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Swiss Confederation

The Federal Council

Bern, 29th of November 2013

The Swiss debt brake: experiences and perspectives

Report of the Federal Council in response to the postulates of Graber Jean-Pierre (10.4022), Landolt (11.3547) and Fischer (12.3552)

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Summary

The Confederation's debt brake has *a decade of practical application* behind it. This permits a detailed analysis of the rule-based fiscal policy in different economic and political situations. This report, which was drawn up in response to a postulate submitted by Jean-Pierre Graber, describes the debt brake, its origins and its effects; key themes are analysed and various perspectives discussed.

The *objective of the debt brake* is to stabilise federal debt. This is managed via the financing statement, which may not exhibit a deficit over a full economic cycle. In order to allow for a fiscal policy that is aligned to the economic cycle, cyclical deficits are permitted subject to the corresponding surpluses being achieved in good times. Accordingly, the debt brake limits the level of expenditure to the level of estimated structural (i.e. cyclically adjusted) receipts. Exceptions are permitted in special situations. A sanction mechanism completes the regulations. These *core provisions* are *enshrined in the Federal Constitution*. This ensures that the rule is binding to a high degree.

The *federal finances* have *developed positively* under the debt brake. Debt has declined sharply, going from CHF 130 billion in 2005 to CHF 112 billion in 2012, and the debt ratio at federal level is more or less at the same level as in 1994, i.e. 19%. The corresponding savings on interest expense have provided valuable freedom of manoeuvre when formulating the budget. Furthermore, the debt brake has strengthened anti-cyclical fiscal policy.

In the future too, the legal provisions will tend to lead to a nominal decline in debt as a result of credits being not fully utilised. Instead of reducing debt further, the target could be to stabilise debt, which would likewise comply with the constitutional requirements. However, in the Federal Council's view and based on experiences so far, there is currently *no need for a change in the objective*, as reducing debt creates freedom of manoeuvre and strengthens the ability of the economy to withstand crises.

Likewise, there is no reason to change individual provisions of the debt brake. The *cyclical factor* paints a realistic picture of economic development. Fears that the debt brake would have a negative impact on the development of investment have proved unfounded. The *proportion of investment* is *relatively stable when viewed over the long term*. In the transport area, for example, funds make it possible to cover investment peaks. The Federal Council therefore considers it sensible to maintain the current regulations.

The positive development of the federal finances since the introduction of the debt brake can also be attributed to external influences. A preeminent driver is the dynamic development of the Swiss economy and therefore the development of receipts. In the future too, the amount of effort required to comply with the rules of the debt brake will depend heavily on the *development of receipts*.

The debt brake is an efficient fiscal rule for managing the budget in the short term, and it has proved itself. Accordingly, it enjoys *broad acceptance*. However, the debt brake cannot solve long-term structural problems such as unfavourable demographic developments, for example. Challenges of this kind need to be tackled by means of structural reforms in the individual

political areas. By contrast, further reducing the Confederation's debt ratio can provide future generations with the best possible starting point for tackling the problems of the future.

1 Introduction

A decade has passed since the introduction of the debt brake in 2003, and there are now a sufficient number of budgets and financial statements available to allow an in-depth evaluation of Switzerland's rule-based fiscal policy. This timeframe does not cover a great deal more than a full economic cycle. But in view of the fact that many European countries are now in the process of introducing debt containment rules of their own, it is actually remarkably long.

The report looks back at Switzerland's experience of the debt brake so far, and discusses a number of open questions as well as future challenges. It was drawn up in response to a postulate of Jean-Pierre Graber (10.4022), which instructed the Federal Council to set out the "major benefits" and the "occasional drawbacks" of Switzerland's debt brake. In addition to this basic mandate, the report addresses a number of individual issues resulting from the postulate and from other referred initiatives (cf. Table 1).

Structure of the report

The report begins in *Section 2* with an overview of the key elements of the debt brake as per the relevant constitutional provision. *Section 3* traces the development of the constitutional and legislative provisions, while *Section 4* sets out the fiscal policy experiences with the debt brake. Finally, in *Section 5*, the main analytical section, a number of individual themes and specific questions are discussed. *Section 6* then summarises the key findings and provides a fiscal policy outlook.

Table 1: Overview of the review mandates in accordance with the referred postulates

Postulate	**Title**	**Topics and section reference**
10.4022 Graber Jean-Pierre	Report on the debt brake	Expediency of the cyclical factor → 5.3.2 Debt brake by task area → 5.2.4
11.3547 Landolt Martin	Consistent anti-cyclical approach to fiscal policy	Appropriation of underutilised credits for economic packages → 5.1.2
12.3552 Fischer Roland	Enhanced effectiveness of the debt brake and greater transparency in accounting	Debt brake on the basis of the statement of financial performance → 5.2.2 Inclusion of the separate accounts → 5.2.3

2 The debt brake

The initial sections describe the core elements of the debt brake and the way it functions in its current guise.

2.1 Overview

The debt brake comprises as its core elements a target parameter and a control parameter, an exemption clause, and a section mechanism. The corresponding provisions are enshrined in the Federal Constitution, thereby making the rule binding to a very high degree.

The debt brake is an institutional mechanism for managing public finances which subjects the Confederation's fiscal policy to a binding rule. It is designed to avert structural imbalances in federal government finances and ensure that budget management takes account of the economic cycle. The debt brake therefore addresses two classic objectives of fiscal policy: ensuring the robustness of public finances ("sustainability objective") and smoothing economic cycle and growth fluctuations ("stabilisation objective").

The *target parameter* for the rule is the nominal gross debt of the Confederation. It should be stabilised in nominal terms over the course of an economic cycle. This target results from the balance of receipts and expenditure. In the event of persistent economic growth, gross debt stabilised in this manner will decline as a proportion of gross domestic product, and the debt ratio will thus be reduced gradually. The choice of gross debt as the target parameter takes account of the fact that sustainable fiscal policy is primarily measured by the sustainability of public debt.

In order to achieve the desired goal, a suitable *control parameter* is required. This function is assumed by the fiscal balance, which according to the debt brake must be in equilibrium over the longer term. Where implementation is concerned, it is the cyclically adjusted fiscal balance that is key. Managing the situation with cyclically adjusted or structural parameters allows the automatic stabilisers in public finances to take effect without constraints. Account is thereby explicitly taken of the stabilisation objective of fiscal policy referred to above.

Fundamental provisions in the Federal Constitution

Art. 126 Budget management

[1] The Confederation shall maintain its income and expenditure in balance over the longer term.

[2] The ceiling for total expenditure that is to be approved in the budget is based on the expected income after taking into account the economic situation.

[3] Exceptional financial requirements may justify an appropriate increase in the ceiling in terms of paragraph 2. Parliament shall decide on any increase as per Article 159 paragraph 3c.

[4] If the total expenditure in the state financial statements exceeds the ceiling in terms of paragraph 2 or 3, compensation for the additional expenditure must be made in subsequent years.

[5] The details are regulated by law.

The fundamental provisions of the debt brake are enshrined in Article 126 of the Federal Constitution (Cst):

- The *basic idea* of the debt brake is set out in paragraph 1: The Confederation shall maintain its income and expenditure in balance over the longer term. This basic principle of the debt brake is fleshed out in the provisions that follow.
- According to paragraph 2, the budgeted expenditure should be governed by the expected level of receipts, while taking into account the economic situation (*expenditure rule*).
- Paragraph 3 stipulates that deviations from this rule are possible in extraordinary situations (*exemption clause*), whereby such deviations require majority approval by each Federal Chamber.
- Finally, if expenditure at the end of the year is higher than permitted, paragraph 4 stipulates that this excess expenditure must be compensated for in following years (identification of and *sanction* for rule violations). The implementing provisions are regulated in the Federal Act on the Federal Financial Budget (Financial Budget Act, FBA[1]; cf. Appendix 1).

The following sections provide greater detail on the key elements of the debt brake described above, as well as the associated provisions in the FBA.

2.2 Principle

The principle first involves establishing the objective of the debt brake, namely debt stabilisation. At the same time, the financing statement is defined as the control parameter. This may not exhibit a deficit over the longer term. The selection of the control parameter is of great importance. It must be directly manageable and have a direct influence on the target parameter.

Given the principle that the receipts and expenditure of the Confederation are to be in balance over the longer term, the nominal stabilisation of federal debt is implicitly defined as the objective. This direct connection between the target parameter (level of debt) and the control parameter (financing statement balance) is of crucial importance for the success of the fiscal rule.

Essentially, various different control parameters can be defined with a fiscal rule. In academic literature, alternative parameters to the fiscal balance include in particular tax receipts, government expenditure, or the level of indebtedness itself. In cantonal practice, several control elements are sometimes even combined (e.g. the statement of financial performance result and the self-financing ratio for investments).

Each control parameter has its own advantages and drawbacks. If a ceiling is designed for government indebtedness, for example, the target parameter and the control parameter will be identical. A rule of this kind is extremely effective in principle and ensures that government

[1] SR **611.0**

indebtedness does not exceed a sustainable level. On the other hand, it may conflict with other fiscal policy objectives. If the debt ceiling is breached during a recession, a rigid focus on this ceiling will force the state to act in a pro-cyclical manner by consolidating its budget. This undermines the compensating role that the government budget can play as an automatic stabiliser of macroeconomic fluctuations. If the "debt target" is more heavily weighted at the expense of the "economic cycle target", it is more difficult to pursue an economic policy oriented towards full employment, and the acceptance and enforceability of the fiscal rule may be jeopardised as a result.

As explained in the Federal Council's dispatch on the debt brake[2], the financing statement is a suitable control parameter for the debt brake for various reasons. For one thing, it forms the ideal basis for political prioritisation, as it encompasses all planned activities, including investments, in a single statement. In addition, it is closely linked to the development of government debt. Moreover, the multi-year target horizon is important with respect to the above-mentioned conflict of objectives. It allows equilibrium "over time", and not rigorously in each individual year. This makes it possible to take into account not only the need to balance the budget but also the objective of cyclical stabilisation (in accordance with Art. 100 para. 4 Cst).

2.3 Expenditure rule

The debt brake limits the level of expenditure to the extent of estimated structural (i.e. cyclically adjusted) receipts. The adjustment is undertaken by means of the so-called "cyclical factor", or economic cycle adjustment coefficient. This provides information on the degree of capacity utilisation in the economy.

The requirements of the debt brake are taken into account when drawing up the budget and the associated supplementary credits. At its heart is a simple rule: it limits expenditure over an economic cycle to the level of receipts, thereby ensuring a balanced federal budget over time in keeping with the principle discussed above. The rule is more specifically defined in the Financial Budget Act using the following formula (Art. 13 para. 1 FBA):

Maximum level of expenditure = estimated receipts x cyclical factor

The debt brake thereby sets the level of maximum expenditure, or expenditure ceiling, on the basis of receipts after correction by a cyclical factor. The cyclical factor is a measure of the economic situation at any time. It corresponds to the ratio between the trend value of real gross domestic product and the actual level of real gross domestic product in the year in question (Art. 13 para. 3 FBA):

Cyclical factor = trend GDP / GDP

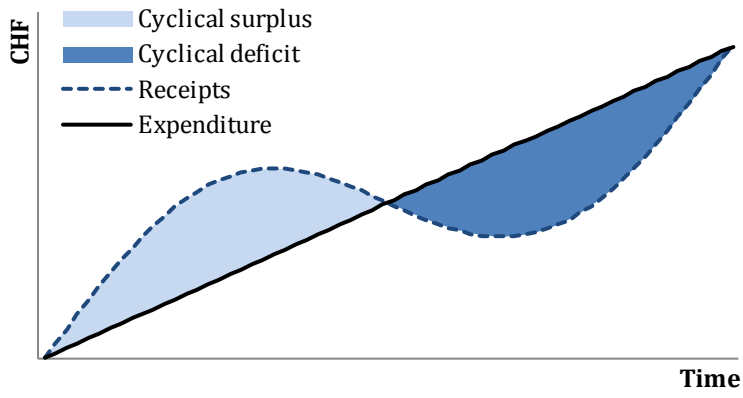
This factor adjusts receipts for the estimated influence of the economic cycle.[3] In other words, in times of macroeconomic capacity shortages, expenditure must be lower than receipts (cyclical factor < 1), whereas in the event of capacity underutilisation it may be higher than receipts

[2] Federal Gazette **2000** 4653

[3] For the estimation of trend GDP, see Section 3.5.

(cyclical factor > 1). In the former scenario, a "cyclical surplus" must be generated, whereas in the latter case a "cyclical deficit" is tolerated (cf. Figure 1). By contrast, federal expenditure is not adjusted for cyclical influences. Following the removal of unemployment insurance from the federal financial statements in 2003, there are no longer any significant cyclically-sensitive expenditure components in the federal budget. Only interest expenditure and third parties' shares in receipts are influenced by the economic cycle, but their impact on the fiscal balance is low.

Figure 1: Consistent path of expenditure and cyclically-dependent receipts



The cyclical factor measures the macroeconomic level of utilisation of the factors of production. It indicates underutilisation even after a recession, and permits a deficit even though the economy is already growing at an above-average rate once again. This prevents a burgeoning economic upturn from being brought to a halt by contractionary fiscal policy. Only when the economy has recovered sufficiently and is growing above its long-term trend are budget surpluses required. This tends to have the effect of smoothing out economic fluctuations.

The debt brake does not require budgets to be balanced on an annual basis, but only over an entire economic cycle. Therefore, what is relevant to the annual controlling process is the *structural* fiscal balance, i.e. the balance that has been adjusted for cyclical influences. The application of the debt brake thus leads to a stabilisation of expenditure development and enables the automatic stabilisers in the federal budget to exercise their impact freely. In a recession, cyclically-related shortfalls in receipts do not have to be compensated for by corresponding cuts in expenditure. The resulting budget deficits have the effect of supporting aggregate demand in the economy (and prevent pro-cyclical expenditure cuts), and thereby contribute to the stabilisation of economic development. The reverse is the case when the economy is booming. The debt brake therefore allows for a passive anti-cyclical fiscal policy, i.e. a rule-based and cyclically-stabilising fiscal policy.

2.4 Extraordinary budget

With the introduction of the debt brake, the federal budget was broken down into an ordinary budget and an extraordinary budget. This was designed to provide an unadulterated representation of the structural budget situation and to increase the flexibility, continuity and credibility of fiscal policy.

Extraordinary receipts, in particular those that arise from the sale of assets, are not taken into consideration when calculating the expenditure ceiling (Art. 13 para. 2 FBA). Given their one-off nature, they should not be available for financing the ordinary budget, but should be used to reduce the level of debt. Conversely, extraordinary expenditure is not subject to the ceiling for ordinary expenditure, which is why the maximum permissible expenditure may be increased by the scope of the former (Art. 15 para. 1 FBA). It can thus be ensured that these often unique or unforeseeable transactions do not jeopardise the continuity of the fulfilment of state tasks through expenditure cuts in other areas.

In order to prevent the basic rule of the debt brake from being circumvented, any resolution on an extraordinary payment requirement needs a qualified voting majority in both Federal Chambers. Moreover, it must also have a minimum weighting in the federal budget (0.5% of total expenditure; in 2012 around CHF 300 mn) (Art. 15 para. 2 FBA). An exemption mechanism of this kind is necessary for the long-term enforceability and credibility of a fiscal rule, as this rule cannot reasonably be expected to cover all possible events.

An extraordinary payment requirement may be requested in the event of "extraordinary developments that cannot be controlled by the federal government", such as severe recessions or natural disasters. In addition to its justification in the face of severe events of this nature, extraordinary expenditure is also permissible for "adjustments to the accounting model" and "booking-related payment spikes" (Art. 15 para. 1 FBA). Switzerland's experiences since the introduction of the debt brake show that it is above all the criterion of uncontrollability that allows for a certain degree of scope for political interpretation.

The extraordinary budget is also subject to a binding rule in the context of the debt brake. Extraordinary expenditure that is not covered by extraordinary receipts must be compensated for in the ordinary budget over the medium term. The control parameter for the extraordinary budget in this respect is the amortisation account (Art. 17a para. 1 FBA). Any extraordinary expenditure incurred is debited to this statistical account, and any extraordinary receipts are credited to it. The balance of the account thus shows the cumulative balance of the extraordinary budget.

If the account exhibits a deficit, this must be paid off over the course of the next six accounting years by means of structural surpluses in the ordinary budget (Art. 17b para. 1 FBA). If, as a result of further extraordinary expenditure, the deficit of the amortisation account increases by more than 0.5% of total expenditure, the deadline for repayment is reset. In special situations, parliament has the power to extend the six-year deadline. This flexibility is designed to ensure that the balancing of the extraordinary budget remains achievable even in the face of very high extraordinary expenditure.

2.5 Compensation account and sanction mechanism

An effective sanction mechanism is essential if a binding rule is to be credible. This role is assumed by the compensation account and the associated rules for budget consolidation.

The requirements of the debt brake are taken into account first and foremost when drawing up the budget (as per Art. 13 para. 1 FBA), but it also needs to be ensured that these requirements are complied with during budget execution. This is where the compensation account comes in. The compensation account is not an account in the bookkeeping sense of the word, but a set of statistics that records previous deviations (either positive or negative) from the debt brake requirements. The compensation account therefore constitutes a mechanism for verifying target attainment. Once the annual financial statements have been drawn up, the maximum permissible expenditure is recalculated on the basis of the actual receipts and the revised economic forecasts, and compared to the expenditure actually incurred. The difference is then credited or debited to the compensation account. The balance of the compensation account is a measure of the deviations from the objective of stabilising government debt. A deficit in the compensation account means that debt has risen by the corresponding amount, while a credit balance indicates a reduction in debt by this amount. The compensation account is therefore in a sense a record of adherence to the debt brake.

