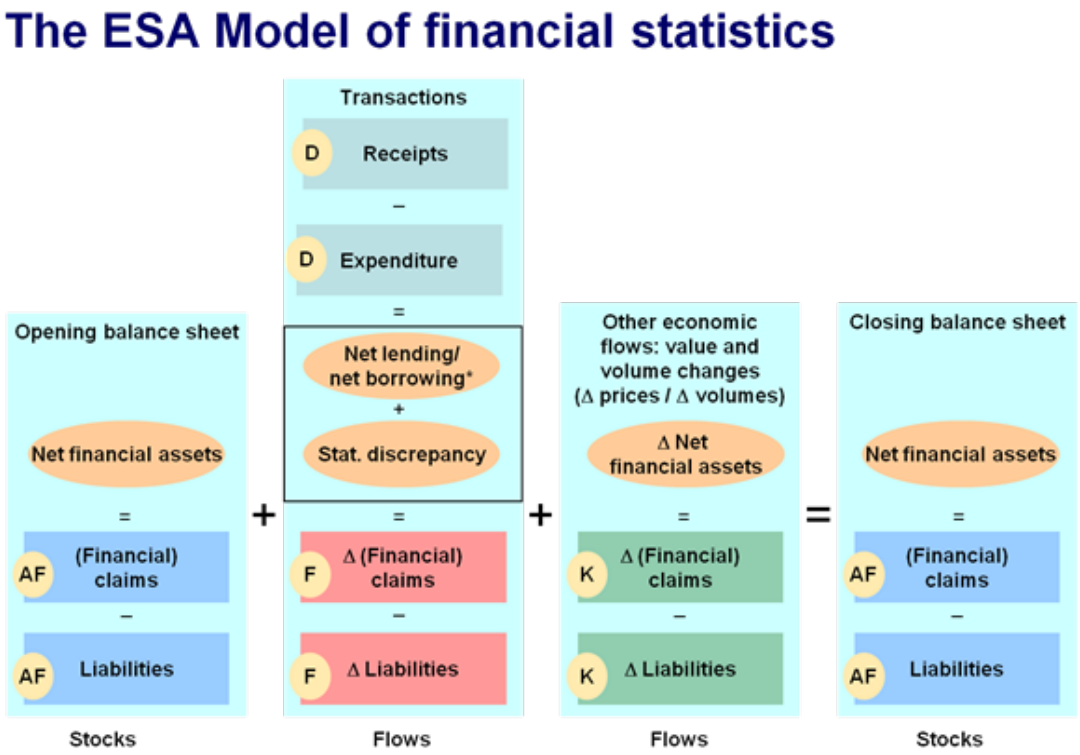
Table 15: Sequence of accounts of the system of national accounts for the general government sector

	Full sequence of accounts for the general government sector
I	**Production account**
II	**Distribution and use of income accounts**
II.1.1	Generation of income account
II.1.2	Allocation of primary income account
II.2	Secondary distribution of income account
II.3	Redistribution of income in kind account
II.4.1	Use of disposable income account
II.4.2	Use of adjusted disposable income account
III	**Accumulation accounts**
III.1.1	Change in net worth due to saving and capital transfers
III.1.2	Acquisitions of non-financial assets account
III.2	Financial account
III.3.1	Other changes in volume of assets account
III.3.1	Revaluation account
IV	**Balance sheets**
IV.1	Opening balance sheet
IV.2	Changes in balance sheet
IV.3	Closing balance sheet

6.2 Implementation in Swiss financial statistics: ESA Model

As preference is often given to presenting the results on the general government sector in the form of time series for the purpose of financial statistics and economic analysis, the aggregates of the system of national accounts according to the ESA 2010 with reference to the GFS Model can also be presented as a sequence of stocks and flows (see Figure 10). This presentation is described in financial statistics as the ESA Model of government finances and has the following structure:

Figure 10: The ESA Model of financial statistics



*Net lending/net borrowing (= Δ net financial assets) as per the ESA 95 or EDP (includes balancing for swaps, as well as other balancing processes)

As can be seen in Figure 10, this approach focuses not on revenue and expense, but on receipts and expenditure. The emphasis on net lending (+)/net borrowing (-), i.e. receipts less expenditure, is – apart from the other economic flows – closely associated with the development of government debt. From the same point of view, the balance sheet stripped of non-financial assets shows only financial assets and liabilities. This part of the accounts is known as the financing statement in the system of national accounts.

