Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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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: 2015 results and 2016-2018 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 2015, as well as provisional 2016 results for the Confederation and social security funds. Moreover, forecasts are given for all general government sub-sectors for 2016 to 2018.

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. A technical note on 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 2015", will be published at the end of October 2017.

[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 2012 to 2018 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.

The general government's **ordinary fiscal balance** improved significantly in 2015 and posted a surplus of almost CHF 4.4 billion. This result was driven by the CHF 2.2 billion surplus of the Confederation (including separate accounts and decentralized entities), that of almost CHF 1.7 billion of the social security funds, and that of CHF 0.8 billion of the cantons. In the case of the Confederation, direct federal tax and withholding tax receipts rose sharply on the previous year, while VAT receipts fell slightly[2]. Regarding the sharp increase in direct federal tax and withholding tax receipts, the negative interest rates possibly had an impact. They make the advance payment of tax attractive, and refund claims can be postponed by three years in the case of withholding tax. Refunds, for example, barely moved in 2015. Moreover, the profit distribution from the Swiss National Bank (SNB) to the Confederation was two times higher in 2015[3]. The consolidation of decentralized entities also made for higher receipts (Appendix 3.1.4). Specifically, the electricity consumption tax levied by the Foundation for Feed-in Remuneration at Cost (CRF), which is recognized under the Confederation's tax receipts, went from 0.6 to 1.1 centimes per kWh[4]. Despite a considerable decline in interest paid, ordinary federal expenditure surged by almost CHF 1.8 billion in 2015. The higher investment expenditure for the fund for major railway projects also contributed to that expenditure growth. After three consecutive years in the red, the cantons' ordinary balance was positive again. Tax receipts were up primarily because of an increase in taxes on the income of natural persons. Moreover, the cantons benefited from the Confederation's good results via their share in federal tax receipts and the supplementary distribution from the SNB, which brought the profit distributed to the cantons to CHF 1.3 billion. The municipalities' ordinary fiscal balance improved by almost CHF 500 million in 2015, but it remained negative. 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 CHF 500 million in 2015. Although the ordinary fiscal balance of old-age and survivors' insurance (AHV), disability insurance (IV) and unemployment insurance (ALV) remained positive, it was down.

According to the initial results for the Confederation and the social security funds, and estimates based on already entered cantonal data, the general government's ordinary fiscal balance is expected to post a significant surplus once again in 2016. This is likely to weaken somewhat in 2017 and 2018, but it will nevertheless remain at around CHF 2 billion. The Confederation, cantons and social security funds will presumably have a positive impact on that result.

According to the Confederation's financial statements, ordinary receipts were up only slightly on the previous year in 2016. Primarily falling withholding tax and stamp duty depressed the

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[2] Federal Finance Administration (2016). Surplus posted in 2015 financial statements – outlook still tense. Press release of 17.02.2016, Bern

[3] Federal Finance Administration (2015). FDF and SNB agree on supplementary distribution to Confederation and cantons. Press release of 30.01.2015, Bern

[4] Swiss Federal Office of Energy (2014). Supplement for renewable electricity and rehabilitation of waterways to be 1.1 centimes per kilowatt-hour from 2015. Press release of 25.06.2014, Bern

result. While direct federal tax receipts were substantially higher, VAT receipts were stable. Ordinary federal expenditure increased by almost CHF 1 billion relative to 2015. The biggest expenditure increases were seen in the task areas transportation (particularly for railway infrastructure), national defense and social welfare (particularly asylum affairs). The Confederation's ordinary fiscal balance was around CHF 1.4 billion in 2016. Because of the SNB's robust profits in fiscal 2016, the profit distribution to the Confederation (577 mn) and to the cantons (just over 1.1 bn) will be increased by a factor of 1.7 in 2017[5]. In contrast, the ordinary balance is likely to end 2017 with only a small surplus due to the strained situation in the case of the Confederation. Thanks to the expenditure growth restrictions proposed by the Federal Council in various areas, the Confederation's budgetary situation (including separate accounts and expected budget underruns) is likely to ease somewhat more in 2018, and an ordinary surplus of almost CHF 1.4 billion is expected.