Credits and debits in the compensation account can have a number of different causes. *Firstly,* they may be the result of forecasting errors with respect to receipts and economic forecasts. Experience shows that the magnitude of economic swings is often underestimated. When the economy is performing strongly, estimates for receipts tend to be too low, which means that the maximum permissible expenditure is also set at too low a level. The subsequent correction once the financial statements have been drawn up therefore leads to a credit. When the economy enters a negative phase, the reverse is frequently the case. *Secondly,* actual expenditure may work out lower than the budgeted value (unutilised credits), which in turn leads to a credit in the compensation account. *Thirdly,* planned expenditure deviations below the expenditure ceiling are also credited to the compensation account if these structural surpluses are then realised in budget execution.

If the compensation account exhibits a deficit, Swiss legislation dictates that this must be eliminated over a period of several years (Art. 17 FBA). This is achieved by means of corresponding reductions in the expenditure ceiling in future budgets. If the compensation account deficit exceeds 6% of the total expenditure incurred in the past financial year, the sanctions are tightened. The excess must be eliminated within the next three financial years. This timeframe provides a certain degree of flexibility, while at the same time ensuring that budget adjustments are not put off indefinitely. In theory, however, this deficit elimination requirement could conflict with the prevailing economic situation.

No measures are envisaged under existing legislation for the event of surpluses accumulating in the compensation account. The legislator is therefore implicitly saying that surpluses are to be used to reduce debt rather than to finance future additional expenditure.

3 The road to the debt brake

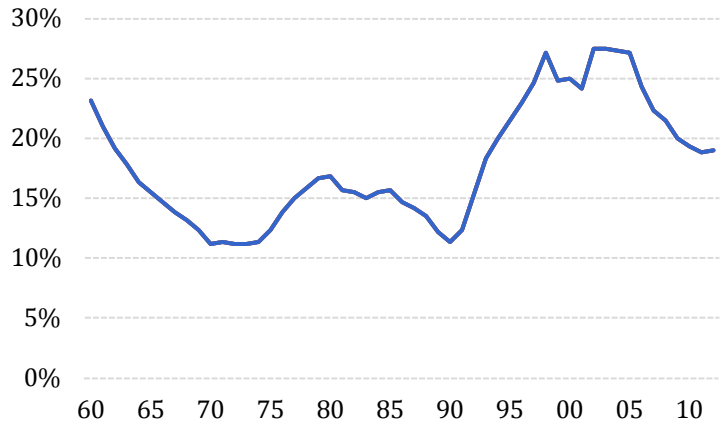
The road to the debt brake in its current guise was long. Below, it is the origins that lie behind its emergence that are looked at first. The focus then turns to how the various constitutional and legislative provisions came about, and which individual elements were amended – without any change to the basic rule itself – following its introduction.

3.1 Origins

All earlier attempts to introduce rules to prevent rapid increases in debt failed due to a lack of rigour and a lack of sanction options. During the intermediate stage of the 2001 budget target, a budgetary rule at constitutional level was prepared with the dispatch on the debt brake.

The Confederation's fiscal policy had not been uniformly successful in the preceding decades. In particular, various periods of recession and stagnation were accompanied by a sharp rise in debt thanks to budgetary deficits which were only reversed in part during the peaks of the economic cycle. Admittedly, in the form of Article 42bis of the Federal Constitution, a provision did exist from 1958 onwards which called for the *reduction of the accumulated deficit* (taking the prevailing economic situation into account). However, even enshrining the notion of debt reduction in the Constitution did not prevent federal debt from rising in the 1990s. By the end of 1999, the gross debt of the Confederation amounted to more than CHF 100 billion, or around 25% of gross domestic product (GDP). Within the space of nine years, the debt burden had virtually trebled.

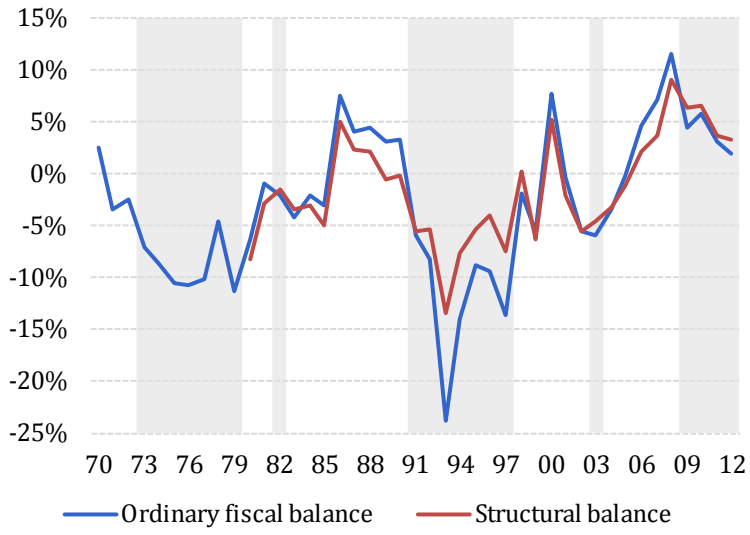
Figure 2: Long-term development of the Confederation's debt ratio (gross debt in % of GDP)



Although the cause of the sharp rise in debt was to a large extent explained by the phase of economic stagnation (1991–1996) and the follow-up costs of outsourcing and funding certain

pension funds and federal operations (1998–2003)[4], it became evident in the mid-1990s that the deficits were to a considerable extent of a structural nature and could not be eliminated by economic growth alone (cf. Figure 3). Against this backdrop, in 1995 – following implementation of various restructuring packages in the years 1992–1994 – an *expenditure brake* that is still in place today was agreed (Art. 159 para. 3b Cst). According to this expenditure brake, subsidy provisions, contingency credits and payment frameworks entailing new one-off expenditure of more than CHF 20 million or new recurring expenditure of more than CHF 2 million require majority approval by the members of both Federal Chambers.

Figure 3: Results of the financing statement and structural balance (in % ordinary receipts; years of capacity underutilisation shaded in grey)



However, these attempts at reducing expenditure and the expenditure brake were not enough to reduce the budget deficit significantly. Accordingly, the *2001 budget target* was formulated in 1997. The deficit in the financial statement was to be reduced gradually from 1999 onwards – following the recovery and stabilisation of the economy – and was not to exceed 2% of receipts by the 2001 financial year. By adhering to a budget that was largely balanced from a structural perspective, the necessary foundations were to be laid for the introduction of the debt brake, which was already planned at that time. In order to achieve the budget restructuring that was envisaged by the 2001 budget target, a new, fixed-term transitional provision linked to the Federal Constitution was drawn up, obliging the Federal Council and parliament to make savings within a fixed timeframe if the target was not met.[5] The bill for the 2001 budget target was accepted on 7 June 1998 by the Swiss people ("yes" votes: 70.7%) as well as by all the cantons.

In order to implement the budget target in an economically and socially acceptable way, the Federal Council invited leading representatives of the federal government, the cantons,

[4] Restructuring and refinancing of SBB; funding of the pension funds of the Confederation, Swiss Post and SBB; recapitalisation of RUAG

[5] The transitional provision was to lapse automatically as soon as it was replaced by constitutional measures to limit deficits and indebtedness (AS **1998** 2031 et seq).

government parties and social partners to roundtable discussions between December 1997 and April 1998. This process gave rise to a consensus-based package of measures which was presented to parliament for a vote in March 1999 as the *1998 stabilisation programme*. It contained the measures deemed necessary to achieve the stipulated target in 2001. Thanks to the consolidation successes attributable to this process, the necessary conditions for introducing the debt brake – from the perspective of the time – were at last fulfilled.

Politico-economic asymmetries that make it difficult to balance the budget

The debt brake corrects "institutional" and "economic policy" asymmetries that can make it difficult to balance the budget over the economic cycle. Firstly, the authority required to increase the level of receipts is assigned to a different federal level than that required to increase expenditure. Increasing the most important taxes (direct federal tax and value added tax) requires a change to the Constitution and therefore the approval of both the people and the cantons. By contrast, an increase in expenditure can be resolved by parliament, typically via a simple majority. Secondly, it is politically easier to allow deficits in phases of recession than to compensate for these deficits with corresponding surpluses in phases of economic upturn.

3.2 Dispatch, parliamentary deliberations and popular vote

Parliament supported the Federal Council's debt brake concept, but restricted the response options to deficits alone with respect to the compensation account. It therefore left the option open to strive for a more ambitious target than debt stabilisation.

Institutional mechanisms for budget management were a perpetual object of fiscal policy debate prior to the introduction of the debt brake. Among other things, a consultation on two specific proposals for a debt brake was conducted in 1995/96. Although the basic idea met with broad approval, priority was accorded to implementing the 2001 budget target following an evaluation of the results of the consultation procedure. In other words, the decision was made to establish the necessary prerequisites for the introduction of the debt brake first of all. Following the acceptance of this bill by the people and the cantons, work began on the elaboration of the dispatch on the debt brake.

The *dispatch on the debt brake* was adopted by the Federal Council for the attention of parliament in July 2000.[6] In March 2001, the Council of States became the first Federal Chamber to address the federal decree on the debt brake and the associated revision of the *Financial Budget Act*.[7] Previously, the Federal Council had published the additional report to the dispatch on the debt brake[8], in order to counter what it believed to be a trend towards laxer expenditure discipline and calls for comprehensive tax breaks, which were attributable among other things to the good results achieved in 2000.

6 Federal Gazette **2000** 4653

7 Federal Gazette **2000** 4728

8 Federal Gazette **2001** 2387

When it came to the detailed process of deliberation, the *management* of the compensation account in particular gave rise to a thorough debate. According to the dispatch, this was to be achieved *symmetrically*: Article 24d para. 1 of the bill required deficits *and* surpluses in the compensation account to be balanced out (by a corresponding reduction or increase in the expenditure ceiling). The rule on offsetting surpluses would have necessitated either an increase in the expenditure ceiling in subsequent years, or the reduction of receipts through tax cuts, for example. The reason for the envisaged symmetrical management of the compensation account was the original design of this account as an instrument for compensating for forecasting errors in receipts. As long as the level of receipts had not been erroneously estimated on a systematic basis, the balance of the compensation account would have fluctuated around a stable level. The sanction for a more substantial deficit prevents the systematic overestimation of receipts and therefore a continuous violation of the debt brake. Conversely, the requirements of the debt brake would have been surpassed in the event of a systematic underestimation, which is why these surpluses could have been used to increase the expenditure ceiling or reduce taxes.

Parliament did not share this conceptual view. Instead, it decided to leave the option open for a more ambitious objective than the stabilisation of debt – namely the possibility of using surpluses to pay down debt. The application of Article 24d para. 1 was therefore restricted to deficits. For this reason, surpluses cannot be used – as originally envisaged in the dispatch – to increase the expenditure ceiling. No upper ceiling is defined, nor is it stipulated how the accumulated credits are to be used. The *management* of the compensation account is therefore *asymmetrical*. It is only envisaged for the scenario of a negative balance. A surplus in the compensation account therefore remains in place, and the obligation to reduce it no longer applies. In other words, parliament prioritised the reduction of debt over increases in expenditure or tax breaks.

Following conciliation between the two Federal Chambers, the Council of States passed the federal decree on the debt brake in the *final vote of 22 June 2001* by 34 votes to 6, and the amendment of the Financial Budget Act by 35 votes to 6. The National Council likewise signalled its approval with a voting majority of 127:64 (federal decree) and 130:62 (FBA).

The constitutional provisions were accepted in the *popular vote of 2 December 2001*, with a "yes" vote of 84.7% and a clear majority in all 26 cantons.

3.3 Deficit reduction plan

As the federal budget unexpectedly showed a high structural deficit when the debt brake was introduced, the structural balance target was postponed until 2007 for economic policy reasons.

The first-ever application of the debt brake came with the 2003 budget. When the budget was adopted by the Federal Council on 30 September 2002, it was assumed that the federal finances were structurally in balance with the 2003 budget. The budget was therefore in compliance with the debt brake. A few weeks later, however, the fiscal policy situation took a turn for the worse. As a result of unexpected economic weakness, the receipt estimates had to be reduced by

around CHF 1 billion, and expenditure cuts had to be sought from parliament in order to keep the budget in compliance with the debt brake. At the beginning of 2003, it became clear that the slump in receipts was even worse than had been feared back in the autumn of 2002. The 2002 financial statements revealed a shortfall in receipts of some CHF 4 billion relative to the 2002 budget. It became clear that, contrary to original expectations, the federal budget contained a substantial structural financing gap when the debt brake was introduced. Under the terms of the debt brake, this would have had to be eliminated within the framework of the 2004 budget. However, a correction of this magnitude within such a short time span would have significantly exacerbated the recession, and would not have been compatible with the federal government's constitutional mandate of pursuing a fiscal policy in line with the economic cycle.

As a result, the Federal Council presented the *2003 relief programme (RP 03)* to parliament, which proposed savings amounting to some CHF 3 billion relative to the expenditure contained in the 2004–2006 financial plan. In addition, a transitional provision was incorporated into the FBA which permitted the structural deficit that was already in existence when the debt brake was introduced and made it possible to gradually reduce this deficit by 2007 by means of a binding *deficit reduction plan*. At the same time, the expenditure ceiling was temporarily increased and – based on the figure of CHF 3 billion in 2004 – reduced by CHF 1 billion each year.

3.4 Crediting of budget underruns to the compensation account

With the 2003 relief programme, the compensation account was restructured in such a way that any budget underrun was credited to the account, in addition to any overrun of the expenditure ceiling being debited. In other words, there was a switch to symmetrical crediting/debiting of the compensation account.

In addition to the reduction of expenditure growth and the degressive raising of the expenditure ceiling for a fixed period, *the FBA provisions on the compensation account were amended* as part of the RP 03. In the dispatch on the debt brake, the Federal Council had envisaged an asymmetrical calculation, whereby overruns of the expenditure ceiling contained in the budget would result in debits, while expenditure underruns based on unutilised credits would not be credited. According to the dispatch on the debt brake, this was in order to "adhere to the principle whereby approved but not fully utilised credits lapse".[9] In particular, the Federal Council was hoping to use these withheld credits to offset additional expenditure in the event of an extraordinary payment requirement.

The calculation of the compensation account was now changed so that all underruns of the maximum permissible expenditure in the financial year were incorporated into the calculation, irrespective of whether they resulted from unforeseen unutilised credits or cost-saving measures. Ever since, the difference between the overall expenditure reported in the state financial statements and the maximum amount calculated on the basis of actual receipts has

[9] Federal Gazette **2000** 4653, point 1.9.5.4 (compensation account and savings measures)

been credited or debited to the compensation account. The aim of the adjustment was to simplify the calculation; moreover, the debiting of the compensation account in the event of an unexpected future slump in receipts was designed to be alleviated by receipt-dependent expenditure positions (e.g. the cantons' shares).

Compared to the original version (Federal Council dispatch on the debt brake), today's provisions on the crediting/debiting and management of the compensation account represent a wholly contrasting approach: the *crediting/debiting* (booking of receipt and expenditure-side deviations) is *symmetrical*. At the same time, the compensation account is *asymmetrically managed*, insofar as deficits have to be eliminated whereas surpluses remain in place (cf. Section 3.2).

3.5 Modified filter procedure

As the initial procedure for determining the cyclical factor did not respond sufficiently strongly to swings in the current economic cycle, a modified method has been applied ever since the 2004 budget.

In order to implement the debt brake in such a way that the economic cycle is taken into consideration as much as possible, the calculation of the expenditure ceiling includes a cyclical factor (adjustment coefficient for the economic cycle) in addition to the level of estimated receipts. This corresponds to the ratio of real trend GDP to actual or forecast real GDP (cf. Section 2.3). However, real trend GDP cannot be directly measured, and has to be ascertained by means of an estimate. To this end, a number of different methods are applied by economists. In the dispatch on the debt brake, a smoothing technique developed by Hodrick and Prescott (HP filter) was suggested, and this filter procedure also ended up being applied when the debt brake was introduced with the 2003 budget.[10]

There were two arguments in particular in favour of the HP filter procedure: on the one hand, the symmetrical character of the HP filter, which ensures that cyclical deficits and surpluses cancel each other out over the economic cycle, and on the other the comprehensibility and transparency of the procedure. By contrast, a drawback emerged in that the trend component of GDP ascertained using the HP filter was heavily influenced by the last observation of actual GDP. As a result, even economic fluctuations in actual GDP of a purely cyclical nature feed through into estimated trend GDP. This oft-cited criticism is now referred to in academic literature as "marginal instability". In order to alleviate this problem, the GDP time series is usually enhanced with additional forecasts so that the last observation is shifted further into the future. This approach did not produce a satisfactory result with the debt brake, as the forecasts used for the financial plan years involved longer-term trend growth rates due to a lack of medium-term economic forecasts.

