

Technical note

Adjustments to the FS and GFS models of financial statistics as of September 24, 2015

1 Introduction

The Financial Statistics Section of the Federal Finance Administration (FFA) published data and indicators in accordance with the new financial statistics guidelines (GFSM 2014¹) of the International Monetary Fund (IMF) for the first time on September 24, 2015. As part of the changeover to the GFSM 2014, a methodological reconciliation is being performed with the system of national accounts² of the Federal Statistical Office (FSO). Where necessary, the results of the GFS Model have been reconciled with those of the system of national accounts and its data has been included. The harmonization between the Swiss system of national accounts and the international GFS Model of financial statistics has also led to adjustments to the basic statistics, i.e. the national FS Model.

The data published in the GFS Model is of a provisional nature for the time being, as the reconciliation with the Swiss system of national accounts has not yet been completed. Items that are currently outstanding include issues associated with the recording, coverage and valuation of contributions for the restructuring and funding of public-sector pension funds, as well as the amount of the resultant employee retirement benefits.

2 Changes in the national FS Model

The adjustments to the national FS Model can be divided into two categories: **survey basis** and **elimination of data inconsistencies**.

Survey basis: During the reconciliation with the system of national accounts, it was found that efficient processing of the data for the *Confederation* and *social security funds* could be guaranteed under the new conditions only by implementing an IT application on a time series basis. As a result, the Confederation and social security funds sub-sectors have been completely re-recorded from fiscal 2008 onward. Furthermore, the Confederation sub-sector has been extended to include the *Building Foundation for International Organisations* (FIPOI) and *feed-in remuneration at cost* (CRF fund).

Elimination of data inconsistencies: Since fiscal 2008, the current *Harmonized Accounting Model for the Cantons and Municipalities* (HAM2) has formed the basis for the national FS Model. The data prior to 2008 was recorded in accordance with the earlier HAM1, which was less detailed than the HAM2. One of the causes of data inconsistencies was the automatic mapping procedures for pre-2008 data. The elimination of these inconsistencies aims to apply the recording and processing practices of the Financial Statistics Section valid since 2008 also to the pre-2008 data to the greatest possible extent in order to enhance the consistency of the time series. For the most part, eliminating the inconsistencies involves adjustments to function/category combinations. These corrections made at *cantonal* and *municipal* level are described in detail in the appendix³ to the technical note. Inconsistencies as a result of automatic mapping have also been corrected in the statement of financial position (loans, financial interests, investment contributions) of the *Confederation* sub-sector for the years prior to 2008.

¹ Government Finance Statistics Manual 2014

² The system of national accounts is based on the European System of Accounts (ESA 2010), which is compatible with the GFSM 2014.

³ The Excel file "tn_2015.09.24_beilage.xlsx" can be found at www.efv.admin.ch, under Documentation - Financial statistics – Methods.

The corrections listed in the appendix relate to logical inconsistencies identified in the data. These were made to either smaller, implausible recorded amounts or combinations of categories and/or functions that were inconsistent with the methodology. For instance, households do not pay contributions to government units: payments by households are either taxes, gifts, fees and charges or reimbursements.

Premium reductions are an example of an inconsistency caused by the lower level of detail of the HAM1. Prior to fiscal 2008, premium reductions were recorded in the health insurance task area because the HAM1 did not have the premium reductions task area. When the pre-2008, HAM1-based data was automatically mapped to the new HAM2-based FS Model, the premium reductions were left in the health insurance function. From 2008 on, this item was correctly allocated to the premium reductions task area. This break has now been corrected for the pre-2008 data.

3 Changes in the international GFS Model

As a result of the implementation of the GFSM 2014 and the reconciliation with the FSO's system of national accounts, the Financial Statistics Section revised the data sources, basic data and calculation methods it uses. The latest round of revisions has provisionally been completed with the first publication of the international financial statistics model (GFS Model) in accordance with the GFSM 2014. Such comprehensive revisions of the methodological and conceptual calculation basis take place approximately once every 15 to 25 years and aim to take account of the changed economic circumstances and issues.