Table 1: 2012-2018 accounts, in CHF mn

		2012	2013	2014	2015	2016	2017	2018
General government	Receipts	200'753	205'968	206'548	214'551	215'836	219'870	223'705
	Expenditure	200'531	204'715	207'466	213'100	213'254	217'881	221'715
	Overall fiscal balance	**222**	**1'253**	**-918**	**1'451**	**2'581**	**1'990**	**1'990**
	Ordinary fiscal balance	1'930	1'559	729	4'366	2'973	2'067	2'024
Confederation (1)	Receipts	64'411	67'045	64'944	69'251	69'370	70'351	72'631
	Expenditure	62'726	64'575	64'749	66'545	67'498	69'821	71'258
	Overall fiscal balance	**1'685**	**2'470**	**194**	**2'706**	**1'872**	**530**	**1'373**
	Ordinary fiscal balance	947	1'414	-18	2'212	1'394	341	1'373
Cantons	Receipts	79'776	81'373	82'851	86'118	87'270	89'367	91'131
	Expenditure	83'211	83'282	85'227	88'599	87'003	88'647	90'731
	Overall fiscal balance	**-3'436**	**-1'908**	**-2'375**	**-2'481**	**267**	**719**	**400**
	Ordinary fiscal balance	-1'390	-772	-606	814	993	986	434
Municipalities	Receipts	44'166	44'500	45'410	46'813	47'617	48'427	49'452
	Expenditure	45'090	45'955	46'303	47'262	47'887	48'665	49'707
	Overall fiscal balance	**-924**	**-1'455**	**-893**	**-449**	**-270**	**-238**	**-254**
	Ordinary fiscal balance	-523	-1'229	-804	-336	-126	-238	-254
Social security funds	Receipts	59'563	60'814	61'958	62'281	62'670	63'880	64'085
	Expenditure	56'666	58'668	59'802	60'605	61'958	62'901	63'614
	Overall fiscal balance	**2'897**	**2'146**	**2'156**	**1'676**	**712**	**979**	**471**
	Ordinary fiscal balance	2'897	2'146	2'156	1'676	712	979	471

[1] Including separate accounts and decentralized entities

Grayed: extrapolations and forecasts

In the case of the cantons, the available data is pointing toward the ordinary fiscal balance rising slightly to almost CHF 1 billion in 2016, whereby both ordinary receipts and ordinary expenditure are likely to edge up. An ordinary financing surplus of a similar magnitude is expected also in 2017. As slightly slower receipt growth is anticipated for the cantons in 2018, and at the same time expenditure growth is set to gather pace somewhat, the ordinary fiscal balance will be halved relative to the previous year.

