Schweizerische Eidgenossenschaft
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Swiss Confederation

Federal Department of Finance FDF

Federal Finance Administration FFA

Brief report on financial statistics

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Public finance trends: Initial results for 2016 and 2017-2019 forecasts

Contents

This overview presents the definitive results for the consolidated accounts of the general government sector (Confederation, cantons, municipalities and social security funds) for 2016, as well as provisional 2017 results for the Confederation and social security funds. Moreover, the report provides forecasts for all general government sub-sectors for 2017 to 2019.

Based on the consolidated accounts, which are prepared in accordance with the Harmonized Accounting Model for the Cantons and Municipalities (HAM2), the Federal Finance Administration (FFA) also calculates financial statistics indicators according to the guidelines of the International Monetary Fund (IMF). These are calculated according to the Government Finance Statistics Manual (GFSM 2014).

A brief report on the latest financial statistics results can be found below. Information on the methodology is provided in the appendix. Technical notes on earlier new items and changes, as well as comprehensive time series and detailed data pertaining to the individual sub-sectors of the general government can be found online[1]. The more detailed annual report, "Switzerland's financial statistics for 2016", will be published at the end of October 2018.

[1] https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/uebersicht.html

1. Consolidated accounts of the government units

For the national financial statistics, the closing accounts of the various government units are restated in a uniform structure based on the Harmonized Accounting Model for the Cantons and Municipalities (HAM2). This approach allows a direct comparison of the government units within Switzerland. Table 1 shows how the financing statements for 2013 to 2019 pan out. The *ordinary fiscal balance* refers to the balance of ordinary receipts and expenditure; the *overall fiscal balance* also includes extraordinary transactions and therefore corresponds to the overall result of the financing statement. It is thus preferable to describe economic aspects using the ordinary fiscal balance. The breakdown between ordinary and extraordinary effects is essentially the same as that used in the financial statements of the Confederation, cantons and municipalities in accordance with their legal framework. Contributions for the funding of pension funds are an exception; these are all recorded as extraordinary items for comparability reasons, especially for comparing personnel expenditure.

Although the general government's **ordinary fiscal balance** deteriorated in 2016 relative to the previous year, it still showed a surplus of almost 3.0 billion. This result was driven by the 1.4 billion surplus of the Confederation (including separate accounts and decentralized administrative units), that of almost 1.1 billion of the cantons, and that of 0.7 billion of the social security funds. The Confederation's ordinary receipts were up only slightly on the previous year in 2016. Additional direct federal tax receipts and the investment contributions received (railway infrastructure fund) stood against lower withholding tax and stamp duty. Following the double payment the previous year, the Swiss National Bank (SNB) also reduced its profit distribution to the usual billion in 2016, and the Confederation received a third of that. Despite continued declines in interest expenditure, ordinary federal expenditure increased by just under 1 billion relative to 2015. The biggest expenditure increases were seen in the task areas social welfare (particularly asylum affairs and premium reductions), transportation (especially for railway infrastructure) and national defense.

The cantons presented a positive ordinary result for the second consecutive year in 2016. Ordinary receipts were up primarily because of an increase in taxes on the income of natural persons and legal entities. In addition, the compensation paid by the Confederation to the cantons in the area of asylum rose significantly. On the other hand, the momentum of revenue growth was curbed somewhat by the fact that the SNB profit distribution returned to normal again relative to the previous year. The biggest expenditure increases were seen in the social welfare task area, particularly asylum affairs, premium reductions and supplementary benefits.

The municipalities' ordinary fiscal balance improved again in 2016, but it remained slightly in the red (-0.2 bn). There was an increase in both receipts and expenditure, albeit a milder one. The social security funds' ordinary fiscal balance posted a year-on-year decline of almost 1 billion in 2016, but still closed with a surplus of 710 million. While the ordinary results of disability insurance (IV) and unemployment insurance (ALV) remained positive, old-age and survivors' insurance (AHV) posted a deficit for the first time since 1999.

According to the initial results for the Confederation and the social security funds, and estimates based on cantonal data already entered, the general government's ordinary fiscal balance is expected to post a significantly higher surplus of around 5.4 billion in 2017. This is likely to weaken somewhat in 2018 and 2019, but it will nevertheless remain in the billions. Current forecasts are pointing toward ordinary surpluses of 4.4 billion and 3.4 billion, respectively, for both years. The Confederation, cantons and social security funds will have a positive impact on that result.

According to the federal financial statements, ordinary receipts posted a significant year-on-year increase in 2017, due mainly to higher withholding tax receipts[2]. This strong growth could not have been expected. On the one hand, it was attributable to higher dividend receipts. On

2 Federal Finance Administration (2018). 2017 financial statements: surplus due to higher withholding tax receipts. Press release of 14.02.2018, Bern.

the other hand, refunds did not increase to the same extent. The Confederation and cantons also received an additional payment due to the SNB's high profits in 2016.[3] The Confederation's ordinary expenditure was higher than the previous year in line with expectations. Including the decentralized administrative units, which generated significant surpluses particularly because of the railway infrastructure fund, the Confederation's ordinary result amounted to around 3.9 billion in 2017. In 2018, the Confederation is likely to have an ordinary surplus of around 2.6 billion.