For example, during the first-ever implementation of the debt brake in the 2003 budget, it was found that only some 40% of the revision of the economic forecast in the budget year was reflected in a change to the cyclical factor. As a result, the cyclical responsiveness of the debt

[10] The procedure is not stipulated by the FBA or the Financial Budget Ordinance.

brake was impaired in a way that was undesirable. In order to improve the marginal responsiveness of the cyclical factor, a number of adjustments were made. On the one hand, the traditional Hodrick and Prescott formula for calculating the trend component was modified, so that the actual values of the time series were less strongly weighted.[11] At the same time, the GDP forecasts for the financial plan years were no longer taken into account when calculating the cyclical factor for the budget year.[12] Experience to date has shown that the HP filter modified in this way (mHP filter) considers 80% of a forecast revision for the GDP growth rate as cyclical, and this then feeds through into an equally high change to the cyclical factor. The cyclical responsiveness works out around twice as high as that of the traditional HP filter.[13]

When calculating trend GDP, both the HP filter and the mHP filter also require an assumption for the so-called "smoothing parameter" – typically designated lambda (λ). The smoothing parameter influences the duration of the economic cycles implicitly determined through the procedure. Simulation calculations have shown that a parameter of 100 results in the best possible degree of cyclical responsiveness.[14] This factor was determined when the debt brake was introduced and has not been changed since.

3.6 Extended rule

Originally, extraordinary expenditure was not subject to the debt brake. To prevent circumvention of the debt brake, an additional rule also requiring compensation in the extraordinary budget was introduced in 2010.

With the debt brake's original rules, extraordinary expenditure did not have any impact on the ordinary budget, in order to protect this budget from potentially large and one-off fluctuations in expenditure. However, this left the extraordinary budget as a potential cause of indebtedness. In particular, the danger arose that the exemption clause might be abused to circumvent the debt brake in times of fiscal policy difficulty.

The debt brake was therefore supplemented with the introduction of the extended rule on 1 January 2010, so that the medium-term balancing of the ordinary budget and the balancing of the extraordinary budget were both laid down in law as a binding rule. The basic idea of the extended rule is that deficits in the extraordinary budget have to be eliminated over a fixed timeframe by means of structural surpluses in the ordinary budget (cf. Section 2.4). This timeframe is suspended if the compensation account shows a deficit. The rebalancing of the extraordinary budget is therefore "subordinated" to the rebalancing of the ordinary budget.

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[11] Bruchez, P.-A. (2003), "A modification of the HP filter aiming at reducing the end point bias", FFA Working Paper No. 3 (old series).

[12] Cf. dispatch on the 2003 relief programme of 2 July 2003, Federal Gazette **2003** 5615

[13] Cf. Colombier, C. (2004), "A re-evaluation of the debt brake"; with the assistance of: F. Bodmer, P. A. Bruchez, A. Geier, T. Haniotis, M. Himmel, U. Plavec, FFA Working Paper No. 2, revised version

[14] The value applies to annual data and corresponds to the value determined by the authors of the HP filter (Hodrick, R. J. and E. C. Prescott, 1997, "Postwar U.S. Business Cycles: An Empirical Investigation", Journal of Money, Credit and Banking, Vol. 29, No. 1, 1-16)

4 Fiscal policy experiences

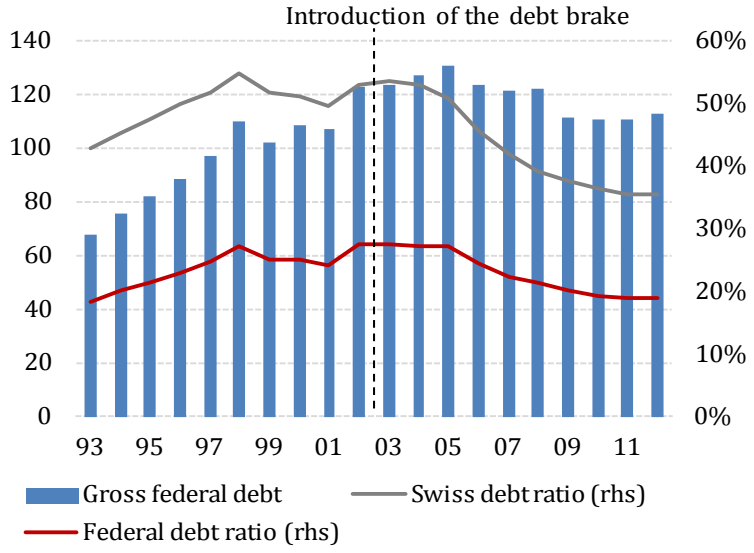
The illustration of experiences with the debt brake begins with an overview of the federal budget and its impact on the economy. The focus then switches to the key implications of the debt brake for budgeting practice. This section then concludes with a focus on the international sphere.

4.1 Development of the federal budget

The federal finances have developed positively since the introduction of the debt brake – as can be illustrated by various indicators. The level of debt has declined sharply, while the corresponding interest expenditure savings have created greater budget flexibility.

The Confederation's gross debt has declined sharply relative to the year when the debt brake was introduced, going from CHF 124 billion in 2003 to CHF 112 billion at the end of 2012 (cf. Figure 4). As a result of Switzerland's economic growth during the same period, the decline in the debt ratio is even more striking, going from 27.5% in 2003 to 19.0% in 2012.

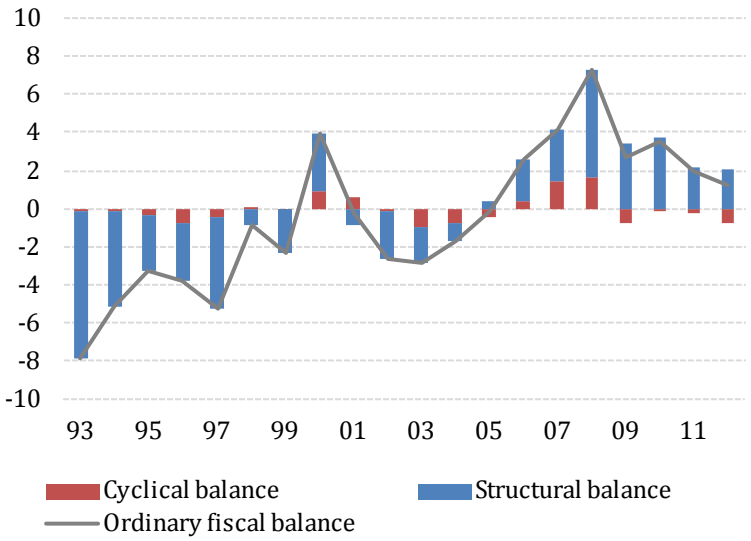
Figure 4: Development of debt (gross debt in bn and debt ratios in % of GDP)



At the root of this development lies a sustained and far-reaching restructuring of the federal finances. A comprehensive package of measures to restructure Switzerland's public finances was implemented with the 1998 stabilisation programme and then embedded in a corresponding institutional framework with the 2001 budget target (cf. Section 3.1). As a consequence, the high structural deficits towards the end of the 1990s could be gradually reduced (cf. Figure 5).

Thanks to the debt brake, these initial successes in stabilising the public finances could then be consolidated. In particular, the binding debt brake regulations facilitated the implementation of two relief programmes (RP 03 and RP 04). This made it possible to quickly eradicate the unexpected structural deficits recorded following the turn of the millennium

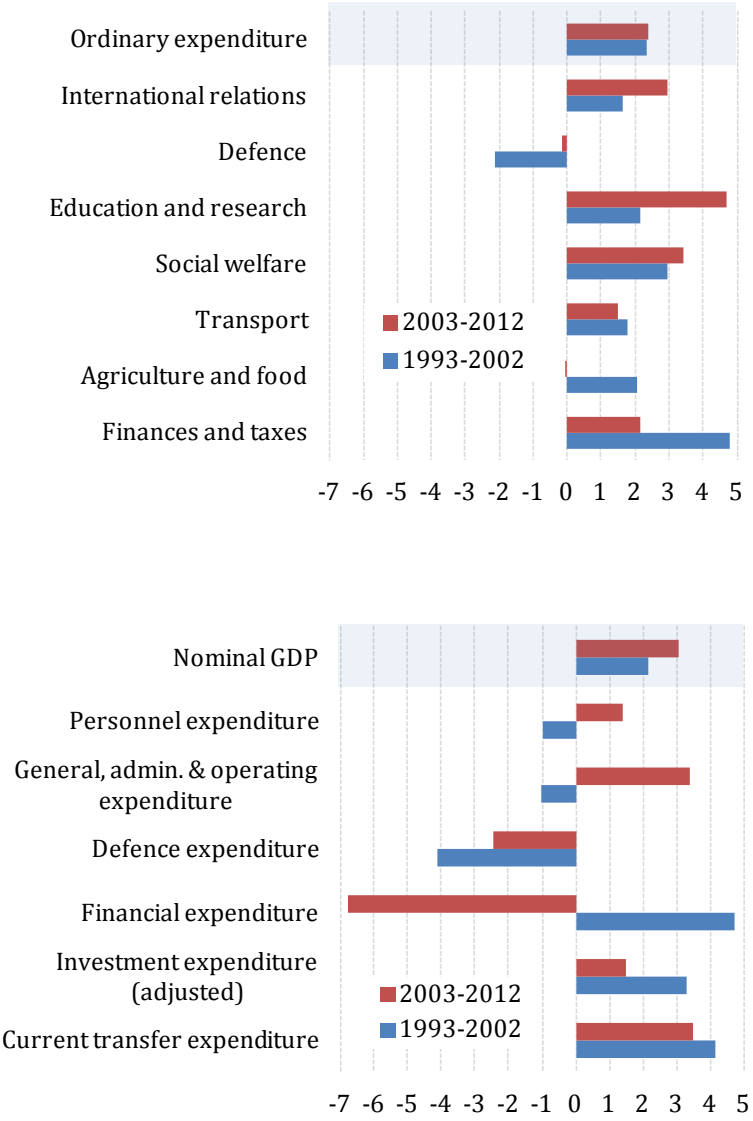
Figure 5: Development of the ordinary fiscal balance and its components (in CHF bn)



The subsequent reduction in debt was assisted by the economic parameters that characterized the years 2004 to 2008. Indeed, like the Confederation, Switzerland's cantons and communes also succeeded in reducing their debt ratios on the back of strong GDP growth. At federal level, however, it is especially thanks to the debt brake that the strong growth in receipts during this period was transformed into corresponding budget surpluses. A comparison of average growth rates over the ten years prior to and following the introduction of the debt brake shows that annual expenditure growth since the debt brake's introduction has remained stable at almost the same level (1993–2002: 2.3%; 2003–2012: 2.4%), even though the annual rate of economic growth has been higher since the turn of the millennium (2.1% and 3.1% respectively; cf. Figure 6).

However, although expenditure growth remained stable in the ten years prior to the introduction of the debt brake and in the ten years that followed, there have been some significant changes in the expenditure dynamics of individual account groups and task areas. This effect is most striking in the area of financial expenditure, i.e. expenditure in the area of finances and taxes. The sharp decline in debt combined with the low interest rate environment since 2008 has led to a considerable decline in interest payable. Financial expenditure has fallen sharply since peaking in 2006. Increases in expenditure have been recorded in particular in the areas of international relations, education and research, and social welfare, whereas the transport, agriculture and food task areas have recorded lower rises than prior to the introduction of the debt brake.

Figure 6: Development of federal expenditure by task area and account group (average annual growth in %)



With respect to individual account groups within the federal budget, it becomes clear in particular that the Confederation's own expenditure – with the exception of expenditure on armaments – has expanded once again since the introduction of the debt brake, whereas the development of transfer expenditure has slowed. However, growth rates in the own expenditure area remained significantly below that of transfers in both periods.[15] By contrast, the average growth of investment expenditure has declined (from 3.3% to 1.5%; figures adjusted for structural breaks, cf. Section 5.2.1). The main cause of this lower growth is the peak in investment expenditure at the turn of the millennium (New Rail Link through the Alps/NRLA, motorways). The comparison on the basis of the federal financial statements is incomplete,

[15] These statements should be understood as trends. The figures are not adjusted for structural breaks. For example, the outsourcing of the ETH into a separate account (from 1.1.2000) resulted in a reduction of personnel and operating expenditure in the federal accounts, and at the same time an increase in transfer expenditure by the amount of the financing contribution (approx. CHF 1.7 bn).

however. Where investments are concerned, the Confederation's separate accounts (FinPT fund, infrastructure fund, ETH Domain) also have to be factored in to avoid distorting the picture (cf. Section 5.2.1).

4.2 The debt brake and economic policy

As the design of the debt brake is oriented towards the economic situation, the frequently pro-cyclical fiscal policy of the 1980s and 1990s was consigned to the history books. As the recession of 2009 showed, the debt brake also provides sufficient freedom of manoeuvre to allow a response to a temporary deterioration of the economic situation. The instrument of extraordinary expenditure has yet to be used in the event of a severe recession.

Primacy of automatic stabilisers

The Federal Constitution contains a so-called "cyclical article" which requires the Confederation to take the economic cycle into account when formulating its receipts and expenditure policy (Art. 100 para. 4 Cst). In other words, fiscal policy should have the effect of smoothing the economic cycle. In recessions, the economy should be supported, while in boom phases it should be cooled. This can occur in one of two ways: actively, i.e. through discretionary fiscal policy decisions, or passively, i.e. through the automatic stabilisers (see below for more on this).

There is a potential conflict between the objective of economic stabilisation on the one hand and the application of the debt brake to stabilise debt on the other. Stimulating the economy in phases of economic weakness (e.g. by increasing expenditure) weighs on public finances, particularly if this additional expenditure is not then successfully scaled back over the following years of strong growth.

When the debt brake was designed, this conflict of objectives was resolved by striving to achieve a balanced budget over the medium term, or over the entire economic cycle. In order to meet the economic policy requirements, a stabilising change in the budget balance is possible in the short term – which is relevant to the economy – as long as it is ensured that expenditure is aligned with *cyclically adjusted* receipts.

The debt brake is therefore primarily aimed at allowing the *automatic stabilisers* to exercise their effect. Within the federal budget, receipts act as an automatic stabiliser.[16] During a downturn in the economic cycle, lower receipts tend to lead to a rise in the deficit, whereas during an upturn receipts increase and make it possible to generate surpluses. If the debt brake were to require a balanced budget at all times, expenditure would have to be cut during a downturn and could then be increased during an upturn. However, this is precisely what is not desired from an economic policy perspective, as this would have the effect of reinforcing rather than smoothing out economic cycles (pro-cyclical fiscal policy). The debt brake therefore targets a balanced budget in the medium term, and allows deficits or requires surpluses in the short

[16] By contrast, in the case of unemployment insurance (ALV), it is expenditure that works as an automatic stabiliser, as this increases sharply when unemployment rises.

term, depending on the economic situation. The way this cyclical flexibility functions is described in greater detail in Section 5.3.2.[17]

Subsidiary discretionary measures

As a rule, active economic policy measures are not envisaged under the debt brake. In exceptional situations, however, the debt brake rules can be loosened. In the dispatch on the debt brake, for example, the case of a "severe recession" is explicitly mentioned as an example of such an uncontrollable eventuality. In this kind of situation, if all monetary policy instruments have been exploited and additional fiscal policy measures are deemed necessary, an extraordinary payment need can be claimed in order to implement expenditure that exceeds the ordinary expenditure ceiling.

Discretionary fiscal policy to stabilise the economy is also used sparingly because its effect is limited. In fiscal policy, long decision-making processes tend to be the rule (i.e. their effect tends to feed through too late), and there is ultimately a danger that measures will be taken which do not have the effect of stabilizing economy, or that measures will be implemented which are difficult to rein in again once the economy picks up. In small, open economies like Switzerland, the effectiveness of such measures is typically restricted also by a high proportion of imports. In normal circumstances at least, monetary policy is better suited than fiscal policy to achieving economic policy goals, as it can react quickly to a change in the situation and influence economic activity in its entirety via interest rate policy.

Renunciation of pro-cyclical fiscal policy

One indicator of the cyclical structuring of fiscal policy is the so-called fiscal stimulus. This corresponds to the change in the account balance as adjusted for cyclical influences (i.e. structural balance). As this excludes non-manageable factors, it becomes a measure of the degree to which policy is designed around the economic cycle. The fiscal stimulus provides an approximated value for the effect of discretionary fiscal policy on the economy.