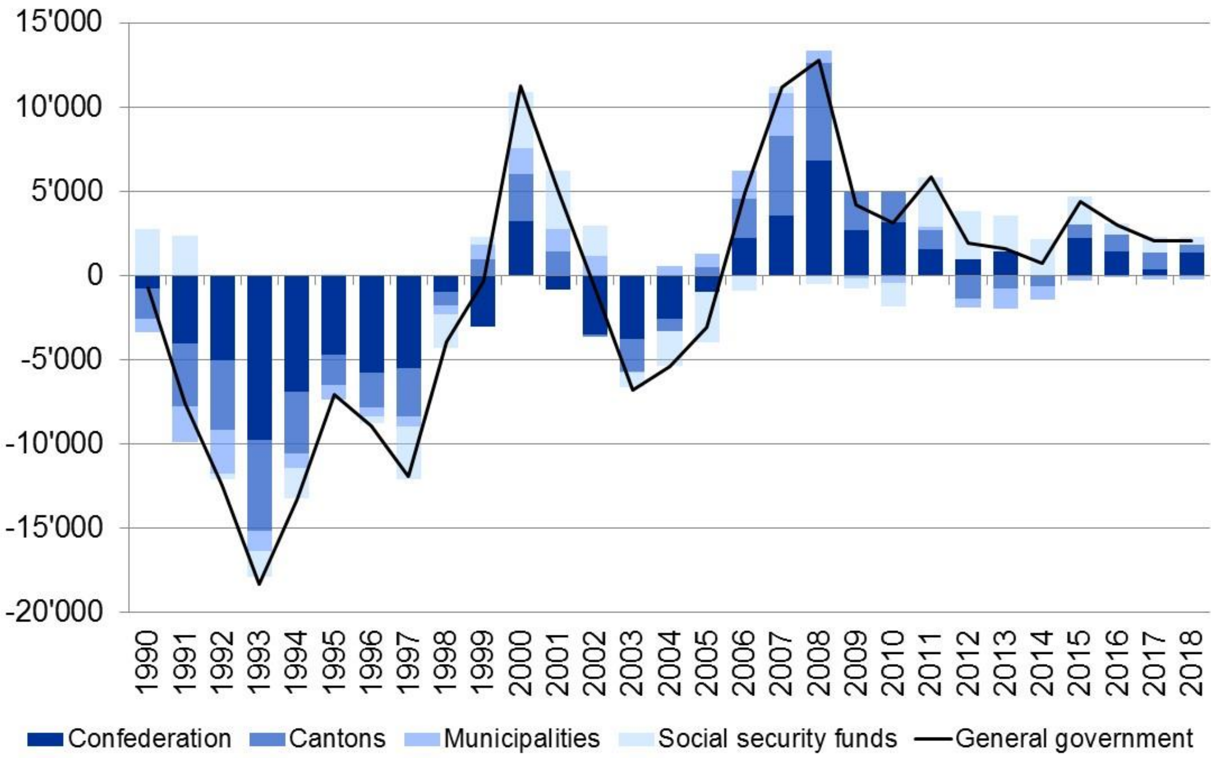
Although the municipalities' ordinary fiscal balance is likely to improve somewhat in 2016, it will remain negative up to the 2018 forecasting period. An improvement in the municipalities' budgetary situation is taking time to materialize.

The economic slowdown in the wake of the franc's appreciation and the ensuing rise in unemployment led to a drop in the social security funds' surplus in 2016 (+0.7 bn) despite

[5] Swiss National Bank (2017). Swiss National Bank expects annual profit of CHF 24.5 billion. Press release of 06.03.2017, Zurich

higher receipts. The social security funds' surplus is likely to approach the billion mark again in 2017, due mainly to an improvement in the disability insurance and unemployment insurance balances. A more difficult financial situation is looming for the social security funds from 2018 onward. This would ease if the 2020 retirement provision reform were to be accepted on 24 September 2017.

Figure 1: 1990-2018 ordinary fiscal balance, in CHF mn



The general government's **ordinary fiscal balance** posted a surplus of just over CHF 1.4 billion in 2015. The difference between the ordinary fiscal balance and the overall fiscal balance is due to various extraordinary receipt or expenditure items. In the case of the Confederation, the positive difference between the two results can be explained by extraordinary receipts coming primarily from the new allocation of mobile radio frequencies (139 mn), a payment within the framework of the debt restructuring liquidation of Swissair (135 mn) and fines collected by the Competition Commission (COMCO). The cantons posted extraordinary receipts of CHF 84 million, as well as extraordinary expenditure for the recapitalization of the pension funds of public-sector entities, primarily in the cantons of Bern (2 bn), Solothurn (1.1 bn) and Geneva (CHF 207 mn), which put a drag on their overall fiscal balance. Coming in at around CHF 2.5 billion in 2015, the cantons recorded a deficit overall for the fifth year in succession. The difference for the municipalities was also due to extraordinary expenditure for the recapitalization of several cities' pension funds.

The general government's ordinary fiscal balance is likely to rise by another billion in 2016 and reach almost CHF 2.6 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 CHF 1.9 billion. Despite a deterioration relative to the ordinary balance because of a pension fund reform in the canton of Basel Stadt (approximately 1 bn), the cantons once again have a financing surplus (+267 mn) after a prolonged period without. There are no known extraordinary receipt or expenditure items to date for the municipalities and social security funds, and the two balances are likely to be the same.