The financing statement in the ESA Model shows the stocks, transactions and other economic flows for financial assets and liabilities. In practice, however, in the system of national accounts and in financial statistics, the resulting net lending (+)/net borrowing (-) is not the same balancing item resulting from non-financial transactions, i.e. receipts and expenditure. These are the same in theory only. Such deviations can thus be posted separately as a statistical difference.

6.3 Key differences between the ESA Model and the GFS Model

As both the ESA 2010 and the GFSM 2014 are based on the methodology presented in the SNA 2008, both of these approaches use the same rules for valuation and the time of recording; their requirements are thus practically the same. As the GFSM 2014 and the ESA 2010 have a different perspective and purpose of analysis, they differ mainly in the way they present their results concerning the general government sector and the degree of detail posted.

Another difference can be seen in terms of consolidation. All transactions between government units are fully consolidated with the GFS Model, whereas the system of national accounts has only partial consolidation. Production-related intermediate consumption and intermediate production between government units are not consolidated in the system of national accounts. Primarily the compensation shown in the FS Model is concerned here in Switzerland.

The partial consolidation with the system of national accounts results in general government expenditure and receipts being increased by the same amount relative to the GFS Model. This has no impact on the deficit/surplus ratio, but the general government expenditure ratio turns out to be higher. The tax-to-GDP ratio is not affected, as taxes and contributions to social security funds are not consolidated.

6.4 Maastricht debt ratio

The Maastricht debt ratio shows the ratio of gross debt in accordance with the Maastricht criteria relative to nominal GDP.

Gross debt according to Maastricht is made up of the following GFS items:

Table 16: Maastricht debt

Gross debt according to Maastricht (GFS codes)		
	6302	Currency and deposits
	6303	Debt securities
	6304	Loans

Maastricht debt corresponds to total gross debt at nominal value. The Maastricht definition of debt comprises currency and deposits, as well as debt securities and loans. In particular, this definition does not include liabilities in the form of equity rights, claims against insurance companies and pension funds, derivatives and other liabilities (trade credits and deferred income). Consequently, the definition is significantly narrower than gross debt in accordance with the IMF, which includes more or less all liabilities and is thus more comprehensive.

7 Next update

If necessary, this methodology paper will be updated after the next "2024 benchmark revision" by the FSO, SNB and FFA.

The topics to be covered by this benchmark revision are still under discussion at present.

8 Glossary of selected terms

Term	Definition
Expense	Expense is a monetary valuation of the goods and services used or consumed during a given accounting period. The GFS Model includes the consumption of fixed capital (planned economic depreciation) in addition to expenditure with a financing impact. The FS Model additionally includes all items with no financing effect (depreciation, value adjustments and net expense for special financing).
Expenditure	Expenditure is defined as the use of non-administrative assets (FS Model) or financial assets (GFS Model) to fulfill a public task. It requires a legal framework and a credit.
Deficit/surplus ratio	The deficit/surplus ratio for the general government sector or one of its sub-sectors corresponds to net lending/borrowing in accordance with the GFS Model as a percentage of nominal GDP.
Receipts	Receipts are third-party payments that add to non-administrative assets or financial assets.
Receipt ratio	The receipt ratio shows the total revenue or total receipts in the GFS Model in relation to nominal GDP. Aside from tax and social security contributions, it also includes other revenue such as fees, rental charges, dividends and output for own final use in the area of research and development.
Revenue	In the GFS Model, revenue is the entire increase in value during a given period. The FS Model additionally includes all items with no financing effect (reversals and net revenue from special financing).
Financing statement	The financing statement is used to calculate the entire financing requirements, which result from the difference between expenditure and receipts. It thus discloses all payment transactions for a fiscal year resulting directly from the performance of tasks.
Net lending/borrowing	Net lending/borrowing in the GFS Model corresponds to the net operating balance less the net acquisition of non-

