# Technical note

Adjustments in the GFS Model of financial statistics as of September 7, 2017

## 1 Introduction

The Financial Statistics Section of the Federal Finance Administration (FFA) has been publishing data and indicators in accordance with the current financial statistics guidelines (GFSM 2014[1]) of the International Monetary Fund (IMF) since September 24, 2015. As part of the changeover to the GFSM 2014, the first phase of the methodological reconciliation with the system of national accounts[2] of the Federal Statistical Office (FSO) was completed. The previously shown GFS Model data (balance sheet stocks and non-financial transactions) was reconciled with the system of national accounts with the publication of September 7, 2017. The objective of showing uniform economic indicators for government finances was thus achieved. Only financial transactions in financial assets and liabilities remain. Their reconciliation is still pending and they were not previously published in the GFS Model.

Future publications of the GFS Model of financial statistics will be based on the following revision policy:

- Ongoing revisions
  - Provisional figures on the previous year will be published at the end of August / start of September, and the two preceding years will be revised.
  - An update will be available at the end of February / start of March the following year, as that is when the cantons are fully captured for two years earlier.
- Comprehensive revisions
  - Experience has shown that methodology changes (e.g. changes to reference works for financial statistics such as the GFSM or the SNA, basic data changes) are made every five to ten years. The full time series are always revised in such cases.

With the current revision, the differences between the GFS Model of financial statistics and Switzerland's system of national accounts for the general government sector are limited to the different views chosen for presenting the results and the 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 or added value, respectively.

While all transactions between government units are fully consolidated with the GFS Model, 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 national FS Model[3] of financial statistics is concerned here in Switzerland.

The partial consolidation with the system of national accounts results in general government expenditure and revenue being increased by the same amount relative to the GFS Model, i.e. by just over 3% each. This has no impact on the general government's deficit/surplus ratio. However, the general government expenditure ratio turns out to be an average of 1% of nominal gross domestic product (GDP) too high

---

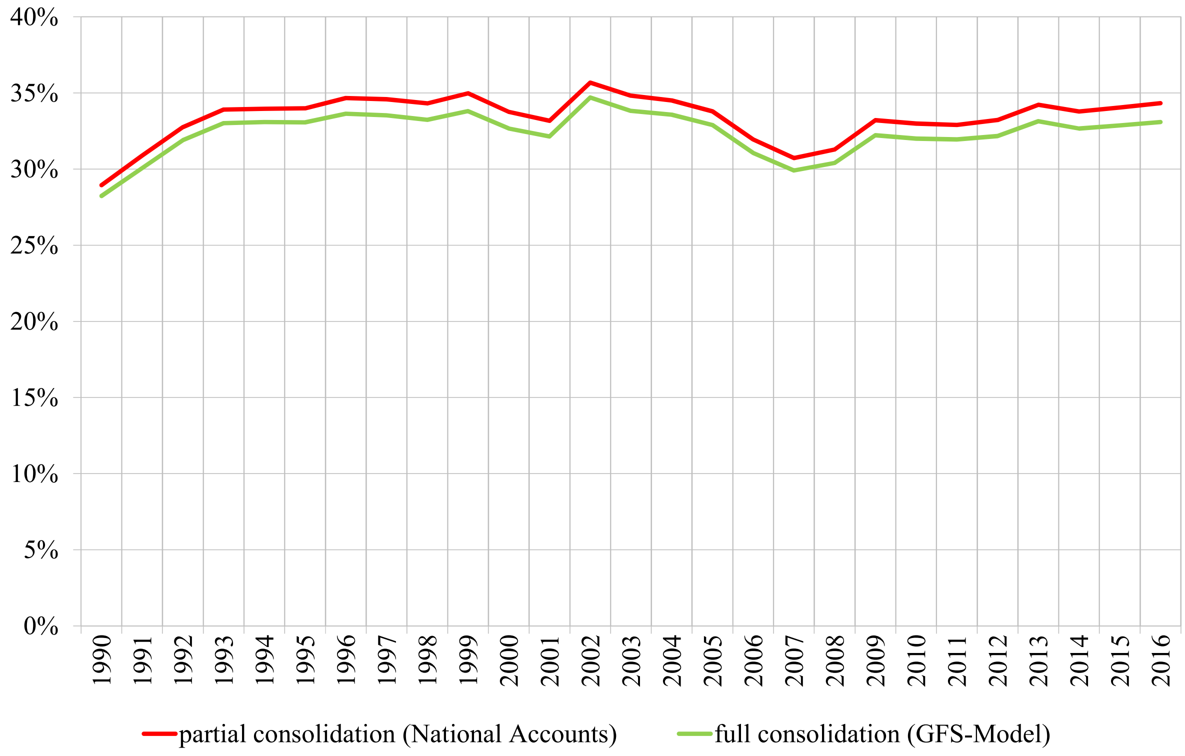
[1] Government Finance Statistics Manual 2014 (https://www.imf.org/external/np/sta/gfsm/).