Further financing surpluses of around CHF 2 billion are forecast for 2017 and 2018. The Confederation is not expecting any extraordinary expenditure or receipts during that period, whereas the canton of St. Gallen is planning an additional payment for the restructuring of its pension fund in 2017. Nevertheless, the cantons are likely to have a financing surplus again both years.

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 conceptual and methodological reconciliation with the system of national accounts of the Federal Statistical Office (FSO) is completed with this publication; the GFS Model time series have been revised accordingly.[6]

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 0.8% in 2016. This should be taken into account when interpreting the financial statistics indicators' trend. The GDP trend for 2017 and 2018 is based on the economic forecasts of the federal government's group of experts, published on June 20, 2017[7].

Table 2: 2012-2018 indicators, in % of GDP

		2012	2013	2014	2015	2016	2017	2018
Deficit/surplus ratio	**General government**	**0.4**	**-0.4**	**-0.2**	**0.6**	**0.3**	**0.3**	**0.4**
	Confederation	0.2	0.1	0.0	0.4	0.1	0.0	0.3
	Cantons	-0.1	-0.7	-0.3	0.1	0.1	0.1	0.1
	Municipalities	-0.1	-0.2	-0.2	-0.1	0.0	-0.1	-0.1
	Social security funds	0.5	0.3	0.3	0.3	0.1	0.1	0.1
Tax-to-GDP ratio	**General government**	**27.0**	**27.1**	**26.9**	**27.6**	**27.8**	**27.8**	**27.8**
	Confederation	9.5	9.6	9.4	9.9	9.8	9.8	9.8
	Cantons	6.7	6.7	6.7	6.8	7.0	7.0	7.0
	Municipalities	4.1	4.1	4.1	4.2	4.3	4.3	4.3
	Social security funds	6.7	6.7	6.6	6.7	6.7	6.8	6.7
General government expenditure ratio	**General government**	**32.2**	**33.1**	**32.7**	**32.9**	**33.1**	**33.3**	**33.0**
	Confederation	10.3	10.5	10.4	10.6	10.7	10.8	10.7
	Cantons	13.3	13.9	13.5	13.6	13.6	13.7	13.7
	Municipalities	7.1	7.1	7.2	7.1	7.2	7.2	7.2
	Social security funds	9.0	9.1	9.1	9.2	9.3	9.3	9.2
Debt Ratio (Maastricht)	**General government**	**30.6**	**30.3**	**30.6**	**30.0**	**29.2**	**29.6**	**28.8**
	Confederation	16.8	16.4	15.8	15.0	14.1	14.6	13.8
	Cantons	7.3	7.5	8.3	8.4	8.5	8.5	8.4
	Municipalities	6.5	6.6	6.7	6.8	6.8	6.8	6.8
	Social security funds	1.0	0.7	0.6	0.4	0.4	0.3	0.3
Gross debt ratio as defined by the IMF	**General government**	**43.7**	**42.9**	**43.0**	**43.0**	**42.3**	**42.7**	**41.5**
	Confederation	21.8	20.7	21.0	20.9	19.8	20.4	19.4
	Cantons	11.7	12.1	12.1	12.2	12.5	12.3	12.2
	Municipalities	10.2	10.2	9.9	10.0	10.1	10.1	10.1
	Social security funds	1.0	0.8	0.7	0.5	0.5	0.4	0.4

[1] Including separate accounts and decentralized entities

Grayed: extrapolations and forecasts

[6] Explanations on the revisions carried out can be found in the appendix and the details are given in a technical note: see technical notes at https://www.efv.admin.ch/efv/en/home/themen/finanzstatistik/methoden.html

[7] State Secretariat for Economic Affairs (2017). Positive economic outlook continues despite tentative recovery to date. Press release of 20.06.2017, Bern