Table 1: 2013-2019 accounts, in CHF mn

		2013	2014	2015	2016	2017	2018	2019
General government	Receipts	205,955	206,543	214,523	215,678	221,592	225,216	227,553
	Expenditure	204,690	207,449	213,043	212,895	215,963	220,931	224,309
	Overall fiscal balance	**1,266**	**-906**	**1,480**	**2,783**	**5,629**	**4,285**	**3,244**
	Ordinary fiscal balance	1,519	694	4,354	2,990	5,406	4,397	3,360
Confederation (1)	Receipts	67,045	64,944	69,251	69,367	73,007	73,311	74,088
	Expenditure	64,575	64,749	66,545	67,495	68,930	70,757	71,912
	Overall fiscal balance	**2,470**	**194**	**2,706**	**1,872**	**4,077**	**2,555**	**2,176**
	Ordinary fiscal balance	1,414	-18	2,212	1,394	3,900	2,555	2,176
Cantons	Receipts	81,353	82,830	86,092	87,324	89,183	91,270	92,259
	Expenditure	83,263	85,206	88,576	86,779	88,190	90,268	92,045
	Overall fiscal balance	**-1,909**	**-2,376**	**-2,484**	**546**	**993**	**1,002**	**214**
	Ordinary fiscal balance	-826	-653	771	1,126	967	1,115	331
Municipalities	Receipts	44,504	45,443	46,831	47,391	48,043	48,905	49,709
	Expenditure	45,945	46,324	47,248	47,735	48,372	49,262	50,094
	Overall fiscal balance	**-1,442**	**-881**	**-417**	**-344**	**-329**	**-357**	**-385**
	Ordinary fiscal balance	-1,215	-792	-305	-239	-348	-357	-385
Social security funds	Receipts	60,814	61,958	62,281	62,670	63,495	63,854	64,568
	Expenditure	58,668	59,802	60,605	61,960	62,607	62,769	63,329
	Overall fiscal balance	**2,146**	**2,156**	**1,676**	**710**	**888**	**1,085**	**1,239**
	Ordinary fiscal balance	2,146	2,156	1,676	710	888	1,085	1,239

[1] Including separate accounts and decentralized administrative units

Grayed: extrapolations and forecasts

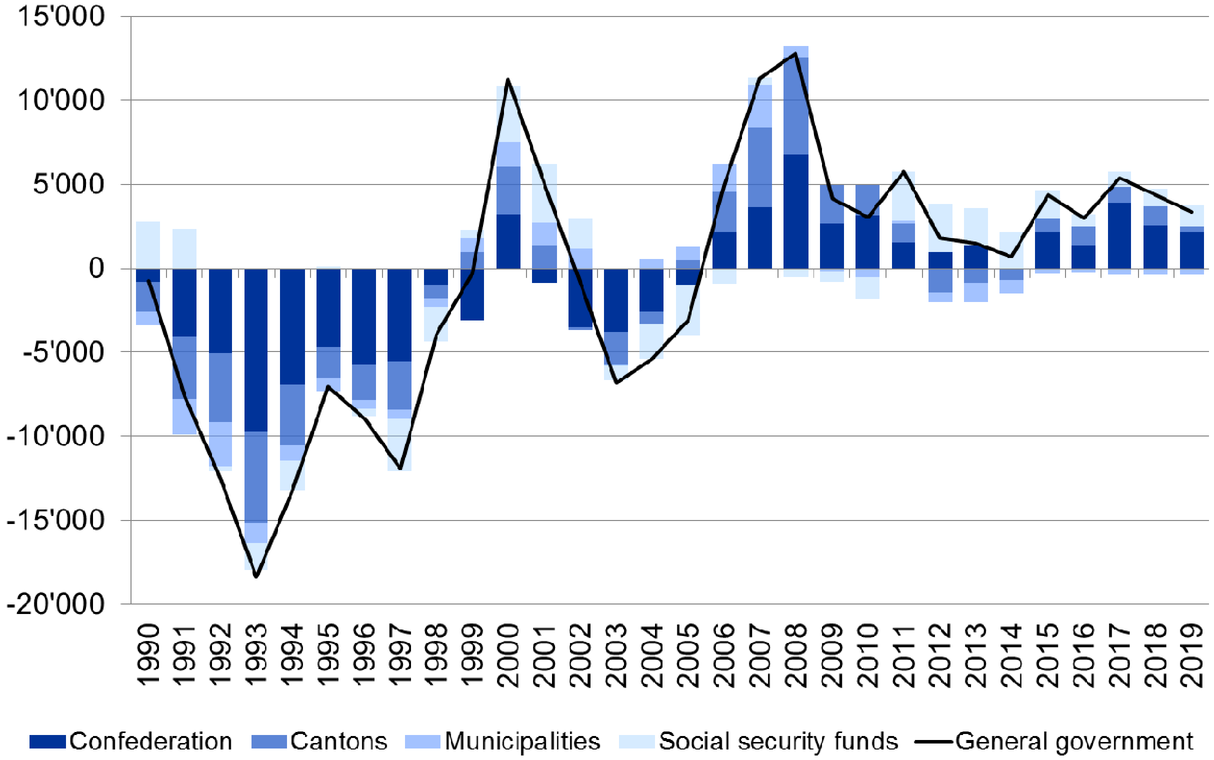
The currently available cantonal data is pointing to a slightly lower ordinary surplus for 2017. Ordinary receipts are likely to be slightly weaker than expenditure despite the SNB's higher profit distribution. However, the ordinary fiscal balance is likely to increase in 2018. A significantly lower but positive result is expected for 2019. This decline is due to ordinary expenditure growing faster than receipts.

The municipalities' ordinary fiscal balance is likely to deteriorate somewhat in 2017 and to show a high deficit once again. It will probably stay negative also in 2018 and 2019.

The drop in unemployment contributed to an increase in the social security funds' surpluses in 2017. The social security funds' ordinary fiscal balance showed a surplus of 0.9 billion in 2017. Thanks to the good economic situation, the social security funds' surpluses are likely to exceed the one billion mark in 2018 and 2019.

[3] SNB (2018). The Swiss National Bank (SNB) reports a profit of CHF 54.4 billion for 2018. Press release of 05.03.2018, Zurich. While the SNB paid 1.7 times the normal profit distribution of CHF 1 billion to the Confederation and cantons in 2017, a double profit distribution of 2.0 billion will actually take place in 2018.

Figure 1: 1990-2019 ordinary fiscal balance, in CHF mn



The general government's **overall fiscal balance** rose by 1.3 billion in 2016 and reached just over 2.8 billion. The Confederation recognized extraordinary receipts from COMCO fines (170 mn), the allocation of mobile radio frequencies (144 mn) and additional payments within the framework of the Swissair liquidation settlement (165 mn). The Confederation's financing surplus was almost 1.9 billion. Despite a deterioration relative to the ordinary balance because of pension fund reforms in the cantons of Basel Stadt (425 mn) and Basel Landschaft (288 mn), the cantons once again have a financing surplus (+546 mn) after a prolonged period without. In the case of the municipalities, the financing deficit declined slightly year on year, but it remained negative (-0.3 bn). The social security funds did not record any extraordinary receipts or expenditure, which is why their results corresponded to the ordinary balances.