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

[3] In the FS Model, the financial statistics figures are shown in accordance with the national standards of the 2008 Harmonized Accounting Model for the Cantons and Municipalities (HAM2). The national FS Model is largely used as the basic statistics for the international GFS Model.

in the system of national accounts as a result. The tax-to-GDP ratio is not affected, as taxes and contributions to social security funds are not covered by consolidation.

**Figure 1:** General government sector, general government expenditure ratio in % of GDP, impact of partial consolidation




## 2 Main consequences of the current revision

### 2.1 General information

#### *New federal recording from 2007*

In 2007, the Confederation introduced the new accounting model (NAM), which is based on the International Public Sector Accounting Standards (IPSAS[4]). Since the introduction of the NAM, the Confederation's accounting has been carried out according to business criteria. The introduction of new accounting standards can lead to certain series breaks in the time series of the financial statements affected.

In the financial statistics, however, the Confederation did not start to be recorded in line with the NAM until 2008. 2007 was still recorded in accordance with the principles of the old accounting standards which were in force until 2006. But 2008 is special for the Confederation's financial statements primarily because of the new system of fiscal equalization and the division of tasks between the Confederation and the cantons (NFE). Consequently, there can be significant series breaks in 2008 in the affected task areas (e.g. responsibility for motorways was transferred from the cantons to the Confederation). To ensure that the politically desired shifts and the ensuing series breaks do not overlap with any breaks

[4] The IPSAS are accounting standards that should be used by public sector entities in accordance with the recommendations of the IPSAS Board (https://www.ipsasb.org/).

caused by the introduction of the NAM, the Financial Statistics Section also used the NAM for the Confederation for fiscal 2007 as part of the current revision.

### *Municipalities' statements of financial position for 1990 to 2007*

As part of the current revision, an extrapolation was carried out for the municipalities' statements of financial position for 1990 to 2007. Consequently, the balance sheet stocks for the municipalities and the general government sector can now be shown from 1990 in the GFS Model of financial statistics. These time series were only published from 2008 before the revision.