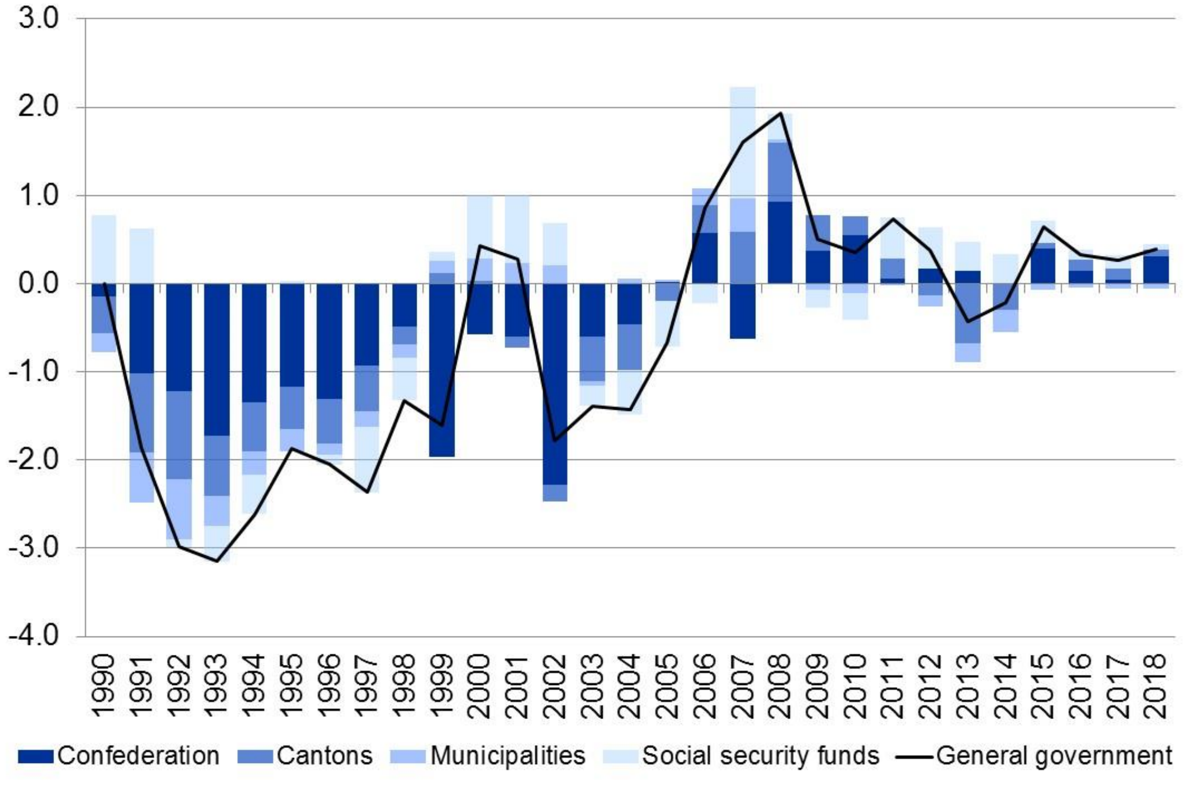
The financial statistics indicators are stated in accordance with the current guidelines of the IMF. In the case of the GFS Model, the **ratios** are determined using standards that are different from those used for the fiscal balance interpreted in the first part of this report (Appendix 3.2). This 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 +0.6% of nominal gross domestic product (GDP), the government units ended 2015 in positive territory for the first time in two years. The high surpluses of the Confederation and the social security funds were a major factor contributing to the good result. After three consecutive years of deficits, the cantons posted a small surplus in 2015 (+0.1%). Only the municipalities posted a negative balance for the seventh time in succession (-0.1%). Pension fund restructuring continued to put a noticeable strain on the results of the cantons and municipalities. The deficit/surplus ratio of the social security funds remained stable year on year in 2015.

The increase in unemployment dragged down the social security funds' result in 2016, resulting in a smaller surplus than the previous year (+0.1%). Coming in at +0.1% of GDP, the Confederation's result was down on the previous year too. In contrast, the cantons' situation improved. The pressure on expenditure has eased, as there is no longer as much pension fund restructuring as in earlier years. Overall, the general government had a surplus ratio of 0.3%.