The general government's positive overall fiscal balance is likely to more or less double in 2017 and amount to around 5.6 billion. The Confederation recognized extraordinary receipts from COMCO fines (99 mn) and additional payments within the framework of the Swissair liquidation settlement (78 mn). The cantons' result is expected to improve as a result of extraordinary financial revenue in the cantons of Graubünden and St. Gallen. There are no known extraordinary receipts or expenditure items for the municipalities and social security funds, and their results should remain unchanged.

Declining financing surpluses are forecast for the general government in 2018 and 2019, but they are still very high at 4.3 billion and 3.2 billion, respectively. The Confederation does not envisage any extraordinary receipt or expenditure items in 2018 and 2019. There are no known extraordinary items for the municipalities and social security funds either. In contrast, further expenditure is planned in various cantons for the restructuring of public sector pension funds, although this will not significantly reduce the still positive financing surplus. The plunge expected in 2019 is already apparent in the ordinary result.

2. Financial statistics indicators in accordance with international guidelines

The finances of the government units are additionally published in accordance with the guidelines of the International Monetary Fund (IMF) to facilitate international comparisons. The IMF's Government Finance Statistics Manual 2014 (GFSM 2014) forms the methodological foundation for the data and indicators published.

The government unit indicators used in financial statistics comprise a set of five aggregates, each of which is expressed as a percentage of nominal gross domestic product, GDP (Table 2). Nominal GDP growth was 1.2% in 2017. This should be taken into account when interpreting the financial statistics indicators' trend. The GDP trend for 2018 and 2019 is based on the official economic forecasts of the federal government's group of experts, published on June 19, 2018[4].

Table 2: 2013-2019 indicators, in % of GDP

		2013	2014	2015	2016	2017	2018	2019
Deficit/surplus ratio	**General government**	**-0.4**	**-0.2**	**0.6**	**0.4**	**1.3**	**0.8**	**0.6**
	Confederation	0.1	0.0	0.4	0.1	0.8	0.4	0.4
	Cantons	-0.7	-0.3	0.1	0.1	0.3	0.2	0.1
	Municipalities	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.0
	Social security funds	0.3	0.3	0.3	0.1	0.1	0.1	0.2
Tax-to-GDP ratio	**General government**	**27.1**	**26.9**	**27.6**	**27.8**	**28.5**	**27.8**	**27.6**
	Confederation	9.6	9.4	9.9	9.8	10.5	9.9	9.9
	Cantons	6.7	6.7	6.8	7.0	7.0	6.9	6.9
	Municipalities	4.1	4.1	4.2	4.3	4.3	4.3	4.2
	Social security funds	6.7	6.6	6.7	6.7	6.7	6.6	6.6
Expenditure ratio	**General government**	**33.1**	**32.7**	**32.8**	**33.0**	**32.9**	**32.7**	**32.3**
	Confederation	10.5	10.4	10.6	10.7	10.8	10.6	10.5
	Cantons	13.9	13.5	13.6	13.5	13.5	13.5	13.4
	Municipalities	7.1	7.2	7.1	7.1	7.1	7.1	7.0
	Social security funds	9.1	9.1	9.2	9.3	9.3	9.1	8.9
Debt ratio (Maastricht)	**General government**	**30.3**	**30.6**	**30.0**	**29.0**	**29.5**	**28.1**	**27.2**
	Confederation	16.4	15.8	15.0	14.0	14.5	13.3	12.6
	Cantons	7.5	8.3	8.4	8.4	8.4	8.2	8.2
	Municipalities	6.6	6.7	6.8	6.7	6.8	6.7	6.6
	Social security funds	0.7	0.6	0.4	0.4	0.3	0.2	0.1
Gross debt ratio	**General government**	**42.9**	**43.0**	**43.0**	**41.8**	**42.7**	**40.7**	**39.4**
	Confederation	20.7	21.0	20.9	19.8	20.8	19.2	18.2
	Cantons	12.1	12.1	12.2	12.5	12.3	12.0	11.8
	Municipalities	10.2	9.9	10.0	9.7	9.7	9.6	9.5
	Social security funds	0.8	0.7	0.5	0.5	0.4	0.2	0.1

[1] Including separate accounts and decentralized administrative units

Grayed: extrapolations and forecasts

The financial statistics indicators are stated in accordance with the current guidelines of the IMF. In the case of the GFS Model, the **ratios** are determined using standards that are different from those used for the fiscal balance interpreted in the first part of this report (Appendix 3.2). This ensures that the indicators are internationally comparable. As with the preceding data, the indicators are based on the consolidated results of the Confederation, cantons, municipalities and social security funds.

With a **deficit/surplus ratio** of +0.4% of nominal gross domestic product (GDP), the government units ended 2016 in positive territory for the second time in succession. While the Confederation, cantons and social security funds achieved surpluses in the order of 0.1%, the