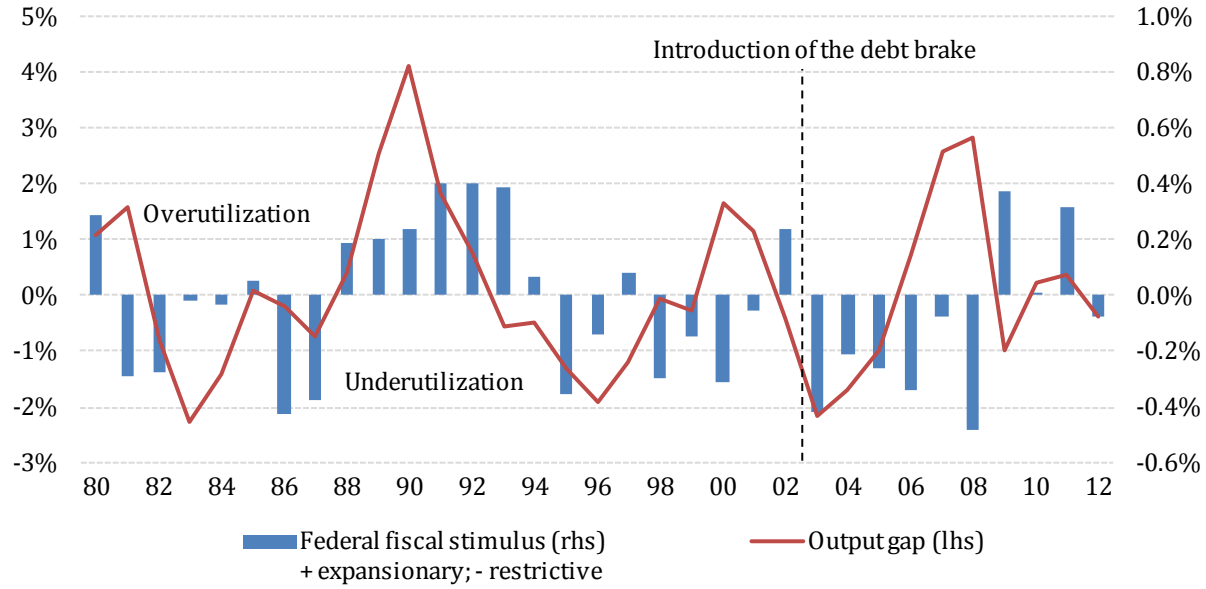
In Figure 7, this fiscal stimulus (as a percentage of GDP) is contrasted with the output gap[18] that shows the degree of capacity utilisation in the economy.[19] The graph shows clearly that discretionary fiscal policy in the 1980s and 1990s was for the most part pro-cyclical. For example, during the upturn at the end of the 1980s, contrary to fiscal policy restraint, the surplus was reduced or the deficit was increased before tending to be decreased again during the following phase of capacity underutilisation (recession and stagnation).

[17] In addition, the cyclically influenced errors in estimating receipts, which have an offsetting effect on the compensation account in the medium term, tend to have an anti-cyclical impact.

[18] According to the mHP filter, cf. Section 5.3.2.

[19] Up until 2001, the fiscal stimulus is shown as a two-year average, in order to eliminate the distortions that arose in the 1980s and 1990s as a result of the two-year tax assessment procedure.

Figure 7: Fiscal stimulus and output gap (in % of GDP)



As illustrated in Section 3.3, a phase of budget consolidation then had to be implemented in the introductory period of the debt brake, in order to allow full adherence to the debt brake regulations from 2007 onward. However, it was possible for the pro-cyclical effect of these relief programs in what was then a recessionary environment to be mitigated by the debt reduction plan.[20]

From 2006 onwards – once the point of structural budget equilibrium was reached – discretionary fiscal policy was neutral or anti-cyclical, i.e. the automatic stabilisers were able to exercise their full impact or were additionally supported. In other words, in the boom years 2006–2008, the debt brake prevented cyclical receipt surpluses from being used to increase expenditure due to the budget surpluses it required. This effect was further strengthened by forecasting errors, as the strength of the upturn and the corresponding level of receipts was underestimated in the budget.

When it transpired in 2009 that the financial crisis would spill over into the real economy, parliament adopted three levels of discretionary stabilisation measures. Thanks to the structural surpluses generated, all three levels were implemented by exploiting the fiscal policy freedom that the debt brake allowed.[21] At this time, the danger of a severe recession could not be ruled out as a scenario given the global economic situation, and the Federal Council and the Federal Administration also reviewed measures involving extraordinary expenditure. However, economic events then turned out much better than expected for Switzerland, and such steps did not prove necessary.

[20] These relief programs were subjected to prior analysis by BAK Basel Economics in order to evaluate their economic impact. They were likely to have a negative impact on gross domestic product in the region of 0.5%.

[21] Cf. the reports of the Swiss Federal Audit Office (SFAO) and the State Secretariat for Economic Affairs (SECO):
- SFAO (2012), "The economic measures of the Confederation 2008–2010: evaluation of the conception and implementation of the stabilisation measures", May 2012
- SECO (2012), "Report on the stabilisation measures 2009/2010", 15 May 2012

Finally, in 2011, parliament adopted a further package of measures – with an additional addendum that likewise required no invocation of an extraordinary payment requirement – with a view to combating the sudden appreciation of the Swiss franc.

Conclusion

By permitting deficits in an economy working below capacity and – equally importantly – requiring surpluses in the reverse situation, the debt brake has made a key contribution in the Confederation's shift from a pro-cyclical fiscal policy to one that is better aligned with the economic cycle. Thanks to the cyclical factor, receipts can act as an automatic stabiliser. Any deterioration of the economic situation can be responded to with a certain amount of flexibility through the ordinary budget, as shown by the experience of dealing with the recession of 2009. Moreover, the instrument of extraordinary expenditure can be called upon in the event of a severe recession. Although the scope for discretionary economic policy measures was limited by the debt brake, the compatibility of fiscal policy with the economic cycle has improved. A key reason for that development is the disciplining effect of the binding rule in years with a buoyant economy.

4.3 Implications for the budget process

The introduction of the debt brake has significantly transformed the budget process. The maximum level of expenditure brings a "top down" element to budgeting, which has a strong disciplinary effect and is conducive to more precise budgeting. Furthermore, the debt brake also has a significant advance effect on financial planning, even in the absence of a legal obligation.

The debt brake is a key pillar of the Federal Council's budgeting process, as it has brought a "top down" approach (i.e. a rule that relates to the overall budget) to a process that otherwise works according to the "bottom up" principle (involving decentralized applications for budget funds). At the start of the Administration's budget process in February, the Federal Council bases its calculations on an updated prior-year financial plan, and measures this against the provisions of the debt brake. If the updated expenditure falls below the level of cyclically adjusted receipts, it instructs the departments of the Federal Administration to draw up their budget proposals on this basis. It can also allocate additional funds to individual task areas. By contrast, if the provisions of the debt brake are not fulfilled, it imposes savings. The departmental expenditure ceilings that arise from the financial plan and the overall expenditure ceiling set by the debt brake also represent the key control parameter as the budget process develops further.

This does not exclude the possibility that the Federal Council may set additional or more ambitious fiscal policy objectives, such as a stabilisation of the general government expenditure ratio or the achievement of structural surpluses, for example. But the requirement to comply with the debt brake prevents annually recurring discussions on the correct level of general government expenditure. Since the introduction of the debt brake, it has become customary for the Federal Council to present a budget to parliament that exceeds the requirements of the debt

brake by a double or triple-digit figure in the millions, so that the Federal Assembly can set or adjust short-term priorities as required without having to compensate in other areas.

The requirements of the debt brake only need to be complied with in the budget; they are not binding for the financial planning process itself from a legal perspective. Nonetheless, the Federal Council checks compliance with the debt brake requirements in the financial planning process too, as this allows it to identify structural deficits at an early stage and initiate the necessary measures. The debt brake therefore strengthens the medium-term view too.

Furthermore, the debt brake has an impact on the structure of expenditure. Setting an upper limit for expenditure tends to favour earmarked forms of expenditure, such as social insurance benefits (retirement and disability insurance, health insurance premium reductions), and third-party shares in federal receipts as laid down in the Constitution. As a rule, short-term relief measures should not have an impact on these kinds of expenditure, which means that cuts have to be made in other areas of expenditure such as defence, education and research, or agriculture. As part of its task evaluation, the Federal Council therefore defined medium-term target growth rates for expenditure by task area. In the 2011–2015 legislative period plan, it resolved to elaborate expenditure policy priorities for the medium term (i.e. over an 8 to 10-year period) too. The risk of significant earmarked expenditure crowding out equally important tasks for the country's economy and prosperity can therefore be identified at an early stage and reduced by means of corresponding measures.

Finally, the debt brake also increases the incentive to ensure greater budget accuracy. There is no longer a systematic incentive to overestimate receipts in the budgeting process, as the resulting structural deficits will be debited to the compensation account and will need to be compensated for at a later stage.

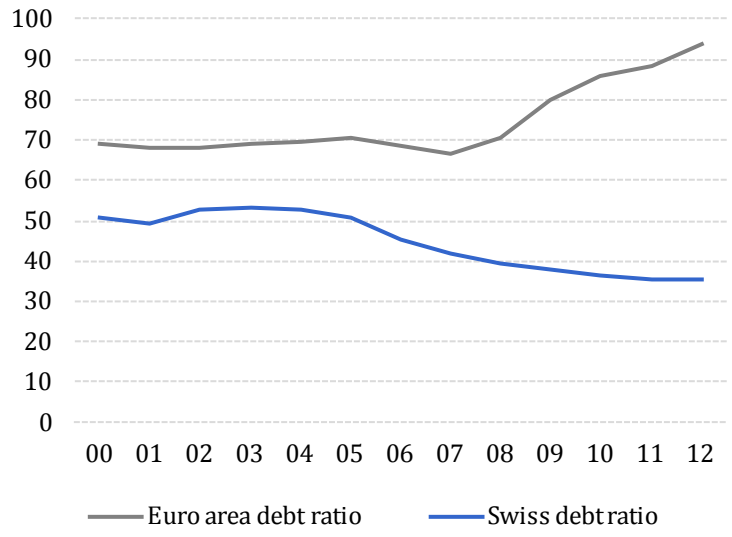
4.4 Switzerland in an international comparison

While Switzerland had a somewhat lower debt ratio than most of the eurozone before the debt brake entered into force, it was still of a comparable magnitude. The picture has changed dramatically in recent years, however. The steady reduction of Switzerland's debt ratio from 2008 onwards stands in stark contrast to the dramatic rise in government debt elsewhere in Europe.

Over the past 15 to 20 years, a range of measures have been taken at both federal and cantonal level with a view to achieving a sustainable budget policy. There are budget restrictions in almost all cantons nowadays (cf. box at the end of this section). As a result, the unsustainable increase in public sector debt in the 1990s has been halted, and a trend reversal has been engineered. This development has been facilitated by comparatively strong economic growth both before and after the 2009 recession. In the eurozone, by contrast, the volume of debt rose sharply in the aftermath of the financial and economic crisis. The repercussions of the crisis

were exacerbated by the slow economic recovery after 2009 and a return to recession in 2012 and probably 2013 too[22].

Figure 8: Comparison of Swiss and euro area debt ratios (in % of GDP)



Aside from the debt ratio, other indicators for Swiss government finances are among the lowest when compared to other industrialised nations. For example, Switzerland's tax-to-GDP ratio, which measures total tax receipts (taxes and social security contributions) as a proportion of GDP, amounted to 28.5% in 2012, while Switzerland's general government expenditure ratio, which is defined as total government expenditure as a proportion of GDP, remains among the lowest in the OECD area. However, it has to be noted that differences in general government structures make international comparisons particularly difficult where the tax-to-GDP and general government expenditure ratios are concerned.[23] Finally, with a surplus ratio of 0.3%, Switzerland's overall fiscal balance was slightly positive last year. This makes Switzerland one of the very few countries to have achieved a surplus in 2012.

The OECD figures for 2012 for both the gross debt ratio[24] and the surplus/deficit ratio[25] show that the state of public sector finances in Switzerland is good overall and has improved noticeably since 2003 (gross debt ratio 2012: 44%, Figure 9; surplus ratio 2012: +0.7%, Figure

[22] According to a European Commission forecast of 3 May 2013

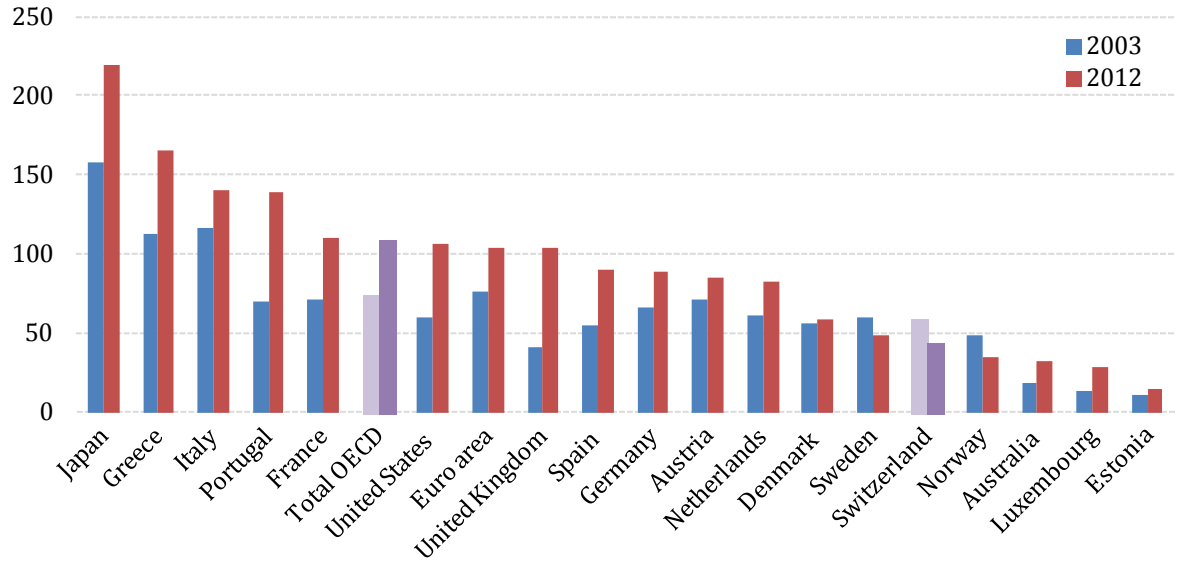
[23] In Switzerland, mandatory health insurance and occupational pension plans are deemed to belong to the private sector rather than the general government sector. Therefore, the receipts and expenditure of health insurers and occupational pension funds are not reflected in the tax-to-GDP ratio or general government expenditure ratio.

[24] The "gross debt ratio" applied by the OECD and IMF is more comprehensive than the debt ratio according to the Maastricht criteria (Eurostat). In addition to debt, the former also takes into account provisions and restricted reserves (in liabilities), and therefore results in a considerably higher figure. Moreover, valuations are at market prices rather than nominal values.

[25] The surplus/deficit ratio according to the OECD is not corrected for special one-off transactions (or "one-offs" to use IMF terminology) and may therefore deviate from the figures calculated by the Financial Statistics Section. In 2012, the difference (+0.4 percentage points) is the result of extraordinary receipts arising from the new allocation of mobile radio frequencies.

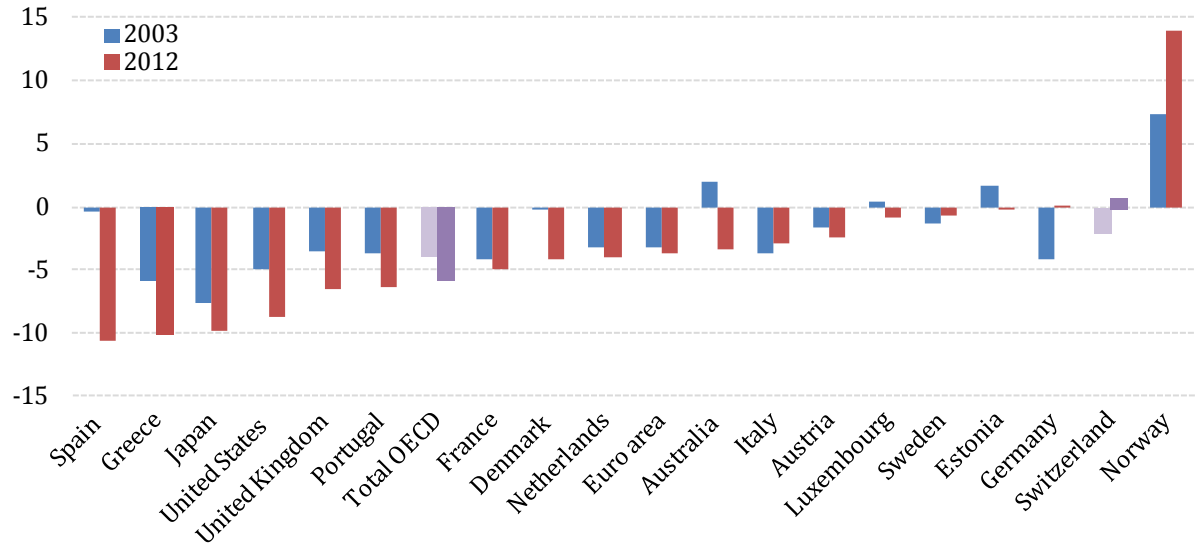
10). Taking the gross debt ratio as a measure, Norway, Australia, Luxembourg and Estonia were the only OECD countries that were in a better situation in 2012.

Figure 9: Gross debt ratios in 2003 and 2012 (in % of GDP)



Source: OECD Economic Outlook 93, May 2013

Figure 10: Deficit/surplus ratios in 2003 and 2012 (in % of GDP)



Source: OECD Economic Outlook 93, May 2013

Debt brakes at cantonal and international level

A debt brake is an institutional instrument designed to prevent excessive indebtedness. In addition to the Confederation, the Swiss cantons (with the exception of Appenzell-Innerrhoden) also have similar fiscal rules to limit indebtedness.[26] The oldest cantonal debt rule dates back to 1929 (Canton of St. Gallen). The Confederation's debt brake has retained the basic ideas of St. Gallen's model in a number of respects, including in particular the obligation of parliament to comply with a guideline in the budget, and the idea of a sanction mechanism in the event of a target being missed in the financial statements. However, the cantonal fiscal rules differ from one another greatly in their design and detail, and all differ from that of the Confederation (see also box in Section 5.2.2 concerning the statement of financial performance). For example, only a minority of cantons need to take account of the economic cycle, and where this does apply it typically manifests itself only in qualitative formulations such as the requirement to manage public finances in a manner appropriate to the economic situation. In addition, the sanction rules are differently designed.