As the economy is slowly gaining momentum, the general government is also likely to end 2017 and 2018 in positive territory, with the surplus ratios probably reaching 0.3% or 0.4% of GDP. While the cantons are posting surpluses, there is still no upswing for the municipalities. Despite the economic upturn, the social security funds' situation is unlikely to ease in 2018 because of the expiry of the IV supplementary financing.

Figure 2: 1990-2018 deficit/surplus ratio, in % of GDP

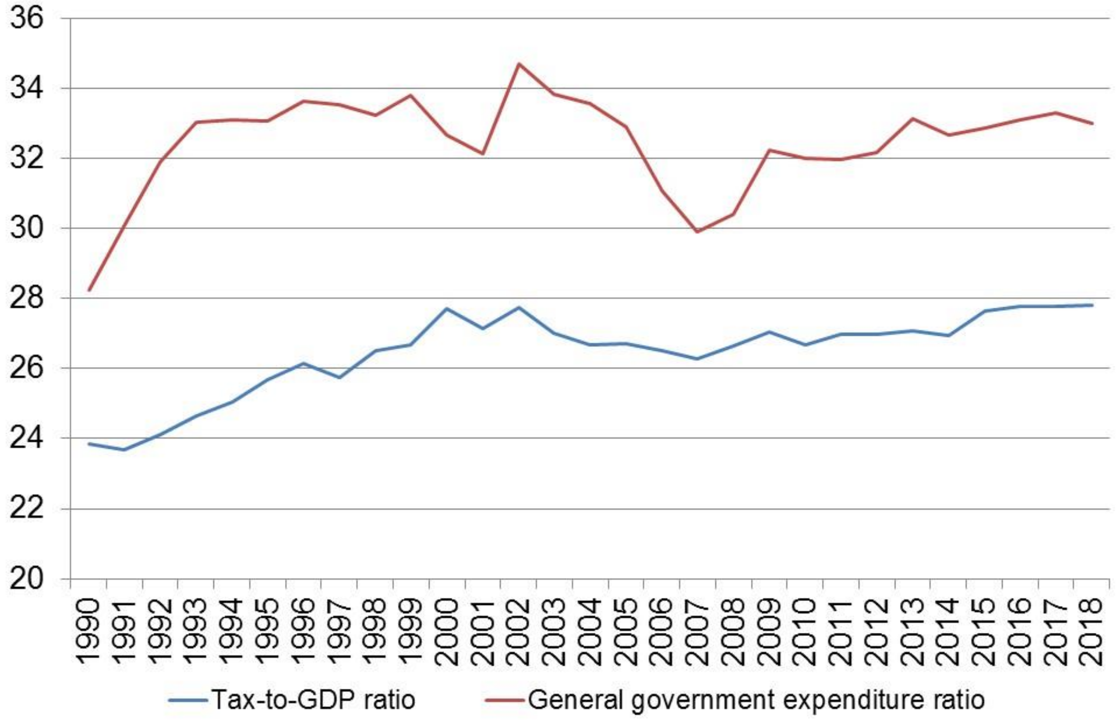


After rising significantly in the 1990s, the general government sector's **tax-to-GDP ratio** has been stable at between just under 27% and 28% of GDP since the turn of the millennium (Figure 3).

The general government's tax-to-GDP ratio was 27.6% of GDP in 2015. The Confederation's tax revenue surged that year (see section 1), and its tax-to-GDP ratio rose to 9.9%. The tax revenue growth of the other sub-sectors also outstripped the weak nominal GDP growth (+0.6%), with the result that their tax-to-GDP ratios each rose by 0.1 percentage points to reach 6.8% of GDP for the cantons, 4.2% for the municipalities and 6.7% for the social security funds.

Triggered by the improving economic situation from 2016 to 2018, tax revenue growth is likely to be on par with that of GDP, which is why the tax-to-GDP ratio is set to move sideways.

Figure 3: 1990-2018 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 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 it reached 32.9% of GDP in 2015. 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 2015 (see section 1). Moreover, the Confederation's investments increased in 2015. In the case of the municipalities (7.1%) and the social security funds (9.2%), the ratios remained more or less at the previous year's level in 2015.