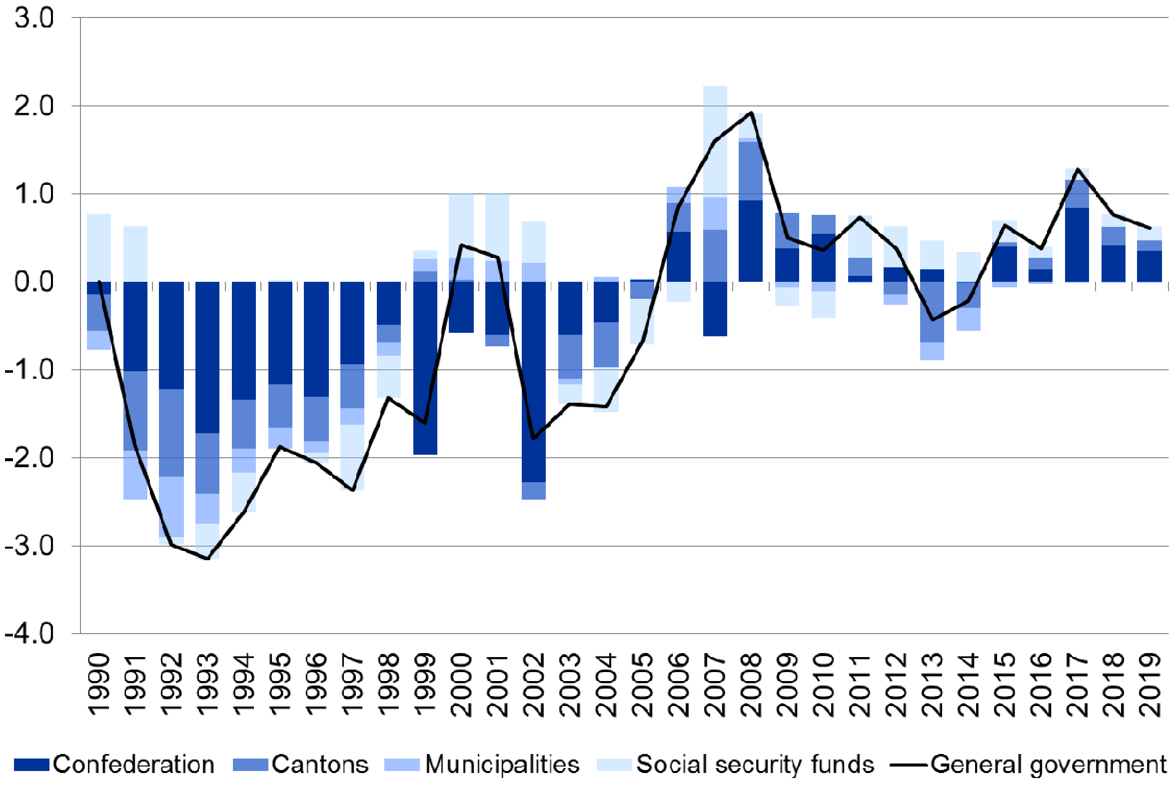
[4] State Secretariat for Economic Affairs (2018). Upswing unhindered despite risks. Press release of 19.06.2018, Bern.

municipalities had an almost balanced result. While the surpluses of the Confederation and social security funds fell year on year (see section 1), the canton' surplus ratio remained stable. After seven years with deficits, the municipalities broke even again for the first time in 2016. The burdens for the cantonal and municipal accounts due to pension fund restructuring decreased significantly in 2016.

While the Confederation's expenditure growth was rather modest in 2017, there was a significant increase in receipts, driven by the surprisingly high withholding tax receipts. Consequently, the Confederation had a high surplus ratio of 0.8% of GDP, which it achieved only once before, in 2008. While the social security funds ended the year with a surplus of 0.1% of GDP, like the previous year, a surplus ratio of 0.3% can even be expected for the cantons according to the current extrapolations. The municipalities are likely to achieve a virtually balanced result once again. Overall, the general government had a surplus ratio of 1.3% in 2017.

As a result of the economy gaining momentum, the general government is likely to post significant surpluses of 0.8% and 0.6% of GDP, respectively, in 2018 and 2019. While the Confederation, cantons and social security funds can expect surpluses in both years, the expenditure and receipts of the municipalities are likely to be broadly balanced once again. Despite the economic upturn, the social security funds' situation is unlikely to ease in 2018 because of the expiry of the IV supplementary financing. Nevertheless, surpluses in the order of 0.1% and 0.2% of GDP, respectively, can be expected in 2018 and 2019 due to lower unemployment insurance expenditure. However, the positive balances of the social security funds in 2018 and 2019 should not hide the imminent retirement provision challenges.

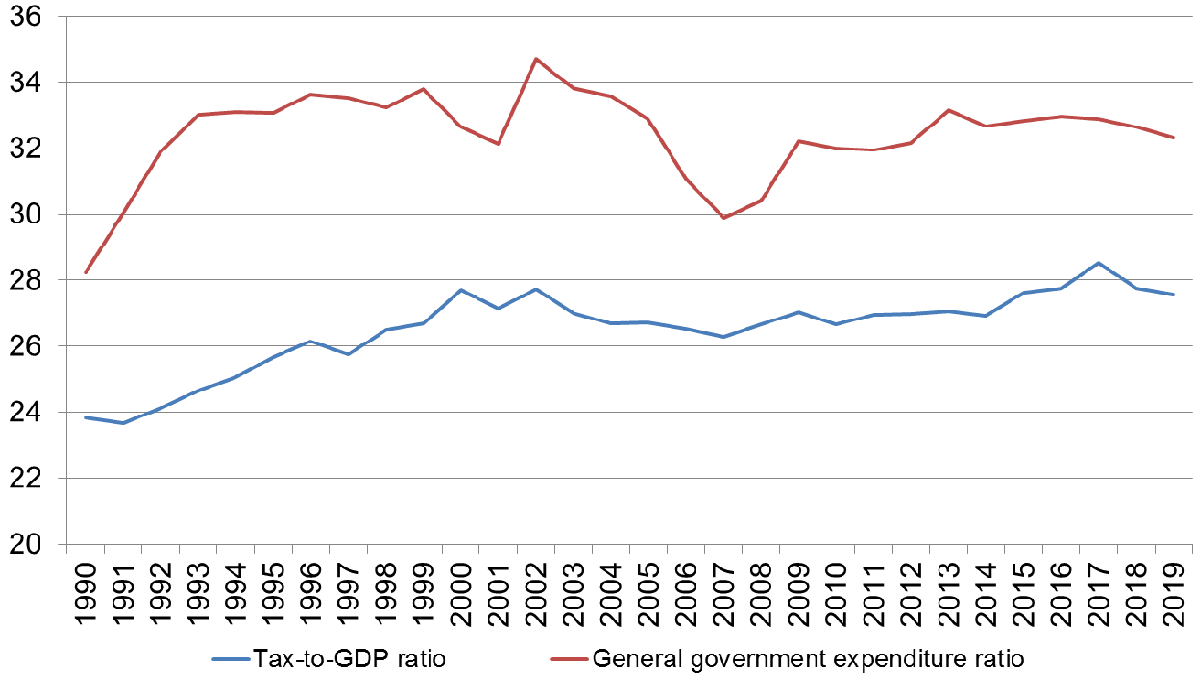
Figure 2: 1990-2019 deficit/surplus ratio, in % of GDP