### *Extrapolations and forecasts for previous year*

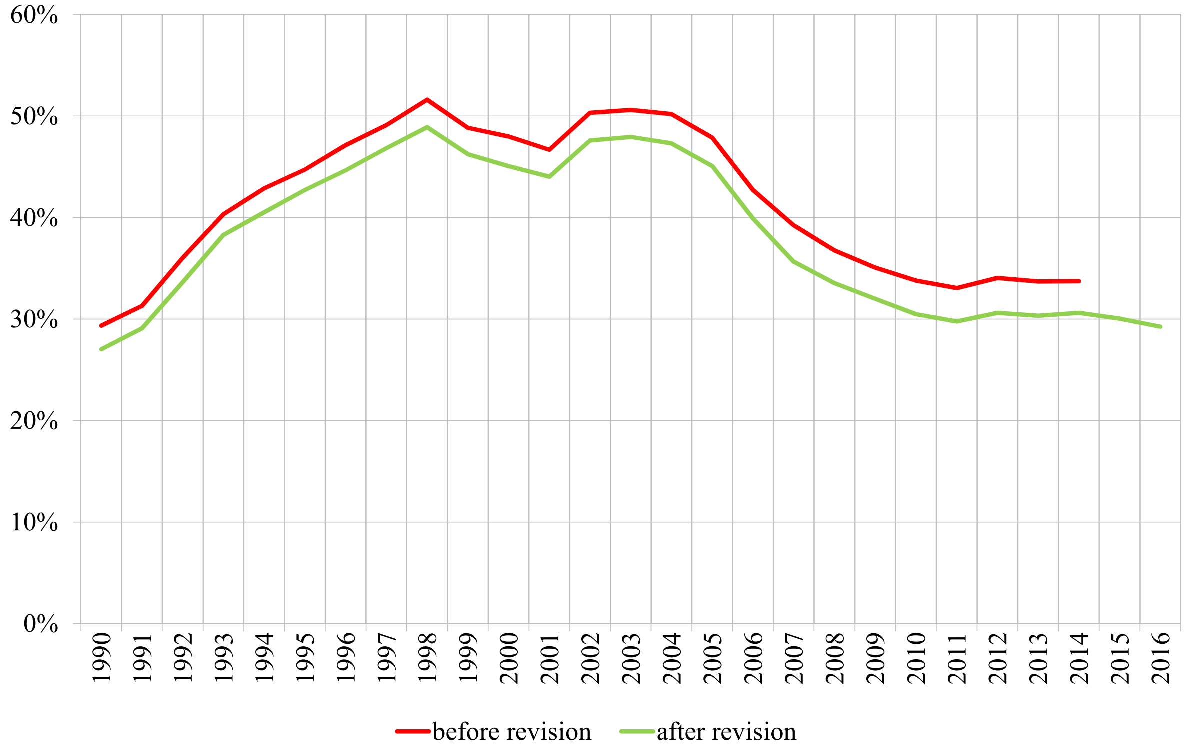
In the national FS Model, data for the previous year (currently 2016) is not available until 14 months (cantons) or 20 months (municipalities) after year-end. With the current revision, the first data for the previous year is published in the international GFS Model just eight months after year-end. For 2016, this data is based on the financial statements (Confederation, social security funds), already available accounting data (cantons) and forecasts using indicators (municipalities).

## 2.2 Balance sheet items (stocks)

### *Gross debt in accordance with Maastricht criteria*

Before the current revision, the Financial Statistics Section published gross debt figures in accordance with the HAM2 of the cantons and municipalities with reference to the Maastricht definition. These are calculated in the national FS Model of financial statistics. With the current revision, gross debt is determined directly in the international GFS Model of financial statistics in accordance with the Maastricht definition. The HAM2 definition includes a few more items than the Maastricht definition, particularly advance payments and trade credits. Consequently, the gross debt ratio is an average of 2.8% of GDP lower after the revision.

**Figure 2***:* General government sector, gross debt, in % of GDP – with reference to the Maastricht definition (before revision) vs. Maastricht debt (after revision)