At international level too, fiscal rules have been attracting increasing interest. In 1990, only five countries had fiscal rules in force that were applied at central government level (Germany, Indonesia, Japan, Luxembourg and the United States). In the past two decades, the number of countries with national and/or supranational fiscal rules has risen to 76 (as at March 2012).[27] A significant development here is the Stability and Growth Pact of the EU, which obliges member countries in principle to stay within the limit of 3% of GDP for the annual budget deficit, and a maximum of 60% of GDP for total government debt. However, not all EU member states have adhered to these fiscal rules. Against this backdrop, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union ("European fiscal compact") was signed by 25 EU member states on 2 March 2012. Under this agreement, the contracting states (and the countries of the eurozone in particular) undertake to implement domestic fiscal rules that are binding over the long term.

[26] Source: Conference of Cantonal Finance Directors (2012), "Fiscal policy rules of the cantons, expenditure, deficit and debt brakes", version of 18 December 2012

[27] Cf. International Monetary Fund (2012): "Fiscal Rules in Response to the Crisis – Toward the 'Next Generation' Rules: A New Dataset"

5 Analysis and discussion of specific topics

This chapter analyses and discusses various issues surrounding the debt brake on the basis of the experiences gained over the past ten years on the one hand, and in consideration of future perspectives on the other. First of all, these relate to the objective (Section 5.1). The focus then switches to the scope of application (Section 5.2). Finally, key questions concerning implementation are explored (Section 5.3). The issues raised by the three postulates – Graber Jean-Pierre (10.4022), Landolt (11.3547) and Fischer (12.3552) – are also discussed.

5.1 Objective and monitoring

5.1.1 Objective of the debt brake

The debt brake has played its part in ending the rise in debt and reducing the outstanding level of federal debt by CHF 18 billion. As a result, the minimum objective of debt stabilisation as enshrined in the Constitution has been fulfilled. In the future too, the statutory parameters are likely to prove conducive to a further reduction in nominal debt. As an alternative to debt reduction, the stabilisation of debt could also be targeted. In the view of the Federal Council, there is no need for a change to the existing objective from today's perspective, as the reduction in debt provides fiscal policy leeway and increases the resilience of the economy in the face of crises.

Issue at hand

The minimum objective of the debt brake according to the Federal Constitution is to stabilise the level of debt. However, the debt brake has actually had an effect above and beyond stabilisation: federal debt has been reduced significantly since 2005. One reason for this is the systematic recurrence of budget underruns on the expenditure side, which are likely to be a recurrent feature in the future too. The legal requirements relating to the compensation account mean that budget underruns may be used solely to reduce debt. Politicians have no alternative option of using savings for tax cuts or expenditure increases. The sections below discuss the current and alternative objectives against this background.

Current objective and impact of the debt brake

The objective of the debt brake is defined in Article 126 para. 1 of the Federal Constitution (Cst): "The Confederation shall maintain its income and expenditure in balance over the longer term." A neutral fiscal balance in the medium term implies a stabilisation of gross debt. However, no absolute or relative level of gross federal debt is stipulated.

The required balancing of receipts and expenditure constitutes a minimum objective. Expenditure may not exceed receipts, but the recording of receipt surpluses is a possibility. This is the result of Article 126 para. 2 of the Cst on the one hand, which talks of a *maximum* amount

of total expenditure, and the origins of the debt brake on the other (as a reaction to the increase in debt in the 1990s).

The implied minimum objective of nominal debt stabilisation has been exceeded significantly since the introduction of the debt brake in 2003. By 2012, the outstanding level of federal debt had been reduced by CHF 18 billion from its peak in 2005. The reduction in debt is even more apparent when expressed as a proportion of gross domestic product (GDP), with the debt ratio declining from 27% to 19%. As a result, the increase in debt in the 1990s, which was the reason for the introduction of the debt brake in the first place, has been partially reversed. As illustrated in Section 4.4, the level of government debt in Switzerland is very low compared with other industrialised nations. However, at 35.7% (2012), it remains above the level recorded at the start of the 1990s (1990: 30.9%).

In particular, the reduction in debt was facilitated by the extremely dynamic economic growth in 2004–2008 and the corresponding growth in receipts, which exceeded expectations. Another key contributor was the series of systematic budget underruns recorded on the expenditure side (averaging around CHF 1 billion annually). The decline in debt is reflected in the rising balance of the compensation account. The causes can be identified by means of an analysis of the credits to the compensation account (cf. Section 5.1.3).

Objective and impact of the debt brake

According to the dispatch on the debt brake, the stated objective of the Federal Council was to stabilise debt in nominal terms and thereby gradually reduce the debt ratio (debt as a percentage of GDP).[28] Less clear, by contrast, was that debt would also decline in nominal terms as a result of unutilised credits. The budget underruns were initially designed to counter-finance extraordinary expenditure; from 2010 onwards, the extended rule had the effect of tightening the binding nature of the mechanism. Ever since, deficits in the extraordinary budget have had to be compensated for by a budgeted reduction in ordinary expenditure. A recurring series of budget underruns has facilitated a systematic reduction in debt. Furthermore, supplementary credits have worked out lower than in the era prior to the debt brake, which has had the effect of accentuating budget underruns.

What is the optimum level of debt?

There is no consensus among economists for what constitutes an optimum level of government debt. Although the debt ratio (i.e. nominal debt as a percentage of GDP) is a generally recognised measure for evaluating the economic significance of government indebtedness and the associated risks, academic research has not arrived at a consensus for what a country's debt ratio should ideally be. It is generally accepted that economic growth suffers when the level of debt is very high.[29] The precise level at which economic growth suffers, however, is greatly

[28] Federal Gazette **2000** 4653, Section 1.9.1 (Scope and objectives of the debt brake)

[29] Reinhart, C. M., V. R. Reinhart and K. S. Rogoff (2013), Public Debt Overhangs: Advanced-Economy Episodes Since 1800, Journal of Economic Perspectives, Volume 26, No. 3

disputed.[30,31] The maximum level set by the EU – namely 60% – was established primarily for political reasons, for example.

However, there is widespread agreement that sustainable fiscal policy in the long term requires *stability* on the part of the debt ratio: if the debt ratio keeps on rising, there is a medium to long-term risk of national insolvency. Key to the dynamism of the debt ratio is the relationship between the interest burden, economic growth and the primary balance (the balance excluding the interest burden). As long as the rate of interest payable on debt does not rise above the rate of GDP growth, the interest burden can be covered by new borrowing. Thanks to the low interest rate environment, this prerequisite would currently be fulfilled by the Confederation. If the rate of interest payable on debt rises above the rate of GDP growth, however, a primary surplus is necessary to stabilise the debt ratio. In the case of the Confederation, the latter is guaranteed over the medium term thanks to the debt brake.

Government debt and "intergenerational equity"

The degree to which future generations will be burdened by government debt depends on a number of factors. As long as the debts of each generation can be refinanced and the state is only indebted towards domestic creditors, there will be no burden shift from one generation to the next. In such a scenario, the next generation is effectively paying interest to itself (creditors are paid at the taxpayer's cost), and the interest payments can be passed on further to the following generation by raising new debt. In order for this to be possible, the level of government debt needs to remain economically viable. This in turn is essentially dependent on the level of interest rates and the rate of economic growth.

Given this background, a straightforward comparison of debt burdens fails to produce a complete picture. In addition to outstanding government debt, future generations also inherit the corresponding assets (and therefore pay the debt interest to themselves). If the debts of one generation are used to finance government spending rather than investment, the future capital stock diminishes, thereby causing a decline in the production potential of subsequent generations. The same applies if government debt financing squeezes out private investment.

The question of the correct level of government investment – and therefore the breakdown of government expenditure – needs to be answered independently of the level of debt. Government investment activity may be too low irrespective of whether the level of public sector debt is rising or falling. Discussions on the level of government investment should therefore not be conducted under the banner of intergenerational equity, but should take account of the wider economic parameters and the competition between locations.

Alternative objectives

Generally speaking, the debt brake was designed to bring about a nominal stabilisation of debt (cf. box on objective and impact). However, parliament deliberately left the door open for the pursuit of a more ambitious target than debt stabilisation by ruling out the possibility of reducing surpluses in the compensation account (cf. Section 3.2).

[30] Herndon T., M. Ash, R. Pollin (2013), Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff, Political Economy Research Institute, University of Massachusetts, Amhurst, April 2013

[31] Baum, A., C. Checherita and P. Rother (2013), Debt and Growth, New Evidence for the Euro Area, ECB Working Papers Series, No. 1450

Given the existing provisions of the Financial Budget Act, it is likely that debt will continue to be reduced in the future too. This is because actual total expenditure systematically works out lower than budgeted expenditure (cf. Section 5.1.2). Consequently, even structurally balanced budgets will tend to result in a reduction in debt. Debt reduction is therefore not the direct result of fiscal policy decisions on the part of the parliament when setting the budget, but the indirect result of systematic budget underruns on the part of the Federal Administration.

The current rules are compared with alternative objectives below. The current rules lead to a continual reduction of debt. Possible alternative objectives could include the stabilisation of debt or of the debt ratio:

- *Debt reduction (status quo)*

  In the future, the rate of debt reduction is likely to prove slower than over the last ten years. In other words, the Confederation still has a long way to go before its outstanding debt is eradicated. Even the accumulated deficit could not be eliminated before around 2030.[32] The debt ratio can be expected to fall more rapidly. If the existing trend were to persist, the ratio would fall below the 10% mark by 2026 or so, which would be an exceptionally low figure by international standards, even when the debt of the cantons and communes is taken into account.

  The continued reduction of debt would also entail a decline in interest expenditure, thereby providing the Confederation with further fiscal policy leeway. Furthermore, the resilience of fiscal policy in the face of economic turbulence would be strengthened.

  From an economic perspective, this benefit needs to be set against the corresponding opportunity costs.[33] For example, the funds used to reduce the debt burden would no longer be available for expenditure in growth-promoting areas. The costs of debt reduction could be expected to rise if the fiscal policy parameters were to deteriorate sharply and in a lasting way as a result of external influences, to the extent that tax increases or sensitive expenditure cuts would be needed to comply with the debt brake. In such a scenario, political pressure on the debt brake as an institution would increase, which in turn would bring the risk that the mechanism could be diluted through "workaround solutions" (cf. Section 5.3.4). Despite the recession of 2009, the economic backdrop for the first ten years of the debt brake was rather favourable. It remains to be seen how the costs and benefits of debt reduction will change in the future.

- *Nominal stabilisation*

  Compared with the status quo, a nominal stabilisation of federal debt would create greater fiscal policy leeway in the budget (of around CHF 1 bn), as expenditure-side budget underruns could be used to finance additional expenditure or tax cuts rather than debt reduction. The debt ratio would decline further. The interest burden would remain

[32] It would probably take around 18 years for the Confederation's accumulated deficit (or negative net assets/equity) to be reversed. This is based on an accumulated deficit of CHF 31 billion as of the end of 2012 and the assumption of annual budget underruns (on average CHF 1 bn) as well as repayment of the unemployment insurance loan (2012: CHF 5.0 bn) and the FinPT fund loan (2012: CHF 8.0 bn).

[33] Opportunity costs (or costs foregone) are the benefits lost from alternative forms of action

unchanged with constant interest rates, but would decline over time as a proportion of total expenditure.

Nominal stabilisation would be in keeping with the constitutional provisions on the debt brake. However, aligning fiscal policy with this objective would require changes to the Financial Budget Act (specifically to the provisions relating to the compensation account, cf. Section 5.1.3).

- *Stabilisation of the debt ratio*

  Given the above-mentioned consideration that the long-term sustainability of fiscal policy is guaranteed by a stable debt ratio, and the fact that Switzerland's debt ratio is already low by international standards, an alternative objective of the debt brake could be to ensure that the debt ratio does not rise from its current level. Assuming ongoing economic growth, this would permit a certain increase in nominal indebtedness or a structural deficit of around CHF 1 billion.[34] In the budget, additional leeway of around CHF 2 billion would be created relative to the situation today.

  A stable debt ratio implies that interest expenditure would no longer decline as a proportion of total expenditure as it has hitherto, but would remain more or less stable.

  This objective would be less rigorous than the current minimum requirement enshrined in the Constitution, which is why an immediate change to the Constitution would be required.

Table 2 below summarises the three different objectives, namely "debt reduction", "nominal stabilisation" and "stabilisation of the debt ratio":

[34] The key driver of debt dynamism is the difference between the relevant interest rate and economic growth. The calculation is based on the assumption of a nominal difference of 1 percentage point. Given these parameters, stabilisation of the debt ratio at 19% would require a primary surplus (surplus before interest payments) of approximately CHF 1.1 billion.

Table 2: Evaluation of the three possible debt brake objectives, including a qualitative appraisal (green: positive; yellow: possible disadvantage; red: politically awkward)

	Debt reduction (status quo)	**Nominal stabilisation**	**Stabilisation of debt ratio**
Fiscal policy implications[35]	Structural surpluses (approx. CHF 1 bn) would continue to be generated. Declining interest payable results in new fiscal policy leeway.	Structurally balanced budget. Interest payable remains stable, but declines as a proportion of other expenditure.	Structural deficits (approx. CHF 1 bn). Interest payable rises in nominal terms, but its proportion of the budget remains constant.
Economic implications	Increased resilience in the face of economic and financial crises (sharper decline in debt ratio).	Increased resilience in the face of economic and financial crises (decline in debt ratio).	No increased resilience in the face of economic and financial crises.
Political level	Debt brake enjoys a high degree of political acceptance and is well established.	Balancing of receipts and expenditure is easy to communicate.	Renunciation of successful model and change to well-enshrined constitutional provision.
Need for legal amendments	No changes.	Adjustments to FBA required to prevent surpluses accumulating in compensation account as a result of budget underruns.	Constitutional amendment required in order to permit structural deficits.

Conclusion

In the view of the Federal Council, there is currently no need to act with respect to the impact of the debt brake. Further debt reduction makes sense, as it increases the resilience of the Swiss economy in difficult situations such as financial market crises; international experience has shown that debt ratios can rise very rapidly in times of crisis.

Moreover, thanks to the resulting lower interest burden, debt reduction has the additional benefit of providing greater leeway for federal finances. Finally, political support for the debt brake among the electorate remains strong. Accordingly, the Federal Council has argued in favour of further debt reduction in its responses to various parliamentary procedural requests (motions 11.3486 and 12.3551, interpellation 13.3019). However, the reduction in debt as a result of the debt brake has taken place against a rather favourable economic backdrop.

As far the Federal Council is concerned, a shift away from the existing strategy would be an option only if the costs of generating structural surpluses were to exceed the benefits of further debt reduction. Under such circumstances, the Financial Budget Act could be changed within the corresponding constitutional provision so that budget underruns on the expenditure side could be used for additional expenditure or tax cuts (cf. Section 5.1.3).

[35] The table shows the structural balance in the accounts. The leeway in the budget would rise by CHF 1 billion (nominal stabilisation) or CHF 2 billion (stabilisation of the debt ratio) relative to today.

5.1.2 Dealing with unutilised credits

Systematic unutilised credits have a significant impact on the Confederation's accounting results. These are typically due to a sparing use of resources and prudent budgeting. Unutilised credits make it possible to finance supplementary credits and reduce debt, but they can also lead to a suboptimal allocation of resources.

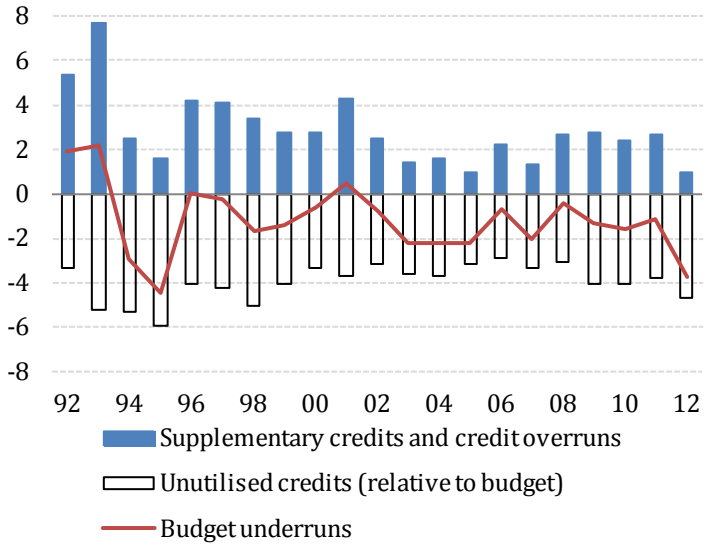
Issue at hand

As a rule, federal expenditure is budgeted in a prudent way. Consequently, at the end of the year, credits are typically left over from the budgetary credits approved by parliament ("unutilised credits"). This section examines the reasons for the prudent budgeting practice, as well as the argument of the Landolt postulate (11.3547) that unutilised credits should be reserved for use in later economic packages.