The **tax-to-GDP ratio**, which measures the general government's total tax receipts (tax and social insurance charges) in relation to GDP, amounted to 27.8% in 2016. The stagnation of the Confederation's tax revenue (see section 1) resulted in a modest increase in tax revenue for the general government (+1.4%). Nevertheless, the general government's tax-to-GDP ratio increased slightly relative to 2015, as nominal GDP growth was even weaker (+0.9%). While the Confederation's tax-to-GDP ratio edged down to 9.8%, the cantons (7.0%) and municipalities (4.3%) saw their tax-to-GDP ratios gain 0.2 and 0.1 percentage points, respectively. In contrast, the social security funds' tax-to-GDP ratio stagnated at 6.7% of GDP.

Due to the surprisingly high withholding tax receipts, the tax-to-GDP ratio will peak at 28.5% of GDP in 2017. In the wake of the improving economic situation and a normalization of withholding tax, tax revenue is likely to grow less strongly than nominal GDP in 2018 and 2019, which means that the tax-to-GDP ratio is likely to fall below 28% again. It is thus still in the range between just under 27% and 28%, where it has been since the turn of the millennium.

Figure 3: 1990-2019 general government tax-to-GDP ratio and expenditure ratio, in % of GDP



After the **general government expenditure ratio** surged in the first half of the 1990s and peaked at 34.7% in 2002, it was possible for it to be lowered considerably to 29.9% thanks to the very healthy economic conditions through to 2007 and various relief measures (Figure 3). The economic climate deteriorated in 2009 following the financial crisis of the fall of 2008. It caused expenditure growth to outstrip economic growth in all sub-sectors and thus led to a substantial increase in the general government expenditure ratio in 2009.

The general government expenditure ratio has continued to edge up since then, and reached 33.0% of GDP in 2016. This increase can be explained by the combination of weak nominal GDP growth and the cantons' high extraordinary expenditure for the recapitalization of their pension funds in 2013 to 2016. Federal expenditure grew particularly in the areas of asylum and railway infrastructure (RIF) in 2016, which is why the Confederation's expenditure ratio rose by 0.1 percentage points to 10.7%. The municipalities' ratio is set to remain at 7.1% of GDP, while it edged up to 9.3% for the social security funds.

The general government expenditure ratio is likely to fall slightly again from 2017, and reach 32.3% in 2019. The good economic situation in 2018 and 2019 is likely to curb expenditure growth, especially in the case of the social security funds.

In the financial statistics, the debt of the general government, i.e. the consolidated government units, and thus also the **debt ratio** are determined in accordance with the Maastricht definition which applies for the EU member states. The debt ratio skyrocketed during the 1990s and peaked at 48.9% in 1998. This increase was attributable mainly to federal debt. The Confederation's debt ratio has fallen continually since the introduction of the debt brake for the

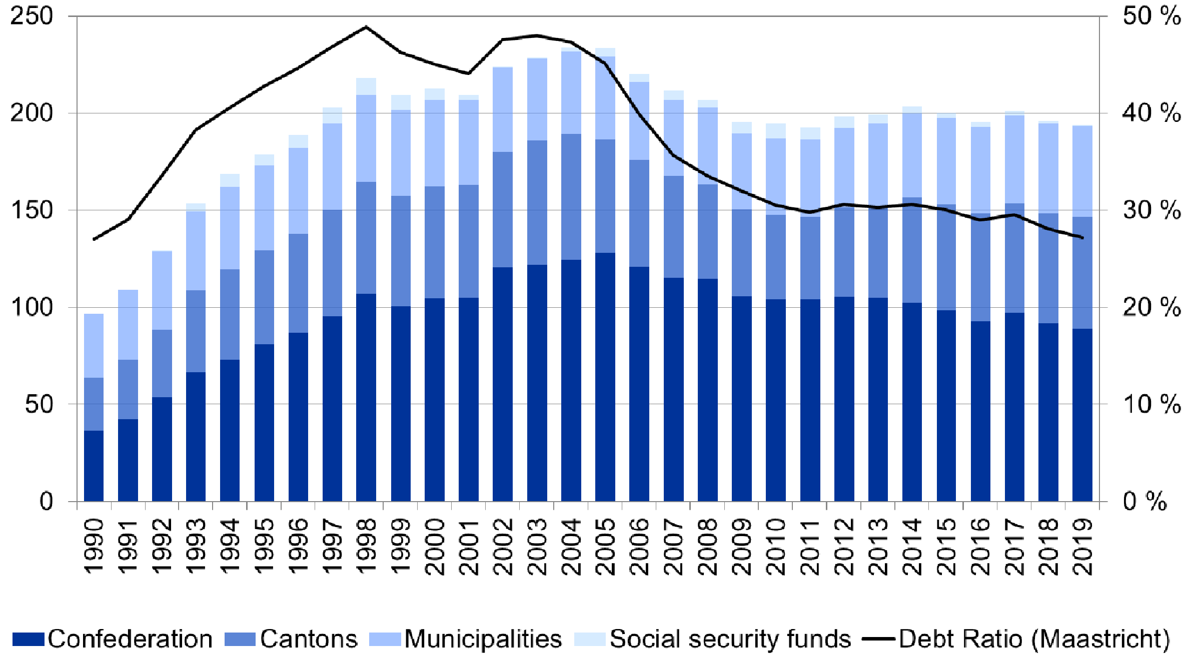
Confederation in fiscal 2003. The debt ratios of the individual sub-sectors have likewise been reduced since 2003 thanks to sometimes high surpluses. The Maastricht debt ratio dropped below 40% of GDP in 2006 and was 30.0% in 2015 (The Maastricht debt ratio will probably be 27.2% in 2019.

Figure 4Figure 4).