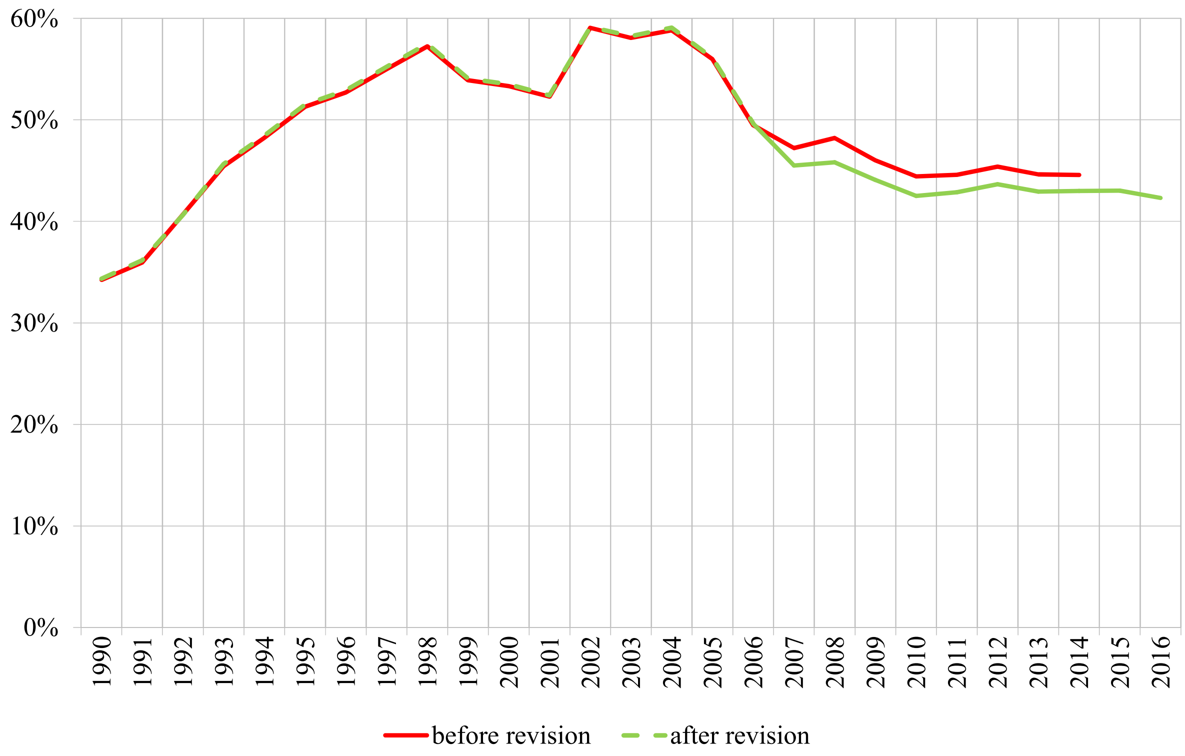
### *Provisions*

The accounting standards of the Confederation (NAM) and of the cantons and municipalities (HAM2) are based on the IPSAS or use them as a reference. The IPSAS are public sector accounting standards that follow business principles. A true and fair view of the public sector should be derived with accrual accounting and correct valuations of assets and liabilities.

The principles underlying the IPSAS are compatible with the GFSM 2014 and ESA 2010 financial statistics standards. Therefore, the Financial Statistics Section previously adopted the provisions[5] created by the government units in accordance with the IPSAS in the GFS Model's balance sheet. Provisions are unilateral actions without a counterparty. In the system of national accounts, however, each liability has to have a counterparty with a corresponding receivable, and vice versa. Given that no counterparty with a corresponding receivable exists in the case of provisions formed unilaterally by government units, provisions are no longer adopted in the GFS Model's balance sheet with the current reform. This also means that the flows pertaining to provisions (deposits in and withdrawals from provisions) are no longer recorded as transactions in the GFS Model.

One result of this change of practice is that the gross debt ratio (IMF debt ratio) is an average of 1.8% of GDP lower from 2007. This is largely attributable to a federal withholding tax provision that is no longer taken into consideration. This provision has been shown in the Confederation's state financial statements since the NAM was introduced in 2007.

**Figure 3:** General government sector, gross debt ratio (IMF debt ratio), in % of GDP




5 Such provisions concern liabilities arising from past events that have a high likelihood of occurrence and the extent of which can be calculated. Consequently, they are not provisions created solely based on the prudence principle.