The general government expenditure ratio is likely to rise again to 33.3% in 2016 and 2017 and not start to decline somewhat until 2018. Especially in the case of the Confederation, expenditure was higher in 2016, particularly in the area of asylum and railway infrastructure (RIF).

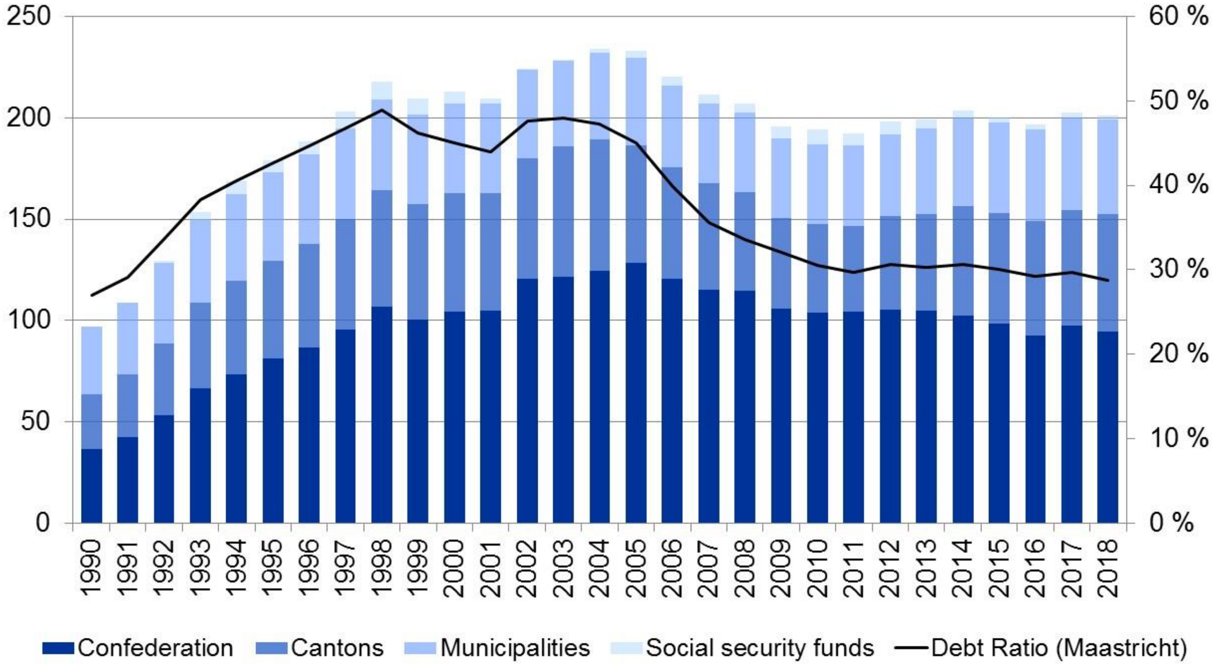
In the financial statistics, the debt of the general government, i.e. the consolidated government units, and thus also the **debt ratio** are determined in accordance with the Maastricht definition which applies for the EU member states. The debt ratio skyrocketed during the 1990s and peaked at 48.9% 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 (Figure 4).

In 2016, the general government's debt ratio is likely to return below the 30% mark again after a long time above it and reach 29.2% of GDP. The Confederation's debt ratio has been lowered to 14.1%. Despite the positive overall fiscal balance, the cantons' debt ratio is set to edge up by 0.1 percentage points to 8.5% of GDP in 2016. 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 is still 6.8%. That of the social security funds fell from 1.2% in 2010 to 0.4% in 2016, largely due to repayment of the unemployment insurance debt vis-à-vis the Confederation.

It is expected that debt will be reduced further in the Confederation and social security funds sub-sectors up to 2018, with the result that the general government's Maastricht debt ratio should come in at 28.8% of GDP. The Maastricht debt ratio will edge up temporarily in 2017, as the Confederation's debt level will rise slightly following a new valuation method for the Confederation bonds held on the liabilities side of the statement of financial position.

Figure 4: Maastricht debt 1990-2018 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 43.0% of GDP in 2015. It is likely to stabilize at around 41.5% by 2018.