Systematic unutilised credits

On average, federal expenditure actually incurred during the financial year has repeatedly turned out to be below the level of expenditure proposed in the budget for many years (cf. Figure 11). The reason for these budget underruns is the recurrence of unutilised credits, which typically prove to be greater than the subsequent credit increases in the form of supplementary credits and isolated credit overruns.

Figure 11: Budget underruns as a result of unutilised credits and subsequent credit increases (in % of budgetary credits)



Generally speaking, budget deviations are part and parcel of the budget implementation process. Defining budgetary credits involves uncertainty of a kind that is typically not within the power of the Federal Council or the Federal Administration to influence. The reason for this uncertainty is the fact that funds are allocated significantly in advance of their utilisation. Furthermore, the actual funding requirement depends (at least in part) on events that cannot be planned.

However, the recurrence of unutilised credits in the federal budget cannot be fully explained by these fundamental parameters alone. Unutilised credits can also be attributable to three other specific factors that differ in their origin and impact.

Prudent budgeting practice: comprehensive effect

Article 32 para. 1 of the Financial Budget Act stipulates that budgetary credits must be fixed on the basis of careful estimates of *probable* requirements. As a rule, the credits set in this way may not be exceeded. Only in the event of an unforeseen development may a supplementary credit be applied for. Assuming that the responsible parties in the Federal Administration are uninclined to take risks and shy away from the administrative burden for a supplementary credit, this implies a prudent budgeting practice. Furthermore, the administrative units have a tendency to build in a safety margin for unforeseen expenditure. If a credit is then not fully used up in practice, this is easier to justify than any supplementary credit (loss aversion theory: "losses" are accorded a stronger weighting than "gains").

Unutilised credits likewise arise through an economical approach to approved funds, whereby administrative units refrain from making additional expenditure despite unutilised credits being evident. Yet even if they wanted to use these funds, their freedom of manoeuvre is heavily restricted by the credit specification, i.e. the use of funds for a specific purpose and within a narrow timeframe (although planned changes as part of the new management model for the Federal Administration would relax the credit specification in the own expenditure area).

Essentially, the incorporation of reserves to cover unforeseeable expenditure is wholly compatible with a serious approach to budgeting. This should be viewed as an expression of a principle of prudence at work in fiscal policy rather than a negative state of affairs *per se*. From the perspective of those responsible for the budget process in the administrative units, a prudent approach to budgeting is simply rational behaviour. From an overall perspective, however, widespread adherence to the prudence principle leads to an inefficient allocation of funds. When aggregated, the individual reserves are too high, which in turn restricts the allocation of funds. Furthermore, this phenomenon has implications at the level of overall fiscal policy management. As the debt brake must be applied when drawing up the budget, a prudent budgeting practice implies that the average budget will exhibit a greater (structural) surplus *ex post* (i.e. when the financial statements are drawn up) than it will *ex ante* during the budgeting process itself. Although supplementary credits are certainly required during budget implementation and can be financed with unutilised credits, these supplementary credits account for only a portion of unutilised credits, as Figure 11 shows.

Overestimation of individual receipt positions: implications for third parties' shares in receipts

Budgeted receipts represent an unbiased estimate of the receipts that will actually be realised (cf. Section 5.3). Although receipts are not wrongly estimated on average, it cannot be ruled out that they will be either underestimated or indeed overestimated in certain years. When it comes to taxes or duties due to be assigned to third parties as fixed shares, the reality of such an overestimation results in unutilised credits which are then beyond the influence of the administrative units. In this case, the magnitude of the unutilised credit can be influenced only

by the quality of the receipt forecast. A number of improvements have been made in this regard in recent years, such as in the area of withholding tax. The goal of the Federal Council is to present unbiased estimates; this should ensure that third parties' shares in receipts do not exhibit unutilised credits on average over a multi-year horizon.

Interest rate risk and receipt estimation errors: implications for interest payable

Substantial unutilised credits are frequently registered in the area of interest expenditure. There are a number of explanations for this:

- *Falling interest rates*: If interest rates are lower than budget assumptions, higher premiums (on the issuance of bonds) will result than were forecast in the budget. When reopening existing federal bonds that pay a higher rate of interest than that required by the market, investors are willing to pay a premium. As these premiums have the effect of reducing expenditure when they are booked, this contributes to a reduction in interest expenditure. Furthermore a leverage effect is at work here: changes in market interest rates have significant repercussions due to the full booking of the premium or discount in the year of issuance; these are asymmetrical, as large discounts are avoided due to the withholding tax obligation.
- *Receipt estimation errors*: The Federal Treasury estimates the financing requirement for the budget of the following year on the basis of an extrapolation for the current year. Based on this estimate, the planned issuance volume is set out and interest expenditure is budgeted. If unexpected receipts surpluses occur after this extrapolation, the refinancing requirement will decline towards the end of the year. This results in unutilised credits for interest expenditure in the following year.

The premium/discount realised in the year of issuance is fully captured in the financing statement. As part of the optimisation of the accounting model, the idea of recognising the premium/discount in the financing statement on an accrual basis is currently being reviewed. This would result in a smoothing of the premium/discount in question, which would reduce the fluctuation of interest expenditure. This in turn would address the problem of unutilised credits caused by premiums/discounts.

Ringfencing of funds for use in later economic packages

The postulate submitted by Martin Landolt (11.3547) instructed the Federal Council to review an amendment to the Financial Budget Act "in a way that would facilitate the ringfencing of unutilised credits for use in later economic packages". The background to this postulate is the observation that the Swiss government's anti-cyclical approach to fiscal policy during the recent economic crisis enabled the country to weather the crisis better than most other countries. In the view of the initiator of this postulate, corresponding funds and opportunities ought to be available to the government when the next crisis occurs.

Implementation of such a policy would require a particular set of statistics to capture the accumulated funds, similar to the mechanism that applies to the compensation account and the amortisation account. New regulations would have to be drawn up to address the competition

that would result between the three sets of statistics (compensation account, amortisation account, and the account for economic packages). The same principle would apply to the deployment of funds: expenditure on economic packages is subject to the debt brake. Accordingly, a second category of extraordinary expenditure would be required. However, this would increase the risk of funds not being deployed in a prudent way, as it would hardly be possible to formulate clear and convincing criteria for the use of funds. Overall, the debt brake mechanism would become significantly more complicated as a result of additional rules and a new statistical mechanism. This in turn would lead to a lower degree of transparency and comprehensibility from the standpoint of both parliament and the people.

Furthermore, establishing a fund for economic policy measures would also go against the rationale of the debt brake, which is designed to promote passive anti-cyclical fiscal policy (cf. Section 4.2). The debt brake works – alongside unemployment insurance – as an automatic stabiliser: without any requirement for additional political decision-making, an expenditure surplus occurs in a recession that supports aggregate macroeconomic demand and stabilises economic development. This mechanism is designed to smooth out the typical fluctuations of the economic cycle, and has proved itself, particularly during the recession of 2009. In the event of a severe recession occurring, the debt brake mechanism explicitly envisages the possibility of increasing expenditure above and beyond the ordinary ceiling that applies under the debt brake. The economy can therefore be additionally supported with discretionary fiscal policy measures that go beyond the measures of automatic stabilisation. In other words, an instrument already exists for consistent anti-cyclical fiscal policy.

Under the debt brake, discretionary economic policy measures (i.e. those relating to specific areas) are envisaged only in exceptional cases, as stimulating the economy in a targeted way is a very difficult undertaking in practice. For measures to be suitable, they need to have a "timely, targeted and temporary" effect. By contrast, the political decision-making process and the implementation of agreed measures require time, which in turn gives rise to the risk that the measures will only start to take effect after the economic upturn has kicked in. For that reason, economic policy measures often have a pro-cyclical impact. Ensuring that measures have a targeted economic effect is also a challenge. In a small, open economy such as that of Switzerland, their impact tend to be smaller than in large countries, as a proportion of demand is satisfied by additional imports and has no impact on the domestic economy (lower multipliers). Finally, limiting the period of impact is often difficult to implement in the political process, as the resolved measures are frequently extended after the recession.

Conclusion

Generally speaking, budget deviations on the expenditure side are part and parcel of the budget implementation process. Actual funding requirements can never be planned to the last cent. Because credits may essentially be underutilised but not exceeded, the administrative units tend to build in safety reserves. As these underutilised credits are a recurring feature and the debt brake has to be applied at the budget stage (and not just with respect to the final accounts), they result in an ongoing overfulfilment of the debt brake requirements and therefore a continuous reduction in debt (cf. Section 5.1.3). Moreover, they fulfil an important function for budget management, as they create freedom of manoeuvre with respect to supplementary credits.

Unutilised credits should therefore not be viewed as negative *per se*. Nonetheless, measures have been taken and projects implemented or launched in the recent past that could be expected (as a side-effect) to lead to a decline in the level of unutilised credits (more accurate receipt forecasts and smoothing of interest expenditure). However, it is impossible to prevent the occurrence of unutilised credits altogether, due to the nature of the budget system. This phenomenon will thus manifest itself in the future too.

The establishment of a permanent fund for economic policy measures should be rejected. Such a fund would contradict the rationale of the debt brake, which relies first and foremost on the federal budget having the effect of an automatic stabiliser, and only envisages discretionary measures being taken in exceptional cases, as these are difficult to implement in practice. An instrument for consistent anti-cyclical financial policy is already in place and has proven its worth in this respect.

5.1.3 Development and management of the compensation account

Around two-thirds of the almost uninterrupted increase in the balance of the compensation account is attributable to receipt forecasting errors, namely an underestimation of Swiss economic growth and the belated recognition of the withholding tax trend. The remaining third is attributable to budget underruns. As these will continue to be a regular feature in the future, it is reasonable to expect a continued rise in the compensation account balance.

Issue at hand

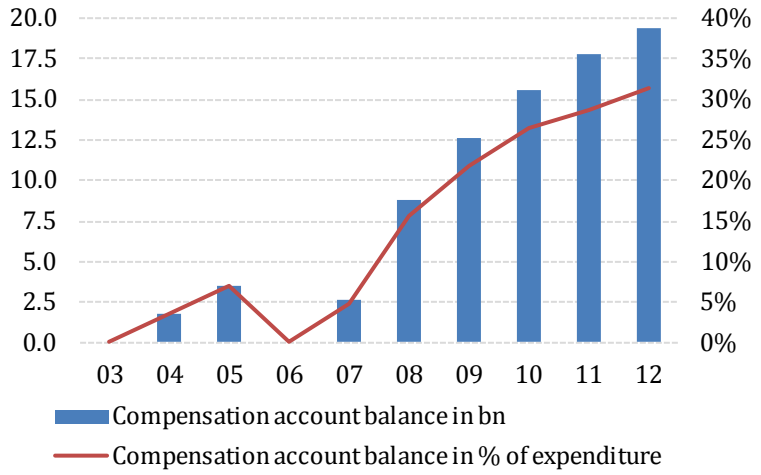
The rising balance of the compensation account indicates that the minimum requirements of the debt brake have been regularly exceeded since 2003. One reason for this is the systematic occurrence of budget underruns, which are registered in the compensation account and result in a reduction in the level of debt. Depending on the objective and the desired impact of the debt brake (cf. Section 5.1.1), the question arises as to how the rules of the compensation account might be changed in order not to have to use the funds accruing through budget underruns solely for the purposes of debt reduction. The pending motion of Roland Fischer (12.3551) contains a corresponding proposal for the anticipation of unutilised credits.

Reasons for the development of the compensation account

The compensation account of the debt brake receives the structural surpluses in accordance with the financial statements, provided these were not reserved for the amortisation of extraordinary expenditure in the budget. The compensation account exhibits a rising balance (cf. Figure 12), with structural breaks after the end of the introduction phase (end of 2006) and at the time of the new regulations for the extraordinary budget (beginning of 2010).[36]

[36] At the end of 2006, the balance of the compensation account was primarily attributable to the undershooting of the *debt reduction plan* from the 2003 relief package (CHF 6.0 bn of CHF 6.3 bn). Because the reason for this was not a failure to comply with the *debt brake requirements* (structural deficits were targeted up to 2005), the balance of the compensation account was reset to zero at the end of 2006. Since 2010, the budgeted structural surpluses have been used to counter-finance extraordinary expenditure and have been booked to the amortisation account for this

Figure 12: Development of the compensation account since the introduction of the debt brake (in bn / % of expenditure)



The credits that led to the current compensation account balance of CHF 19.4 billion were attributable to the following causes:

Table 3: Contributions to the balance of the compensation account at year-end 2012

Total	**19.4 bn**	**100%**
Budgeted structural surpluses[37]	0.4 bn	2%
Forecasting errors for receipts and economic cycle (cyclical factor)	12.7 bn	65%
Overestimation of expenditure (budget underruns)	6.3 bn	32%

The budgeted surpluses account for the smallest proportion. The dominant factors are deviations from forecast (structural) receipts and deviations on the expenditure side. Where receipts are concerned, additional receipts of an unexpected magnitude were recorded in 2007–2011. On the one hand, this was the result of the boom of 2007–2008, the dynamism of which was underestimated, with positive consequences for direct federal tax receipts (cumulated CHF 2.9 bn; equivalent to 15% of the compensation account balance at the end of 2012). On the other hand, the growth trend in the area of withholding tax, which first manifested itself in 2005, was initially not recognised and then underestimated for some time (CHF 9.0 bn; 47%).

On the expenditure side, budget underruns occur systematically. The reason for this is that unused budgetary credits (unutilised credits) are typically much higher than the increase in budgetary credits during the corresponding year (supplementary credits and credit overruns). According to the financial statements, therefore, expenditure has always been much lower than

purpose. At the end of 2010, the balance of the compensation account was therefore reduced by CHF 1 billion (to mirror the accumulated deficit of the extraordinary budget in 2007–2009).

[37] Planned structural surpluses 2007–2009, following deduction of CHF 1 billion when the extended rule entered into force. From 2010, the budgeted structural surpluses were credited to the amortisation account.

estimated in the budget (cf. Section 5.1.2). Overall, these budget underruns contribute a third to the current balance of the compensation account. It is not possible to reduce this credit balance.

Whereas forecasting errors on the receipts side are likely to be reduced thanks to improved forecasting methodology, budget underruns on the expenditure side are likely to occur systematically in the future too. Give this backdrop, the balance of the compensation account will continue to grow; mirroring this effect, nominal debt is likely to continue to decline, thereby increasing fiscal policy leeway in the future.

Discussion of potential adjustments

The way the rules governing the compensation account are designed depends on what objective is being pursued with the debt brake (cf. Section 5.1.1). This is particularly true with respect to the question as to whether a further reduction in debt should be targeted, or whether the level of debt should be stabilised in nominal terms in the future. If the funds from budget underruns were to be made freely available at some point (abandonment of the policy of nominal debt reduction), the Financial Budget Act (FBA) would have to be amended. The following three restrictions should be borne in mind here:

- The rule must be *part of permanent FBA legislation*, and not incorporated into the FBA as a transitional provision via special legislation; otherwise, the successful rule-based fiscal policy would be eroded.
- The compensation account must at least retain *a fluctuation reserve for forecasting errors regarding structural receipts*. The fluctuation reserve could be laid down as a percentage (e.g. 6% of the expenditure ceiling, like the sanction threshold in the event of a deficit), or it could contain the actual estimate errors in structural receipts (and possibly supplemented with a minimum as a percentage of the expenditure ceiling).
- *No retroactive application of the rule amendment:* the credits accrued to the compensation account up to this point should be eliminated (minus the necessary fluctuation reserve). Rationale: allowing access to these credits from the past would not only reverse the debt reduction already achieved, but would also reverse the leeway gained thanks to the lower interest burden.

Two alternatives in particular would be conceivable with respect to a change in the rules:[38]

- *Symmetrical management*: freely disposable credit balances in the compensation account could be used to increase the expenditure ceiling in the budget or for purposes of debt reduction. The decision would be made on a discretionary basis, for example every four years as part of the legislative period planning process.
- *Anticipation of unutilised credits*: the expenditure ceiling in the budget could be increased in keeping with the average budget underrun; in other words, unutilised credits would be anticipated. Budget underruns and budgeted structural surpluses would no longer be credited to the compensation account (which would represent a return to the proposal

[38] The use of unutilised credits for economic packages discussed in the previous section would likewise require adjustment to the provisions governing the compensation account.

put forward in the dispatch on the debt brake); they would be used irreversibly for debt reduction purposes. The compensation account would therefore remain asymmetrically managed: deficits would have to be reduced, while withdrawals would continue to be prohibited. As a rule, a budget exhibiting a structural deficit would be passed. It would then (on average) be structurally balanced *ex post* or would exhibit a surplus.

Both variants would allow a decision to be made as to whether debt should continue to be reduced or whether funds should be made available for specific purposes (additional expenditure or tax cuts). The difference is that variant 1 would envisage decisions being made every four years, which would permit temporary priorities to be set. In the case of variant 2, the increase in the expenditure ceiling would take place automatically, which would facilitate the use of funds for (mostly permanent) tax cuts or the intensification of tasks.

Conclusion

The systematic occurrence of budget underruns results in a continuous reduction in debt, which is statistically captured in the compensation account. If the Confederation were to move away from debt reduction, political decisions would regularly have to be made on how disposable surpluses in the compensation account should be used in the medium term. Alternatively, the unutilised credits could be anticipated and added to the expenditure ceiling every year. Both adjustments would be in keeping with the constitutional provisions, and would not lead to a rise in indebtedness.