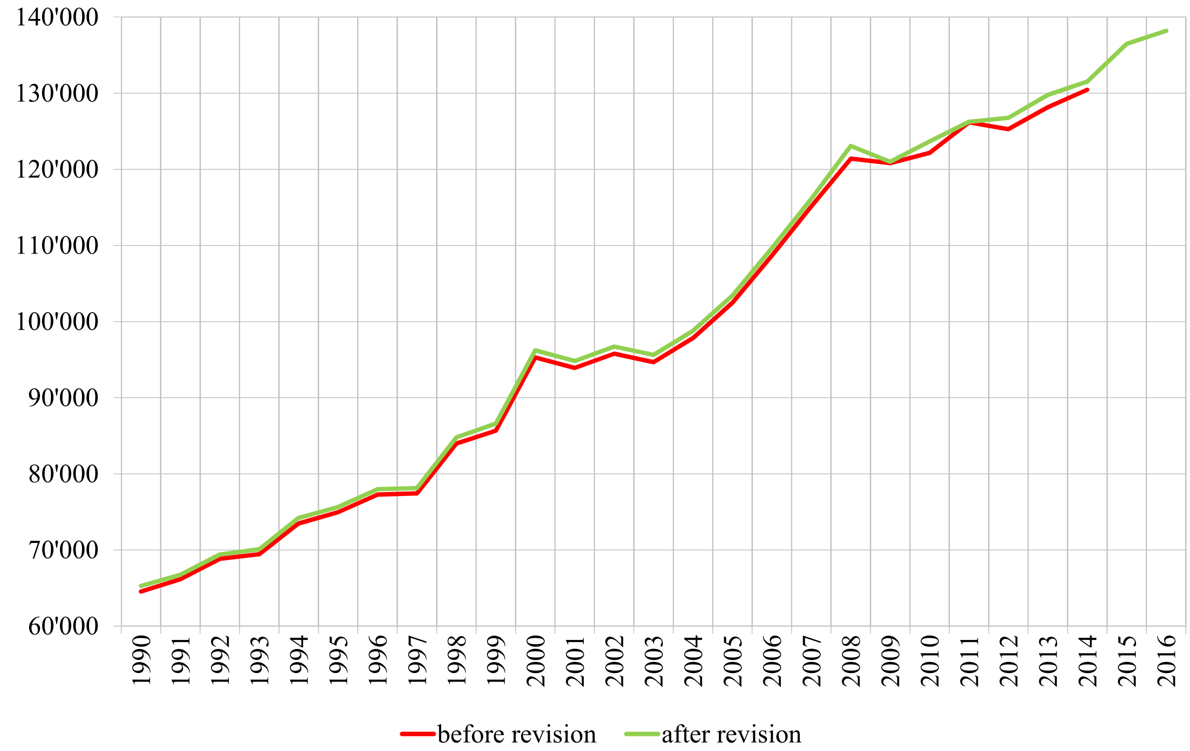
## 2.3 Transactions (flows) in the operating statement and transactions in non-financial assets

### *Tax revenue*

Tax revenue is now an average of 0.9% higher than before the revision. When the first stage of the reconciliation with the system of national accounts was completed on September 24, 2015, the FFA adopted the then procedure in the system of national accounts for cantonal and municipal capital transfer tax. This was based on an estimate of the shares of real estate transfer tax, classified as a fee rather than as a tax. This procedure was corrected with the current revision, as most of the real estate transfer tax is actually tax and not fees. This change of practice resulted in a shift from *other revenue* (GFS item 14) to *taxes* (GFS item 11).

The tax revenue process change from 2007 is due to the above-mentioned change of practice for provisions. Among other things, deposits in and withdrawals from the withholding tax provision are no longer recorded as tax revenue.