	financial assets. In macroeconomic terms, this is the difference between government receipts and government expenditure.
Non-administrative assets	Non-administrative assets in the FS Model encompass those assets that can be sold without any effect on the performance of public tasks.
Tax-to-GDP ratio	The tax-to-GDP ratio measures the general government sector's total tax revenue (tax and social security contributions) in relation to nominal GDP.
FS Model	The FS Model of financial statistics is used for national comparability of the finances of government units. It is based on the Cantonal Finance Directors' recommendation for a Harmonized Accounting Model for the Cantons and Municipalities (HAM2) from 2008, supplemented by certain elements from the new accounting model of the Confederation (NAM).
GFS Model	The GFS Model of financial statistics is used for international comparability of government finances and is based on the financial statistics standard of the International Monetary Fund (Government Finance Statistics Manual 2014). This standard is compatible with the European System of Accounts (ESA 2010).
Consolidation	Consolidation is the combination and adjustment of individual financial statements of several units to form what are known as consolidated financial statements. To obtain consolidated results, transactions between the units to be consolidated are eliminated.
Net acquisition of non-financial assets	The net acquisition of non-financial assets in the GFS Model comprises the acquisition less disposal of non-financial assets and the consumption of fixed capital.
Government unit	The consolidated accounts of a government unit adjusted for internal transactions are made up of its own accounts (parent entity) and the separate accounts of all institutional units for consolidation that are under the control of the executive and legislative bodies of said government unit. All controlled units whose sales of goods

	and services do not cover at least 50% of production costs are for consolidation. If, however, the consolidated financial statements of a government unit include government-controlled units that are largely self-financed via the sale of goods and services, these are removed. Such units are treated as public market producers or public enterprises. The scope of the general government sector is described in "Scope of the financial statistics"[39], which contains a list of added and eliminated units.
Net operating balance	The net operating balance refers to revenue less expense.
Net worth	Net worth in the GFS Model is the liabilities side of the balance sheet less debt.
Non-financial assets	Non-financial assets (GFS Model) encompass all produced (fixed assets, inventories and valuables), non-produced (land and subsoil assets) and intangible (software, patents and other rights of use) assets.
Debt ratio	There are two different debt ratios: The *gross debt ratio (IMF)* shows the ratio of gross debt as defined by the IMF relative to nominal GDP. The gross debt position comprises all liabilities less shares and other equity and financial derivatives. Negotiable liabilities have to be recognized at fair value. The *Maastricht debt ratio* shows the ratio of gross debt in accordance with the Maastricht criteria relative to nominal GDP. The debt used for calculating this indicator includes the following financial instruments on the liabilities side of the balance sheet using the GFS Model: currency and deposits, debt instruments and loans. However, in accordance with the Maastricht definition, these are valued at face value instead of fair value.
Sectoring	The system of national accounts and financial statistics subdivide economic decision-makers into institutional sectors. This delimitation is known as sectoring.

[39] Scope of financial statistics 2018 (XLS, 60 kB, 07.09.2020) (admin.ch)

General government sector	The general government sector comprises the consolidated sub-sectors of the Confederation, cantons, municipalities and social security funds.
Government expenditure	Government expenditure covers the expenditure by government units on goods and services provided to the public, e.g. infrastructure, as well as pensions.
General government expenditure ratio	The tax-to-GDP ratio serves to finance the general government expenditure ratio, which is defined as total government expenditure in relation to nominal GDP. Total expenditure is taken into account in all sectors.
Administrative assets	Administrative assets (FS Model) are those assets that are directly used in the performance of public tasks and that cannot be sold without having an impact on such tasks. The international models do not make any distinction between non-administrative assets and administrative assets.

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