In 2016, the general government's debt ratio returned below the 30% mark again after a long time above it and reached 29.0% of GDP. The Confederation's debt ratio has been lowered to 14.0%. Despite the positive overall fiscal balance, the cantons' debt ratio remained stable at 8.4%. The cantons have increased their debt due to the favorable interest rate environment for borrowers, even though this would not have been necessary because of the positive overall fiscal balance. The municipalities' debt ratio edged down to 6.7%. That of the social security funds fell from 1.2% in 2010 to 0.4% in 2015, largely due to repayment of the unemployment insurance debt vis-à-vis the Confederation. Relative to the previous year, the social security funds' debt ratio remained unchanged at 0.4% in 2016.

In view of the good economic situation and the positive financial outlook for the public finances, Maastricht debt ratios can be expected to decline in all sub-sectors in the years ahead. While the debt burden for the cantons and municipalities is increasing slightly, the Confederation and the social security funds can reduce their debt in absolute terms and not only in relation to GDP. The social security funds' debt reduction is attributable primarily to the repayment of the federal unemployment insurance loan. The Maastricht debt ratio will probably be 27.2% in 2019.

Figure 4: Maastricht debt 1990-2019 for all sub-sectors, in CHF bn (lhs) and in % of GDP for the general government (rhs)



The **gross debt ratio** states government debt according to the IMF definition as a percentage of GDP. It includes more balance sheet items than Maastricht debt. Moreover, certain liability items are valued at market rates (Appendix 3.2). The gross debt ratio is around 10 percentage points higher than the Maastricht debt ratio on average. Despite the methodological differences, the two debt ratios follow a similar path, although the gross debt ratio is somewhat more volatile because of capital market valuation fluctuations.

The gross debt ratio was 41.8% of GDP in 2016. It is likely to fall below the 40% mark by 2019 and reach 39.4%.

3. Appendix

3.1. Information on methodology

The national comparability of the accounting data of Switzerland's government units is ensured with the financial statistics using the FS Model. This is based on the Harmonized Accounting Model for the Cantons and Municipalities (HAM2)[5]. The FS Model is also used as a basis for international comparisons. This comparability is ensured in accordance with the guidelines of the International Monetary Fund (IMF) using the so-called GFS Model of financial statistics. The GFS Model is based on the IMF's Government Finance Statistics Manual 2014 (GFSM 2014), which is specifically targeted to what is needed for analyzing the government units' revenue, financial and asset situation in an economic territory (country).

The conceptual and methodological reconciliation with the system of national accounts of the Federal Statistical Office (FSO) was completed with the publication of 7 September 2017[6]. The system of national accounts data for the general government has been consistent with that of the GFS Model since then. The revisions necessitated by this reconciliation were explained in detail in a technical note[7].

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

- 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 general government 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 too high. The tax-to-GDP ratio is not affected, as taxes and contributions to social security funds are not consolidated.

3.1.1. Overview of financial statistics models

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 in the so-called FS Model, the core of which is based on the HAM2. The Swiss Public Sector Financial Reporting Advisory Committee[8] (SRS-CSPCP) publishes information on the current status of the HAM2 as well as interpretations concerning individual specialist recommendations and frequently asked questions online on its website.

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[5] See "Harmonized Accounting Model for the Cantons and Municipalities", HAM2, http://www.srs-cspcp.ch/de

[6] Switzerland's system of national accounts is based on the European System of National and Regional Accounts, ESA 2010 (http://ec.europa.eu/eurostat/web/esa-2010/overview). 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 (UNO, OECD, IMF, World Bank, European Commission).

[7] See *technical notes* at: https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/methoden.html (Adjustments to the GFS Model of financial statistics as of September 7, 2017)

[8] See http://www.srs-cspcp.ch/en

The FS Model is a model for financial statistics that allows the financial results supplied by the Confederation, cantons, municipalities and social security funds to be standardized and made comparable. At the same time, it forms the basic statistics for mapping, statistical operations and evaluations in accordance with the international GFS Model of financial statistics, in which the public finance guidelines of the IMF are implemented.

The HAM2 chart of accounts forms the basis for the economic classification used in the FS Model. On the one hand, it is streamlined to simplify matters and on the other, items "not elsewhere classified" are added, as the cantons and municipalities are still partly supplying their accounts according to the earlier HAM1. These additional items are needed because the HAM1 is less detailed in parts. Consequently, these positions cannot be clearly mapped to HAM2 items. Apart from quite minor exceptions, the functional classifications of the HAM1 and HAM2 are the same. The data from the Confederation's separate accounts and state financial statements, as well as the social security funds, is also integrated in this model and is incorporated directly into the GFS Model.

In the case of the general government sector, both 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.

However, the FS and GFS Models serve different purposes (Table 3). The inclusion of separate accounts and decentralized administrative units in the Confederation sub-sector, for example, leads to indicators that are not directly comparable with those produced in the Confederation's financial reporting.

Table 3: Overview of financial statistics models

	FS Model	**GFS Model**
Basis	National accounting models 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	Economic sub-sectors (Confederation, cantons, municipalities, social security funds) and the general government sector down to the level of individual budgets (cities and cantonal capitals, cantons, social security funds)	Only at the level of the economic sub-sectors (Confederation, cantons, municipalities, social security funds) and the general government sector

3.1.2. Government Finance Statistics Model (GFS)

Like the FS Model, the GFS Model also uses the accrual basis of accounting, the main feature of which is the allocation of business transactions to the corresponding accounting period. The GFS Model does not provide a breakdown between ordinary and extraordinary results, and instead distinguishes between transactions and other economic flows. While the net operating balance[9] and net lending/borrowing[10] are derived from transactions and can be controlled by fiscal policy, unanticipated events[11] such as changes in the value of stocks are considered other economic flows, which are beyond policy control. Stocks are valued in accordance with the "true and fair view" principle, whereby negotiable assets and liabilities in particular are recognized in the balance sheet[12] at fair value.