Implementation of the GFSM 2014 has also brought with it various types of changes:

- i) methodological and conceptual changes
- ii) elimination of series breaks
- iii) inclusion of external series from the Swiss system of national accounts

i) Methodological and conceptual changes

Striking conceptual changes introduced with the changeover to the GFSM 2014 concern expenditure on military weapon systems and research and development expenditure.

Military weapon systems: Previously, the procurement of military weapon systems, e.g. fighter jets, was considered as the purchase of goods and services and thus as intermediate consumption. Consequently, they were part of government final consumption expenditure in the system of national accounts. As military weapon systems can be used for more than a year and can possibly be resold, they are now treated as capital formation. Their acquisition is recorded as investment expenditure and they are capitalized under non-financial assets in the general government's balance sheet. Previously, military facilities that could also have civilian uses such as barracks or motor vehicles for civilian use were already recorded as acquisition of non-financial assets.

Research and development: Because expenditure on research and development (R&D) has a lasting impact on a country's national economy that is measurable over a period of several years, this is now treated as acquisition of non-financial assets as well. Investment in research and development can optimize or improve the production process. In the GFS Model of financial statistics, only the general government's investment share is taken into account; likewise, only that part is capitalized under non-financial assets in the balance sheet.

ii) Elimination of series breaks

Switching the national financial statistics model to the HAM2 resulted in a series break in the cantons and municipalities sub-sectors because from fiscal 2008 on, **hospitals and retirement and nursing homes** are no longer included in accordance with the ESA 2010 sectoring guidelines. If they are contained in a government unit's accounts, they are eliminated. According to the ESA 2010 delimitation criteria, these entities are not part of the general government sector. They are regarded as public

enterprises insofar as they are controlled by the government. As they cover more than 50% of their production costs with the proceeds from services rendered, they are considered as public enterprises. The proceeds come either directly from private individuals or from health insurers. However, the case-based flat-rate payments from the government units are also considered as proceeds from services rendered. This should not be confused with a deficit guarantee. With the implementation of the GFSM 2014, this series break in the basic data was removed by eliminating the hospitals and retirement and nursing homes of the cantons and municipalities contained in the FS Model up to fiscal 2007 without affecting the balance from 1990 to 2007.

Another series break in the national FS Model that was eliminated in the GFS Model relates to **contributions and compensation** from and to public authorities. Prior to 2008, these two items were not recorded separately, but rather as contributions. In the GFS Model, these items were divided up into compensation and contributions for the 1990-2007 period using the average share for each task area during the 2008-2012 period. This subdivision is important from an economic perspective, as compensation payments are considered as intermediate consumption and received compensation as production. In contrast, contributions are grants, as they are not paid in return for something.

A further correction concerns the recording of the Confederation's receipts from the **auction of mobile radio licenses** in 2001, 2002 and 2012. For the sake of consistency with the ESA 2010 guidelines, these receipts are recorded as receipts from the disposal of nonproduced assets under transactions in non-financial assets. They thus have a positive effect on net lending/borrowing for the years in question.

iii) Inclusion of external series from the Swiss system of national accounts

To facilitate the automatic mapping of the data from the GFS Model to the ESA 2010 items, some external series from the system of national accounts had to be integrated into the GFS Model. These items do not appear as such in the government units' financial reporting. If they affected the operating statement and transactions in non-financial assets, the series were integrated into the GFS Model with no impact on the balance. The items are as follows:

- *Over- or under-compensation* of VAT paid by farmers or foresters on purchases. Under-compensation is recognized as "Other taxes on production" and over-compensation as "Other subsidies on production".
- *Imputed social contributions* (continued wage payments by employers in cases of illness).
- *Financial intermediation services indirectly measured* (FISIM).
- *Net premiums for non-life insurers*, payments of these in the case of claims and the resultant investment income.
- *Investment in research and development* and stocks capitalized using the perpetual inventory method (PIM). They are a subset of *other fixed assets*.
- *Investment in weapon systems* and stocks capitalized using the perpetual inventory method. They are a subset of *other fixed assets*.
- Claims of pension funds on pension managers (liabilities of government units toward public-sector pension funds).

The time series concerned are integrated into the GFS Model with no impact on the balance. The "consumption of fixed capital: fixed assets" from the Swiss system of national accounts is also integrated directly into the GFS Model for all general government sub-sectors because the historical accounting data of the government units does not meet the macroeconomic requirements.