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)[8]. 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) is completed with the publication of 7 September 2017[9]. Consequently, the system of national accounts data of 28 August 2017 for the general government is now consistent with that of the GFS Model[10]. The revisions necessitated by this reconciliation are explained in detail in a technical note[11].

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).

- <u>Consolidation</u>: 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 is not consolidated in the system of national accounts. Primarily the compensation shown in the FS Model is concerned here in Switzerland.
- The partial consolidated 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[12] (SRS-CSPCP) publishes information on the current status of the HAM2 as well

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8 See "Harmonized Accounting Model for the Cantons and Municipalities", HAM2, as of June 2, 2017, http://www.srs-cspcp.ch/de

9 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).

10 Among other things, still outstanding issues associated with the recording, coverage and valuation of contributions for the financial restructuring and funding of public-sector pension funds, as well as the amount of the resultant employee retirement benefits have been settled in the meantime.

11 See *technical notes* at: https://www.efv.admin.ch/efv/de/home/themen/finanzstatistik/methoden.html

12 See http://www.srs-cspcp.ch/de

as interpretations concerning individual specialist recommendations and frequently asked questions online on its website.

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 entities), 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 entities 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[13] and net lending/borrowing[14] are derived from transactions and can be controlled by fiscal policy, unanticipated events[15] 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[16] 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 approximately 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 entities), the 2016 figures are also based on the corresponding financial statements. The 2017 forecasts are based on the current federal extrapolation and the budgets for the separate accounts and decentralized entities. The 2018 forecasts are based on the budget or on the financial plans as the case may be. In the case of the cantons, the forecasts are based on the currently available accounting

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[13] Net operating balance = revenue – expense

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

[15] 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.

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

data (2016), a survey of the cantonal budgets (2017) and various indicators (2018). The 2016-2018 forecasts for the municipalities are based on several indicators. 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 September 7, 2017. All data tables and information on the methods are available online[17].

Table 4: Sources for financial statistics data, February 2017

Sub-sector	up to 2015	2016	2017	2018
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 entities

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 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

[17] https://www.efv.admin.ch/efv/de/home/themen/finanzstatistik/berichterstattung.html

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 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 is to replace the FinPT fund. It also includes the decentralized entities 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.

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

Confederation	2012	2013	2014	2015	2016
Ordinary fiscal balance in accordance with financial reporting	**1262**	**1332**	**-124**	**2337**	**752**
+ Extraordinary fiscal balance in accordance with financial reporting	738	1306	213	493	478
Overall fiscal balance in accordance with financial reporting	**2000**	**2638**	**89**	**2831**	**1230**
+ Balance from consolidation of separate accounts of the federal fin. Statements (1)	-388	-248	42	-140	522
+ Balance from consolidation of decentralized entities financed primarily by tax (2)	73	81	63	15	120
+ Balance of special factors (3)	0	0	0	0	0
Overall fiscal balance in accordance with FS Model	**1685**	**2470**	**194**	**2706**	**1872**
- Balance sheet transactions adjustment (4)	-351	895	-234	-184	173
- Other economic flows adjustment (4)	43	39	-5	10	-523
+ Accrual accounting (5)	-886	-258	-357	-942	-906
+ Statistical operations (6)	382	761	823	1660	760
- Net acquisition of non-financial assets (7)	412	1113	900	1008	1101
Net lending/borrowing in accordance with GFS Model	**1077**	**926**	**-1**	**2589**	**974**

(1) ETH, FinPT, IF, SAB
(2) Separate accounts in accordance with financial statistics (SFIVET, Swiss National Science Foundation, Pro Helvetia, Switzerland Tourism, Swiss National Museum, METAS, CRF, FIPOI)
(3) 2011: e.o. infrastructure fund deposit
(4) Not included in the balance in accordance with the GFS Model
(5) Entries without a financial impact (included in the GFS balance)
(6) Statistical operations for the purpose of adjusting to the IMF's GFSM 2014
(7) 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[18]. 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[19] 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,

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

[19] 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[20], which contains a list of added and eliminated entities.

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