Investments are also reported differently in the GFS Model than in the FS Model. A key variable in transactions in non-financial assets in the GFS Model is what is termed the net acquisition of non-financial assets. This is defined as acquisitions less disposals of non-financial assets and less the consumption of fixed capital. Unlike in the FS Model, however, loans granted to other government units and associated increases in financial interests are not recognized as investments and are thus not included when calculating transactions in non-financial assets. They are treated as transfers to other general government levels and are thus considered part of the operating statement.

3.1.3. Data sources

The financial statistics are based on the data disclosed in the state financial statements of the Confederation and all the cantons, as well as the annual reports of over 900 municipalities. All cities and cantonal capitals as well as random samples per canton are taken into account. Based on the accounts of the municipalities surveyed, estimates and extrapolations are made for the other municipalities per canton. Social security funds are also included (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 (see 3.1.4.). For these reasons, the evaluations in the financial statistics do not necessarily correspond to the financial statements published by the Confederation, cantons, municipalities and social security funds.

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. However, estimates can be used to provide more up-to-date statements and forecasts for the general government sector and the individual sub-sectors, i.e. Confederation, cantons, municipalities and social security funds. The financial statistics are based on the financial statements up to 2015 (Table 4). For the Confederation (including separate accounts and decentralized administrative units), the 2016 figures are also based on the corresponding financial statements. The 2017 forecasts are based on the definitive federal financial statements and on the provisional financial statements for the separate accounts and decentralized units. The 2018 forecasts are based on the budget or on the financial plans as the case may be. The 2016 data for the cantons is based on the financial statements, and the forecasts are based on a survey of the cantonal financial statements (2017) and the cantonal budgets (2018). The forecasts for the municipalities are based on the currently available accounting data (2016) and several indicators (2017-2018).

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9 Net operating balance = revenue – expense

10 Net lending/borrowing = net operating balance – net acquisition of non-financial assets
= government receipts – government expenditure

11 Unanticipated events in the GFS Model are not to be confused with extraordinary transactions in the FS Model. For example, the recapitalization of pension funds is not considered as an unanticipated event in the GFS Model. In contrast, the consequences of a natural disaster or valuation changes due to changes in market prices are considered as unanticipated events that are beyond the control of fiscal policy.

12 The term *balance sheet* is used in the GFS Model instead of the term *statement of financial position*.

The 2016 figures for the social security funds are based on their financial statements, and the 2017-2018 forecasts are based on their budget or financial plan figures.

In the case of the cantons and municipalities, it needs to be borne in mind that the budgets and financial plans used for preparing the forecasts are not uniform. Consequently, discretionary measures (e.g. relief programs, recapitalization of pension funds) of these government units are not always incorporated into the forecasted data. For this reason, the figures are to be interpreted with all due caution as the length of the forecast horizon increases.

The updated results were published on March 8, 2018. All data tables and information on the methods are available online[13].

Table 4: Sources for financial statistics data, September 2018

Sub-sector	up to 2016	2017	2018	2019
General government	**Financial statements**	**Forecasts**	**Forecasts**	**Forecasts**
Confederation	Financial statements	Financial statements	Extrapolation	Budget/financial plans
Cantons	Financial statements	Available data	Budget survey	Forecasts
Municipalities	Financial statements	Forecasts	Forecasts	Forecasts
Social security funds	Financial statements	Financial statements	Budget/financial plans	Budget/financial plans

[1] Including separate accounts and decentralized administrative units

Grayed: extrapolations and forecasts

3.1.4. Differences between financial statistics and state financial statements

The differences between the figures published by the Financial Statistics Section and the government units' own state financial statements are explained below. Such discrepancies can occur in all sub-sectors of the general government (Confederation, cantons, municipalities and social security funds). They generally arise as a result of differences in the understanding of the scope of consolidation, i.e. the sectoring of financial statistics. For the purpose of financial statistics, the entities included in the general government sector are defined in accordance with the criteria of the European System of Accounts (ESA 2010). Thus, in addition to the Confederation as the parent entity, the cantons, municipalities and social security funds, all other entities meeting these criteria are also included. In financial statistics, general government units are all entities that are independent institutions under state control and which either:

- collect taxes,
- redistribute income and wealth, or
- fund less than half of their production costs via sales or fees.

Institutions not meeting these criteria are not included or are removed from the state financial statements. Thus, public enterprises like hospitals, electricity, gas and district heating plants, transportation companies, waterworks, waste incineration plants and antenna installations that cover over half of their production costs through the sale of goods and services or through fees do not fall under the general government sector. Likewise, the general government sector does not include state financial institutions and financial service providers such as the Swiss National Bank, cantonal banks or public-sector pension funds. These are classified as financial corporations. Financial and non-financial corporations are recorded as separate economic sectors in the Swiss system of national accounts, with no distinction being made between public and private enterprises.

The differences between the financial statistics and the state financial statements in accordance with the financial reporting are explained below using the Confederation as an example. According to the financial statistics, the Confederation sub-sector comprises the Confederation itself as the parent entity as well as the separate accounts that appear in the Confederation's financial reporting but which are not consolidated with the parent entity: the

[13] https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/berichterstattung.html

Swiss Federal Institutes of Technology Domain (ETH), the Swiss Alcohol Board (SAB), the Infrastructure fund, the FinPT fund for the financing of major railway projects, and from 2016 the railway infrastructure fund (RIF), which has replaced the FinPT fund. It also includes the decentralized administrative units that are more than 50% funded by the Confederation, as set out in the ESA 2010 criteria: Swiss National Science Foundation (SNSF), Swiss Federal Institute for Vocational Education and Training (SFIVET), Pro Helvetia Arts Council, Swiss National Museum, Switzerland Tourism, Swiss Federal Institute of Metrology (METAS), grid supplement fund (CRF) and Building Foundation for International Organisations (FIPOI). On the other hand, FINMA and its predecessors are funded mainly through fees and supervisory duties paid by the regulated bodies and are thus not included; they are no longer included in the Confederation's state financial statements. The differences between the national FS Model and the international GFS Model also have to be taken into account. These exist primarily through the separate booking of other economic flows in the GFS Model. This leads to a narrower definition of revenue and expense in the GFS Model. Table 5 shows the sequence for moving from the balances in the state financial statements in accordance with the Confederation's financial reporting to the balances calculated using the GFS Model. The lower part of the table shows the general government debt with the Maastricht definition, the so-called Maastricht debt, and the differences between gross debt according to financial reporting, gross debt with the national FS Model and Maastricht debt.