5.1.4 Development of the amortisation account

High extraordinary receipts and expenditure were booked before the extended debt brake rule was created and the amortisation account was set up (2010). Over the last three accounting years (2010-2012), the corresponding credits and debits to this account have remained in balance. The idea of precautionary savings and amortisation of the deficit has proved itself.

Issue at hand

Extraordinary expenditure is reserved for exceptional cases, and therefore also enjoys privileged treatment by the debt brake as an exception to the rule. In 2010, the amortisation account was introduced. This statistical capturing of the extraordinary budget is designed to prevent extraordinary expenditure leading to a rise in debt. The degree to which extraordinary expenditure has been counter-financed is highlighted below.

Extraordinary budget

The development of the extraordinary (abbreviation: e.o.) budget is governed by the irregular occurrence of e.o. transactions (cf. Figure 13). The greatest inflows on the receipts side, with a volume of over CHF 1 billion, arose in particular from the sale of Swisscom shares in 2005 and 2006. The receipts from the sale of the surplus gold reserves of the SNB (2005) were passed on to old age and survivors' insurance in 2007. By contrast, the expenditure for the UBS mandatory

convertible notes (2008) was offset in the following year by receipts from their sale (2009). Considerable expenditure was also incurred for the first one-off deposit in the infrastructure fund and the transition to the new fiscal equalization (NFE) system (both 2008). Expenditure in excess of CHF 1 billion was also incurred for the restructuring contribution to the SBB pension fund (2011).

Figure 13: Extraordinary receipts and expenditure as well as amortisation from 2010 (in bn)

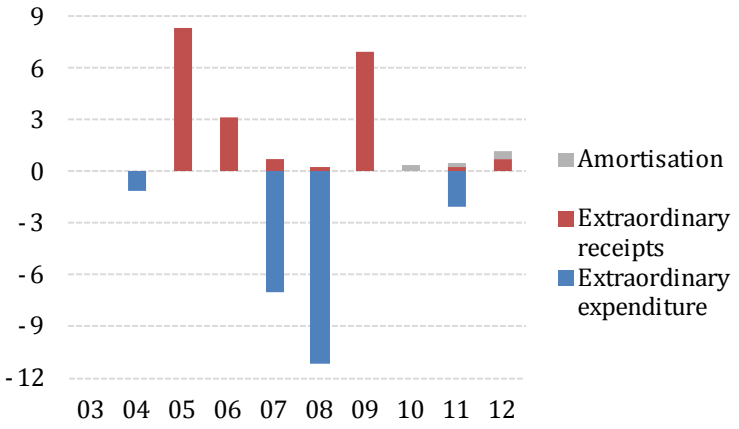
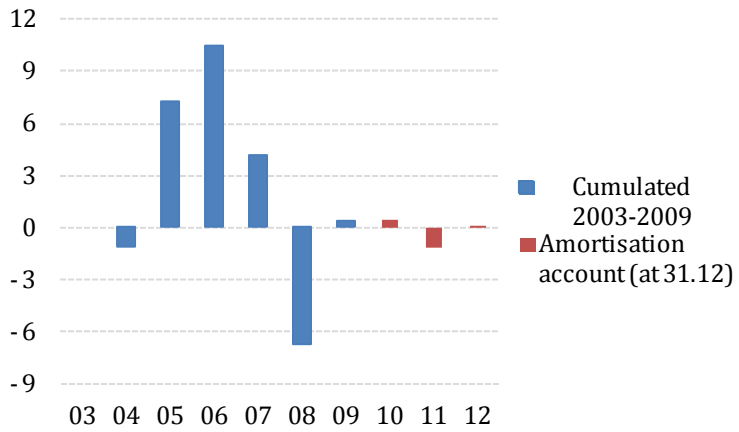


Figure 14: Extraordinary budget and amortisation account from 2010 (in bn)



Securing counter-financing

In order to ensure the counter-financing of e.o. expenditure, the amortisation account was introduced in 2010 (cf. Figure 14). This records all e.o. transactions with the exception of restricted receipts, which are offset by the corresponding expenditure. For this reason, the premature redistribution of the CO_2 tax on fuel (2010) was not recorded in the amortisation account. This e.o. expenditure was offset by e.o. receipts from the introduction of the tax (2008/2009).

The amortisation account can also record budgeted structural surpluses. These contributions from the ordinary budget likewise serve to counter-finance e.o. expenditure (as long as the

structural surpluses in question are actually realised). Amortisation of this kind was undertaken in 2010–2012 in order to cover the e.o. expenditure for 2011.

Conclusion

At the end of 2012, the balance of the amortisation account was CHF 46 million. In other words, the (cumulated) e.o. budget is essentially balanced. This equilibrium was achieved at an early stage, not least thanks to the e.o. receipts from the new allocation of mobile radio frequencies (2012). A genuine "acid test" of the supplementary rule – namely counter-financing solely through savings in the ordinary budget within six years – therefore did not materialise.

However, the statutory basis provides sufficient flexibility to enable the budget to absorb even a burden of this nature, since any restructuring of the ordinary budget takes priority over the balancing of the amortisation account, and the amortisation deadline begins anew with each new occurrence of e.o. expenditure. Furthermore, parliament has the power to extend the deadline further "in special cases".

5.2 Scope of application and overall management

5.2.1 Treatment of investments

If investment is incorporated into a fiscal rule, it is potentially exposed in the event of increased cost-cutting pressure, as it represents expenditure that is not ringfenced by legislation. However, analysis shows that investment has not been "crowded out" of the federal budget by ongoing expenditure since the introduction of the debt brake. Indeed, the proportion of the budget accounted for by investment today is slightly higher than that of the 1990s. The same is true when investment is expressed as a proportion of GDP (investment ratio). Investment peaked in the years 2000/2001.

Issue at hand

The question of whether investment expenditure should be subject to the debt brake or enjoy privileged status was discussed in detail in the dispatch on the debt brake.[39] The conclusion arrived at was clear: investment expenditure should also be covered by the debt brake in order to facilitate the unadulterated setting of budget priorities (without favouring a particular type of expenditure) and to avoid misplaced politico-economic incentives that could have problematic consequences.

Broadly speaking, the approaches taken so far at international level to finance investment through new indebtedness ("golden rules") can be said to have failed.[40] By contrast, the question arises as to whether subordinating investment to the rules of the debt brake has resulted in a squeezing of investment in the federal budget, and whether such a development needs to be corrected.

Two different perspectives

Government investment can be defined in different ways. Two perspectives in particular stand out:

- The first is based on the *definition of the Financial Budget Act*. According to this, investment comprises payments to third parties to create assets that serve administrative purposes.[41] Here the scope can be either the federal accounts on a stand-alone basis (central Federal Administration) or the wider state financial statements, i.e.

[39] Federal Gazette **2000** 4653, Section 1.6.4 (How should investment be treated?)

[40] The rule states that new indebtedness is permissible to the extent of new investment (or more precisely: debt-increasing expenditure is permissible if assets are not reduced as a result). Broadly speaking, the golden rule strategy can be said to have failed, not least because of a lack of clear provisions on implementation (such as experienced by Germany and the UK, for example). Take the comments of the Deputy of the German Council of Experts on the German rule, for example: "The experiences of the last few years have […] shown that Article 115 of the German Constitution [golden rule] […] is largely ineffectual in terms of its debt-containing impact." Source: German Council of Experts on Economic Development (2007), "Limiting government indebtedness effectively: expert opinion drawn up on behalf of the Federal Minister of Economics and Technology", Wiesbaden, March 2007.

[41] Article 3 para. 1b of the FBA

the federal financial statements plus the separate accounts (FinPT fund, infrastructure fund, ETH Domain and Swiss Alcohol Board).

- The second perspective relates to investment in the economic sense, and contains expenditure in the "Education and research" and "Transport" *task areas* in accordance with the federal financial statements. In these task areas, a positive impact on economic growth has been demonstrated.[42] From an economic perspective, the corresponding expenditure – namely investment in human capital – can be considered just as important as infrastructure investment. However, this is by its nature very heterogeneous. For example, transport expenditure also encompasses infrastructure operating costs that do not constitute investment.

For analysis purposes, the data was adjusted for extraordinary expenditure and structural breaks (cf. Table 4) in order to permit a comparison over time.

Table 4: Overview of the applied delimitations (investment in the narrower and broader sense) and adjustments

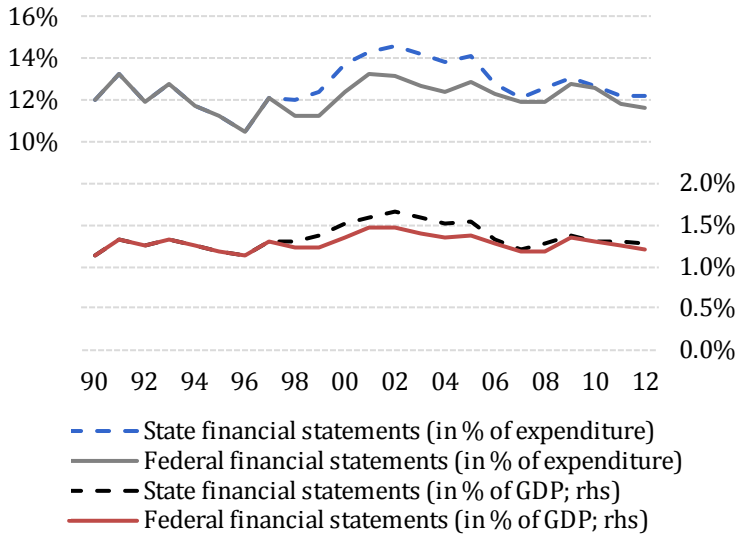
Investment in accordance with Financial Budget Act (investment in narrower sense)
Investment expenditure as per federal financial statements
Adjustments
- Elimination of extraordinary expenditure
- Removal of structural breaks (e.g. unemployment insurance, outsourcing of federal operations, ETH structural break)
Investment expenditure as per state financial statements
Consolidation
- Elimination of deposits from federal financial statements, consideration of funds' expenditure
Investment from an economic perspective (investment in broader sense)
Expenditure for "Transport" and "Education and research" task areas as per federal financial statements

Development of proportion of investment and investment ratio

The proportion of investment is equivalent to investment (in the narrower sense) as a proportion of expenditure in accordance with the federal or state financial statements. When measured against expenditure in the federal financial statements, the proportion of investment has fluctuated at around 12% of total expenditure over the long term, while the investment ratio comes in at about 1.3% of GDP (averages 1992–2012; cf. Figure 15). When the state financial statements – which include the separate accounts – are taken as the basis, the proportion of investment is slightly higher (+0.5 percentage points).

[42] Colombier, C. (2004), Government and Growth, FFA Working Paper No. 4

Figure 15: Investment expenditure in the narrower sense (adjusted; in % of ordinary expenditure or GDP)



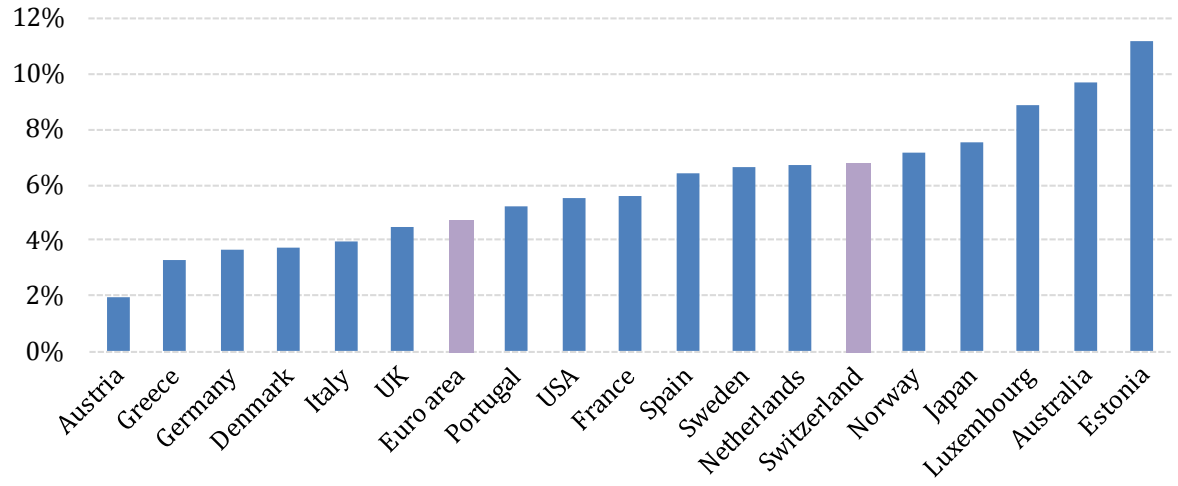
The proportion of investment since the introduction of the debt brake is rather higher than in prior years (+0.3 percentage points) if investment is viewed in the narrower sense. This is true of investment both in the federal financial statements and in the state financial statements (cf. Table 5). The proportion of overall expenditure accounted for by investment in the broader sense (task perspective) is slightly lower in the debt brake era than in the period prior to its introduction (-0.3 percentage points), as the strong growth in expenditure on education and research in recent years has only gradually had an impact on this proportion.

Table 5: Proportions of investment (adjusted; in % of ordinary expenditure)

	Averages		
	1993-2002	2003-2012	1993-2012
Investment as per federal financial statements	12.0%	12.3%	12.1%
Investment as per state financial statements	12.6%	12.9%	12.8%
Transport & education/research expenditure as per federal financial statements	23.9%	23.6%	23.7%

Internationally, proportions of investment can meaningfully be compared only at general government level, as the division of tasks between the different levels of government varies greatly from country to country. In such a comparison, Switzerland lies in the upper middle range with 6.8% of expenditure in 2011 (cf. Figure 16), whereby the proportion of investment of the Swiss state (excluding the private sector) is lower than that of the Confederation, since the social security funds, for example, which account for a substantial proportion of state expenditure, channel virtually no funds into investment.

Figure 16: Proportions of investment of selected states in 2011 (in % of expenditure)

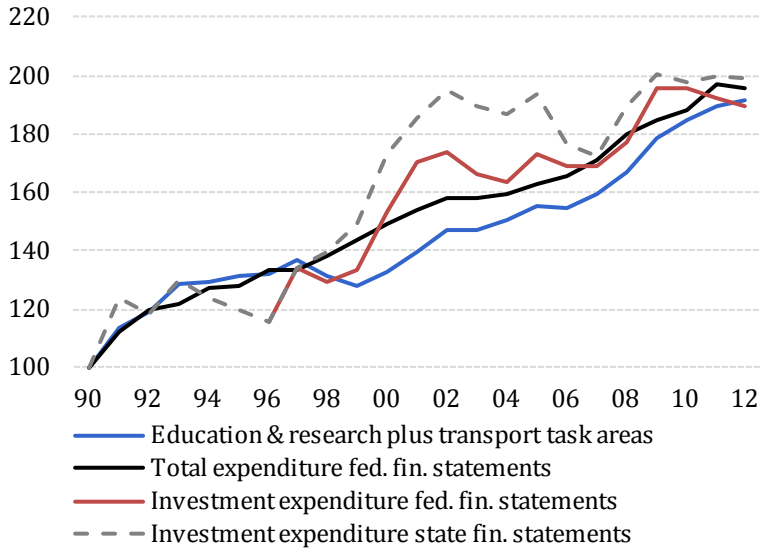


Source: OECD statistics

Investment spikes

Despite the relatively stable proportion of investment, occasional investment spikes can be observed over the last 20 years. On the one hand, there were a number of expenditure spikes for major railway projects during this period (NRLA, Rail 2000). On the other, significant investment was channelled into motorway construction, involving extensive projects in connection with the completion of motorway networks. These projects led to a growth spike in both transport areas in the years 2000/2001, i.e. before the introduction of the debt brake (cf. Figure 17, Investment expenditure as per federal financial statements). In the years thereafter, (up to 2007), federal investment expenditure remained largely stable.

Figure 17: Development of investment expenditure (indexed: 1990=100), in narrower sense (as per federal and state financial statements) and in broader sense (expenditure on education & research as well as transport)



Where *development by task area* is concerned (investment in the broader sense), it is clear that growth up to 2002 remained below average growth expenditure (cf. Figure 17). Thereafter, the gap narrowed again, as both task areas recorded above-average increases. What is not apparent in this illustration is that both task areas had their own growth peaks, namely around the turn of the millennium in the case of transport expenditure (NRLA and Rail 2000), and in the last few years in the case of education and research expenditure.

Conclusion

Including investment is very important for the effectiveness of the debt brake, as it means that the entire federal budget is covered. Analysis shows that the introduction of the debt brake has not had the effect of displacing investment. The proportion of investment in accordance with the federal financial statements has fluctuated at around 12% of expenditure for the last 20 years. The same is true for the investment ratio, which works out at 1.3% of GDP on average. An indicator of the sufficient magnitude of public sector investment is the fact that Switzerland's infrastructure regularly fares very well in international comparisons with respect to both extent and quality.[43] In an international comparison too, the proportion of investment lies in the upper middle range at 6.8% of state expenditure

There was a peak in investment around the year 2000 as a result of major projects, namely NRLA and completion of the motorway network; investment activity was then reined back in to a sustainable level for the long term. Under the debt brake too, there are solutions for the problem of investment peaks thanks to special funds. Admittedly, the expenditure of the funds (FinPT fund/infrastructure fund, i.e. railway infrastructure fund/planned motorways and urban transport fund, respectively) is not managed via the debt brake. But the risk of the debt brake being circumvented is reduced by the fact that the funds are managed via the federal budget (and are therefore subject to the debt brake), and in the case of the FinPT fund there is also a statutory debt repayment requirement.