**Figure 4:** General government sector, tax revenue before and after revision, CHF mn

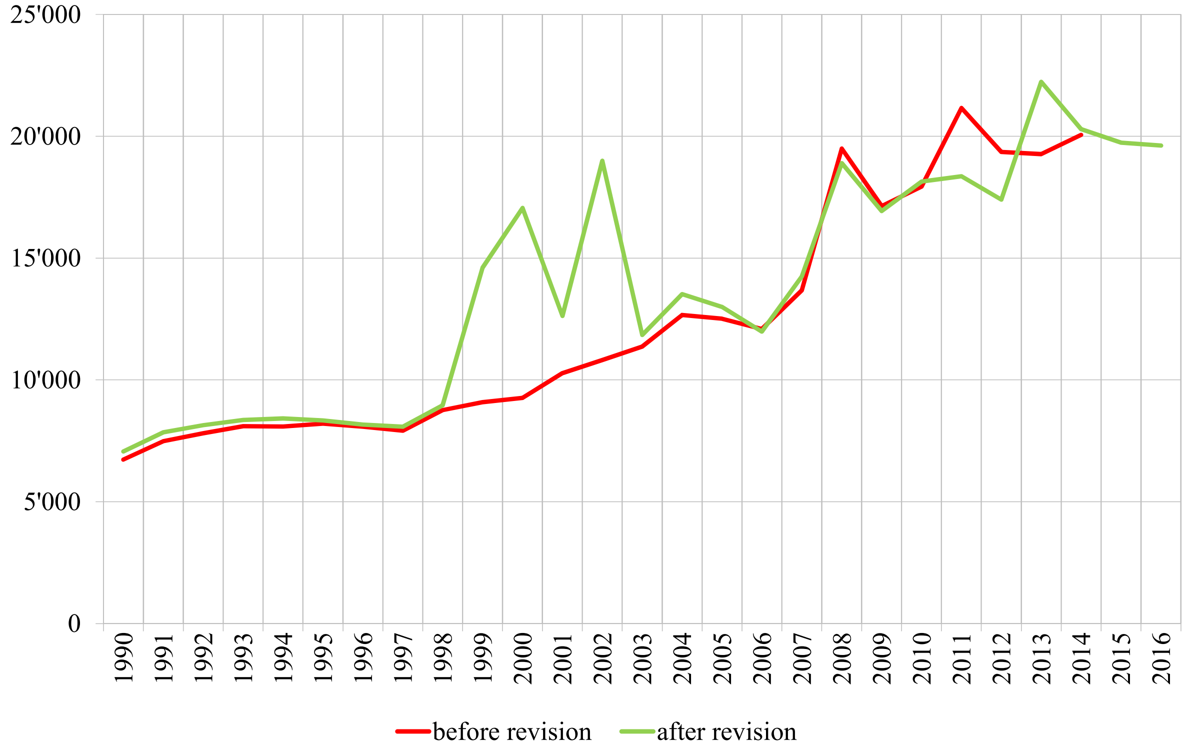



### *Capital contributions to under-funded public sector pensions funds*

In the case of the Confederation, the funding of public sector pension funds was primarily off balance sheet before the introduction of the NAM and thus before 2007. These capital contributions were not shown in the Confederation's then financing statement, which formed the basis for the financial statistics and thus the national FS Model. As the national FS Model forms the basic statistics for the international GFS Model, these capital contributions were not shown in the GFS Model either. With the current revision, the Confederation's capital contributions to under-funded public sector pension funds were determined insofar as possible with the statement of financial position and the very rudimentary statement of financial performance, and adopted in the GFS Model.

Figure 5 shows the changes in *other expense* (GFS item 28). The changes in 1990 to 2006 are largely attributable to the updating of the data situation for the Confederation's capital contributions to under-funded public sector pension funds.

**Figure 5:** General government sector, other expense (includes capital contributions to pension funds), CHF mn




In the case of the cantons and municipalities, accrual accounting was established as a standard already before the HAM2 was introduced[6]. However, the funding of public sector pension funds in the case of the cantons and municipalities is usually through the formation of a provision in favor of the affected pension fund as soon as the need for funding is identified and the amount of the associated liability can be estimated. The statements of financial performance then show the deposits and withdrawals linked to this provision. They are recorded as flows in connection with the funding of the pension fund in the FS Model. For the most part, these deposits and withdrawals are purely accounting-related flows; the actual flows of money from the government unit to the pension fund are rarely visible in the statements of financial performance.

As the formation of a provision is a unilateral action without a counterparty on the part of a government unit, the associated stocks and flows for the designated counterparty, the under-financed public sector pension fund, do not appear as a receivable in the fund's statement of financial position or as a capital contribution in its statement of financial performance. The capital contributions accompanying funding generally appear in pension funds' financial statements when the actual flow of funds takes place. Consequently, effective from this revision, pension funds' financial statements, and thus the FS Model, no longer serve as a source for the accompanying stocks and flows for the funding of under-funded pension funds by cantons and municipalities. In the GFS Model, the financial statistics are now based on the FSO occupational pension plan statistics processed with the system of national accounts in order to portray the liabilities and capital contributions of the cantons and municipalities in connection with under-funded public sector pension funds.