Table 5: Differences in the Confederation's financial reporting – FS Model – GFS Model, in CHF mn

Net lending/borrowing	**2013**	**2014**	**2015**	**2016**	**2017**
Ordinary result financial reporting	**1,332**	**-124**	**2,337**	**752**	**2,799**
+ Extraordinary result financial reporting	1,306	213	493	478	177
Overall fiscal balance financial reporting	**2,638**	**89**	**2,831**	**1,230**	**2,977**
+ Balance from consolidation of separate accounts and decentralized administrative units financed primarily by tax (1)	-168	105	-125	642	1,100
Overall fiscal balance FS Model	**2,470**	**194**	**2,706**	**1,872**	**4,077**
- Balance sheet transactions adjustment (2)	895	-234	-184	173	233
- Other economic flows adjustment (2)	39	-5	10	-523	22
+ Accrual accounting (3)	-258	-357	-942	-906	-18
+ Statistical operations (4)	761	823	1,659	752	3,096
- Net acquisition of non-financial assets	1,113	900	1,008	1,096	1,249
Net lending/borrowing GFS Model (5)	**926**	**-1**	**2,588**	**971**	**5,652**

Gross debt	**2013**	**2014**	**2015**	**2016**	**2017**
Gross debt in accordance with financial reporting	**111,638**	**108,797**	**103,805**	**98,819**	**105,202**
- Financial derivatives (negative replacement values)	225	166	203	178	125
+/- Gross debt separate accounts/consolidation (1)	-964	-934	-1,221	-962	-716
Gross debt FS	**110,449**	**107,696**	**102,381**	**97,678**	**104,361**
+ Coins in circulation according to SNB	2,954	3,011	3,061	3,095	3,142
- Outstanding invoices, advance payments received, tax liabilities, cash deposits (confiscated assets)	-8,549	-8,170	-7,207	-8,080	-10,369
Maastricht debt	**104,854**	**102,537**	**98,236**	**92,693**	**97,134**

(1) Separate accounts (IF, SAB, RIF, FinPT (up to 2015)) and decentralized administrative units financed primarily by tax (ETH, SFIVET, Swiss National Science Foundation, Pro Helvetia, Switzerland Tourism, Swiss National Museum, METAS, CRF, FIPOI)
(2) Not included in the balance in accordance with the GFS Model
(3) Entries without a financial impact (included in the GFS balance)
(4) Statistical operations for the purpose of adjusting to the IMF's GFSM 2014
(5) Net lending/borrowing = revenue – expense – net acquisition of non-financial assets

3.2. Glossary of financial statistics indicators

The financial statistics indicators are stated using the international GFS Model of financial statistics in accordance with the guidelines of the IMF. The Maastricht debt ratio is calculated according to the EU's definition[14]. This ensures that the indicators are internationally comparable. The indicators for the general government sector and its sub-sectors (Confederation, cantons, municipalities and social security funds) are based on five aggregates, each of which is expressed as a percentage of GDP. They serve primarily as a basis for international comparisons. The ratios are based on nominal GDP in accordance with the European System of Accounts (ESA 2010).

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. In addition, the tax ratios of the Confederation, cantons and municipalities as well as the social security funds can be calculated. Social security contributions include mandatory contributions for old-age and survivors' insurance, disability insurance, compensation for loss of earnings and unemployment insurance, agriculture family allowances and maternity insurance in the canton of Geneva. Although mandatory, health insurance, accident insurance and pension fund contributions are not taken into account, as these corporations do not belong to the general government sector. Therefore, the tax-to-GDP ratio is not to be understood as the ratio of compulsory payments. The tax-to-GDP ratio expresses the proportion of GDP used by the general government to finance its tasks using taxes and contributions. A major divergence between the general government expenditure ratio and the tax-to-GDP ratio indicates a debt-financed budget.

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 (current expense and net acquisition of non-financial assets) in all sectors is taken into account in the process. Tax ratios can also be calculated for the individual sub-sectors of the general government sector.

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. Net lending/borrowing can be calculated in two ways:

Net lending/borrowing = revenue – expense – net acquisition of non-financial assets
= government receipts – government expenditure

Debt ratio: The Maastricht debt ratio shows the relationship between the consolidated debt of the general government sector and 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. The definition of the financial instruments taken into account is somewhat narrower than the definition of gross debt in the current Harmonized Accounting Model for the Cantons and Municipalities (HAM2). Some current liabilities under the FS Model[15] which are part of gross debt in accordance with the HAM2 are allocated to other accounts payable under the GFS Model, which are not part of Maastricht debt.

Gross debt ratio: The gross debt ratio states general government debt according to the IMF definition as a percentage of nominal GDP. With the exception of financial derivatives, it includes all liabilities on the liabilities side of the balance sheet and is thus more broadly defined than Maastricht debt and is therefore always higher in principle. Another important difference is that the IMF requires market valuation of debt capital insofar as possible. The IMF gross debt ratio is therefore subject to significantly greater fluctuations than the Maastricht debt ratio,

[14] See Eurostat (2016): Manual on Government Deficit and Debt – Implementation of ESA 2010, Part VIII, Luxembourg, http://ec.europa.eu/eurostat/en/web/government-finance-statistics/methodology/manuals

[15] E.g. current liabilities on trade accounts payable or advance payments received

where debt is included at face value. Bonds and other market-traded debt instruments, in particular, reached a relatively high level in the last few years compared with their face value. Nonetheless, the IMF gross debt ratio follows a similar trend to the Maastricht debt ratio and is 10 percentage points higher than it on average.

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 entities for consolidation that are under the control of the executive and legislative bodies of said government unit. All controlled entities 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 entities that are largely self-financed via the sale of goods and services, these are removed. Such entities are treated as public market producers or public enterprises. The scope of the general government sector is described in more detail in the annual report on Switzerland's financial statistics[16], which contains a list of added and eliminated entities.

[16] See https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/berichterstattung.html