---

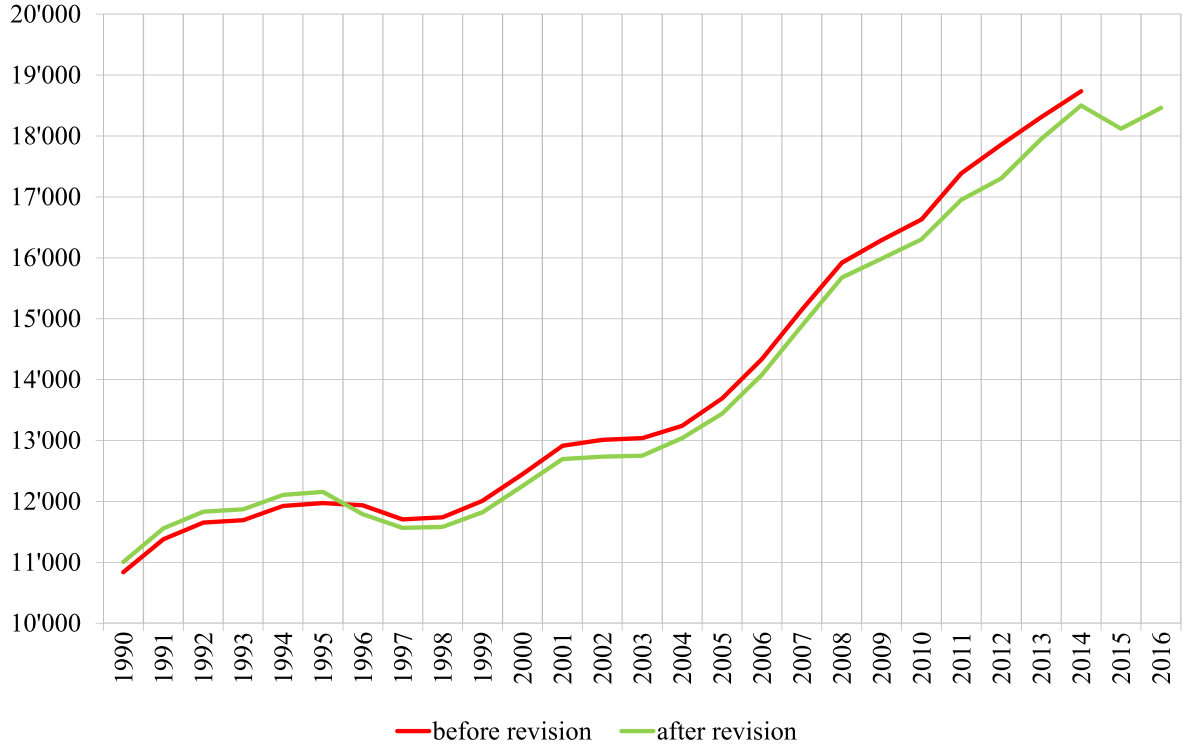
6 Back in the 1980s, the 1981 Harmonized Accounting Model for the Cantons and Municipalities (HAM1) already introduced business standards such as accrual accounting for the government units' accounting standards.

### *Consumption of fixed capital (depreciation)*

Aside from stocks and flows in connection with the funding of under-funded public sector pension funds by cantons and municipalities, other items are also adopted from external sources, and thus not from the government units' financial statements portrayed with the FS Model. With regard to this category of data, it is worth referring to the important *consumption of fixed capital* (GFS item 23). This concerns the depreciation of the government units' capital stock[7]. The FSO determines the depreciation using the perpetual inventory method (PIM), and it is adopted by the Financial Statistics Section in the GFS Model instead of the depreciation in the national FS Model.

Most of the external time series determined by the FSO and integrated in the GFS Model of financial statistics were revised by the FSO over the entire period based on this revision, i.e. including the depreciation shown in Figure 6.

**Figure 6:** General government sector, consumption of fixed capital (depreciation), CHF mn




External time series which flow into the GFS Model instead of the information from the government units' financial statements recorded in the FS Model trigger changes in the case of important general government indicators, e.g. the deficit/surplus ratio or the general government expenditure ratio. In the interests of completeness, it is also worth mentioning that most of the external data adopted in the GFS Model of financial statistics serves simply to refine the basic information contained in the national FS Model and thus does not affect the indicators determined for the general government sector.

[7] Capital stock refers to the stock of non-financial assets such as buildings, streets, property, etc. Capital stock does not include financial assets, e.g. loans and financial interests.