For these reasons, the Federal Council sees no need to move away from the current framework and limit the debt brake's scope of application. For economic reasons, however, it is advisable to keep a close eye on the development of investment at all times. An expansion of reporting in the budget and the financial statements is planned in this respect.

[43] Cf. the IMD World Competitiveness Rankings 2013 (http://www.imd.org/news/World-Competitiveness-2013.cfm) and WEF 2013–2014 (http://www.weforum.org/issues/global-competitiveness), for example

5.2.2 Management on the basis of the statement of financial performance

The debt brake is calculated on the basis of receipts and expenditure in the financing statement. If the statement of financial performance were used as the basis instead, this would necessitate a change in the target parameter (net assets/equity rather than gross debt). Moreover, new investment would enjoy privileged status, as this only feeds through into the statement of financial performance with a time lag. The reduced rigor that would be associated with a change in the target parameter is not covered by constitutional provisions.

Issue at hand

Since its introduction in 2003, the debt brake has been geared around the financing statement. The control parameter of the debt brake is the overall fiscal balance, which is the result of the juxtaposition of current receipts and expenditure together with investment receipts and expenditure. As a result of the postulate submitted by Roland Fischer (12.3552), the Federal Council was instructed to review implementation of the debt brake on the basis of the statement of financial performance and to draw up a corresponding report.

The justification behind this mandate was that major investment projects and payment spikes could lead to other expenditure being displaced, and that undesirable restrictions and fluctuations could emerge in the fulfilment of tasks as a result. In addition, the postulate argues that there is a risk of too little being invested in the construction and maintenance of infrastructure.

Lack of a connection to gross debt and economic policy

A change in the control parameter (balance of the statement of financial performance) would involve a change in the target parameter (level of net assets/equity). However, as the statement of financial performance shows the change in net assets/equity (assets less liabilities), such a fiscal rule would stabilise the Confederation's (negative) net assets/equity and not gross debt. While there is a close and a direct correlation between the fiscal balance and the development of debt, this correlation does not apply where the result of the statement of financial performance is concerned.

The receipts and expenditure of the Confederation as captured in the financing statement form the basis for evaluating the impact of the federal budget on the economic process. The statement of financial performance is not suited to this task, as it does not show investment expenditure that impacts demand on the one hand, yet includes valuation changes that do not have an impact on the economic process on the other.[44]

[44] For this reason, it is standard international practice to use the financing statement or similar models. For example, the financial statistics standards of the International Monetary Fund/IMF (Government Finance Statistics/GFS) may use the accrual method for transactions, but only transactions that can be managed through fiscal policy are reported as revenue and expense. In particular, valuation changes are excluded. In addition, investment expenditure is also taken into account to evaluate the economic impact, so ultimately a financing statement results.

Debt brake on the basis of the statement of financial performance – static simulation

The New Accounting Model (NAM) introduced by the Confederation in 2007 ushered in a full statement of financial performance. Thanks to this, all the prerequisites are in place for calculating the debt brake on the basis of the statement of financial performance for the years 2007–2012. The result of this simulation is summarised in Table 6 (cf. Appendix 3 for more details). When interpreting the results, it should be taken into account that the retrospective calculation is static in nature, i.e. any changes in behaviour on the part of political players cannot be shown.

Table 6: Difference in leeway using the statement of financial performance (in mn)

	2007	2008	2009	2010	2011	2012	Total
Budget	**-241**	**430**	**1'044**	**315**	**544**	**123**	**2'215**
of which							
Premiums/discounts on bonds	51	43	196	-285	-115	122	14
Assumption of motorway stretches	0	150	695	1	140	17	1'003
Special cases (SIFEM, Sapomp)	0	0	0	0	309	0	309
Financial statements	**-414**	**161**	**3'756**	**580**	**1'111**	**456**	**5'651**
of which							
Valuation of significant interests	1'352	896	1'403	956	-22	1'418	6'002
Premiums/discounts on bonds	160	160	-51	-142	-374	-726	-972
Withholding tax provision	-1'500	-700	900	-400	1'100	-500	-1'100
Assumption of motorway stretches	0	0	1'024	2	144	19	1'189
Special cases (BLS, SIFEM, Sapomp)	0	0	336	0	246	0	581

Specifically, the debt brake requirements were calculated for the budget and financial statements on the basis of the statement of financial performance.[45] The differences between the two perspectives, i.e. financing statement on the one hand and statement of financial performance on the other, are considerable:

- In the *budget*, the maximum permissible expense would work out CHF 2.2 billion higher than the maximum permissible expenditure with the financing perspective. On average, the additional leeway amounts to some CHF 370 million annually, although the differences fluctuate quite a lot from year to year.
- The differences when it comes to the *financial statements* are much greater. If the debt brake had been based on the statement of financial performance, the credits in the compensation account in the years 2007–2012 would have been CHF 5.7 billion higher (or around CHF 940 million annually on average)

The differences are attributable to the fact that the underlying transactions are shown in a different way in the statement of financial performance than in the financing statement.

[45] In other words, the maximum permissible ordinary *expense* is equivalent to ordinary *revenue* multiplied by the cyclical factor.

Key differences: valuations and when items are recognised

A key role is played by the *valuation of significant interests*. Valuation changes are reflected fully in the statement of financial performance, whereas only the receipts from such interests figure in the financing statement.

There are also major differences in the treatment of *premiums and discounts* on the issuance of Confederation bonds. In the financing statement, premiums and discounts are fully recorded in the year of issue, whereas the statement of financial performance adopts an accrual approach.

There are likewise significant differences when it comes to the *creation and reversal of provisions* (particularly for withholding tax). In the statement of financial performance, a change in provisions feeds through into the statement result, whereas the financing statement is unaffected by such changes.

In addition, various *special cases* regularly have to be accounted for which are treated differently in the statement of financial performance than in the financing statement. In the period under observation, the revenue from the assumption of stretches of motorways from the cantons is a particular case in point. The proportion of the stretches taken over by the Confederation that was financed by the cantons results in revenue for the Confederation which is not recognised in the financing statement. Also worthy of mention in this context is the reversal of the impairment loss on the double track loan of BLS AG to the amount of the federal participation in the newly founded BLS Netz AG (CHF 336 mn), the revenue from the SIFEM portfolio transfer which is neutral from a financing statement perspective (CHF 416 mn), and the sale of SAPOMP Wohnbau AG (investment receipts of CHF 170 mn from the repayment of share capital).

The significant differences between the budget and the financial statements (particularly in the area of significant interests and provisions) would pose a challenge to a fiscal rule based on the statement of financial performance. Although performance review would be possible in the final financial statements, the sanctions for any non-compliance with the requirements (e.g. a savings program in the event of a negative balance on the compensation account) would have to be adjusted or eliminated in the case of (externally caused) valuation changes. Moreover, in the case of valuation questions, there is a certain amount of discretion that could be exploited when considering optimisation considerations. The question therefore arises as to whether and how this discretion should be restricted.

The differences between the statement of financial performance and the financing statement that result from differences in when items are recognised (e.g. depreciation of capital goods, distribution of premiums over the term of bonds in accordance with the accrual principle) are the inevitable result of the accounting system and should not – with the exception of the potential incentive effect (cf. below) – be viewed as problematic.

False political incentive as a result of the privileged treatment of investment

The financing statement is an ideal basis for setting political priorities, as all planned activities are covered by a single statement. The stable development of investment expenditure (cf. Section 5.2) is an indicator that the debt brake based on the financing statement has a disciplining impact on investment behaviour. This disciplining effect would not apply with the

statement of financial performance as the basis. As higher investment expenditure only feeds through into the statement of financial performance to the extent of depreciation and value adjustments, together with occasional higher operating expenses, investment would effectively enjoy privileged treatment relative to general expenditure. This is the particularly true of internal investment (particularly motorways and buildings), as investment contributions are fully adjusted in the year they are paid out.

Accordingly, political decision-makers would have a false incentive to prioritise internal investment over other expenditure, as the actual costs of such investment would only feed through in subsequent years (after the legislative period), whereas the political benefits would be reaped immediately. The resulting additional expenditure would have a negative impact on the development of debt and lead to a restriction of fiscal policy leeway in the future. A solution for this false incentive would have to be worked out if the debt brake were to be linked to the statement of financial performance. However, an additional rule would further increase the complexity of the mechanism.

Relationship between statement of financial performance and budget rules in the cantons

The accounting system applied by the cantons revolves around the statement of financial performance; a financing statement is not drawn up. In addition, the Harmonised Accounting Model for the Cantons and Communes (HAM2) also includes a statement of financial position and a statement of investments. The Model Financial Budget Act (MFBA) approved by the Conference of Cantonal Finance Directors as a formal recommendation on 25 January 2008 covers both *budget balancing* and *debt containment*.

- On the one hand, the cumulated result of the statement of financial performance should be balanced in the medium term, in other words, net assets/equity should be at the same level at both the beginning and end of a particular economic cycle.
- In addition, the increase in liabilities from investment activity should be restricted. The self-financing ratio for net investment should amount to at least 80% in the budget if the net indebtedness ratio (liabilities less non-administrative assets based on tax revenue) amounts to more than 200%. If the self-financing ratio is more than 100%, the level of debt can be reduced, whereas if it falls below this value new debt will be accumulated.

The MFBA serves to guide the cantons. However, the cantons can take account of their own particular needs when implementing budget rules. Almost all the cantons apply a *fiscal rule* that relates to the *balance of the statement of financial performance*. A number of cantons do not go any further than a general formulation that calls for the budget to be balanced in the medium term. By contrast, other cantons require adherence to specific deficit limits or even the annual balancing of the budget. What the cantons do not take into account is the economic cycle situation as incorporated into the Confederation's debt brake mechanism. That said, the requirement to balance the budget in the medium term enables the cantons to take account of cyclical fluctuations. In addition, various cantons have exemption clauses that permit rule violation in specific situations (e.g. economic slumps, natural disasters).

Less widespread are regulations that envisage a *limitation of new debt arising from investment activity*. Around a third of the cantons have thresholds for the self-financing ratio which lie at between 70% and 100%, depending on the canton. Adherence to these thresholds is in some cases mandatory on an annual basis, while in other cases it may extend over a longer period. The obligation to adhere to these thresholds may be linked to certain conditions. Very few cantons have regulations in place that refer directly to the level of debt. Instead, the yardsticks that apply are tax revenue or gross domestic product. As with the rules on balancing budgets, there are exemption clauses here too which permit the ceilings to be exceeded in certain circumstances.

Possible constitutional amendment

According to the current wording of the Federal Constitution (Art. 126 paras. 2–4 Cst), the debt brake is based on expenditure and receipts, and is therefore aligned with the financing statement. In the dispatch on the debt brake, an alignment with the statement of financial performance was discussed in detail and rejected.[46] Realigning the debt brake with the statement of financial performance on the basis of a straightforward legislative amendment would therefore deviate not only from the clear wording of the Federal Constitution, but also from an earlier consensus on this issue. For these reasons alone, a switch to the statement of financial performance would be questionable.

If this realignment also entailed a significant relaxation of the debt brake's provisions, the mechanism would no longer be compatible with the Federal Constitution. The observations made above with respect to investment show that this would be the case in the event that the debt brake were based on the statement of financial performance, as the changeover would lead to a clear relaxation of the provisions in the absence of an additional rule to cover investment expenditure.

Conclusion

Despite certain advantages (accrual principle, simplification of accounting thanks to the abandonment of the financing statement), it is the disadvantages that stand out if the basis for the debt brake were to be changed to the statement of the financial performance. Such a switch would also involve a change to the target parameter of the debt brake (net assets/equity instead of gross debt), which would be conducive to a relaxation of the debt brake. In contrast to the financing statement, the statement of financial performance does not capture all approved expenditure: the Confederation's investment expenditure is reflected in the statement of financial performance only in the context of depreciation. A debt brake geared around the statement of financial performance would necessitate a solution to the problem of additional investment spikes that would arise as a result of a false incentive. This would increase the complexity of the debt brake. At the same time, a constitutional amendment would be hard to avoid, as the constitutional mandate refers explicitly to the financing statement and requires the Confederation to maintain its expenditure and receipts in balance over the longer term.

[46] Federal Gazette **2000** 4653, Section 1.6.1 (Which control parameter?)

5.2.3 Incorporation of the separate accounts

The debt brake does not cover federal expenditure exhaustively. The expenditure of the separate accounts is excluded. While incorporating the separate accounts could indeed further increase accounting transparency, the disadvantages of such an integration stand out even more, as both possible routes (incorporation from the statement of financial performance perspective or the financing statement perspective) would lead to problems when dealing with investment and investment peaks.

Issue at hand

Separate accounts are the accounts of administrative units of the decentralised Federal Administration and those of (legally independent) funds that require approval from the Federal Assembly (Art. 5b FBA). They include the fund for major railway projects (FinPT fund), the infrastructure fund (IF), the ETH Domain and the Swiss Alcohol Board.[47]

The separate accounts are not subject to the debt brake, as this relates only to the federal budget.[48] By contrast, the postulate of Roland Fischer (12.3552) calls for a review of the inclusion of the separate accounts on the basis of consolidation. The separate accounts would damage accounting transparency, as it is currently difficult to determine the total investment expenditure of the Confederation. Furthermore, the account balance of the Confederation would not be correctly reflected.

The Fischer postulate has two aims where the separate accounts are concerned. Firstly, it calls for an increase in *accounting transparency* by incorporating all investment expenditure of the Confederation. Secondly, it argues that the *effectiveness of the debt brake* would be enhanced by including the separate accounts.

Accounting transparency

When combined with the financing statement of the Confederation sub-sector, the federal financial statistics provide an overview of the Confederation's investment receipts and expenditure (federal financial statements including separate accounts) and also show the corresponding balance.[49]

The Confederation's state financial statements encompass the federal financial statements as well as the separate accounts (Art. 5 FBA), whereby the separate accounts are displayed separately and not consolidated with the federal financial statements. However, in order to provide additional information, a consolidated view is given within the federal financial statements for investment[50] and for the transport task area[51], which is heavily linked with the

[47] The Swiss Alcohol Board, for which a separate account is likewise managed, is to be subsumed into the Federal Customs Administration over the next few years and is therefore not treated here in further detail.

[48] The overall management of the federal budget as per Chapter 3 of the FBA, which focuses on the debt brake, does not include the separate accounts.

[49] Cf. http://www.efv.admin.ch/e/dokumentation/finanzstatistik/index.php

[50] Cf. state financial statements 2012, Volume 1, Section 25 (Statement of investments)

[51] Cf. e.g. 2014 budget, Volume 3, Section 23 (Transport)

two transport funds. A further extension with respect to the reporting of investment development is planned (cf. Section 5.2), whereby this can be effected quite separately from the inclusion of the separate accounts in the scope of the debt brake.

Effectiveness of the debt brake

The incorporation of the separate accounts requires consolidation, i.e. the merger of the individual financial statement and the elimination of so-called internal transactions.[52] This can be done from two different viewpoints:

- Consolidation from the *statement of financial performance perspective*: This would correspond to the approach selected for the Confederation's consolidated financial statements. However, it is the disadvantages that stand out most if the debt brake were to be based on the statement of financial performance (see Section 5.2.2). The key problem would be the management of investment, which would be conceivable in the first place only with (hazy and complicated) additional rules. The inclusion of investment-related separate accounts (the transport fund) would intensify this problem.
- Consolidation from the *financing statement perspective*: Everything that was achieved with the outsourcing of investment into the separate accounts (FinPT fund and IF) would once again become a major problem if these were reintegrated. As the expenditure of the separate accounts would also be subject to the debt brake, dealing with investment spikes would become much more difficult.

  The situation is rather different in the case of funds created for "ongoing maintenance". Rather than primarily acting as a cushion against investment peaks, these are designed to (i) secure financing for investment activity and (ii) prevent competition from new investment on the one hand and from replacement investment and maintenance on the other. This concerns the railway infrastructure fund already approved by parliament and the similar motorway and urban transport fund proposed by the Federal Council. As long as these funds are fully financed via the federal budget – via restricted receipts or additional deposits – their financing is also subject to the debt brake. For this reason, there is no urgent need for these funds to be directly subordinated to the debt brake. Furthermore, with the exception of the FinPT fund, the funds cannot take on debt.

It should nonetheless be pointed out that the existing constitutional provision would allow the scope of the debt brake to be extended to the separate accounts, as the constitutional text specifies the "state financial statements" (Art. 126 para. 4 Cst); these include – alongside the federal financial statements (central Federal Administration) – the separate accounts.

Conclusion

Directly incorporating the separate accounts into the scope of the debt brake might improve accounting transparency, but this can equally be achieved by means of consolidated

[52] For example, the elimination of a transfer from the federal financial statements to the separate account, and in its place recognition of the – externally relevant – expenditure debited to the separate account.

presentation of investment development in the budget and in the financial statements or financial statistics (Confederation sub-sector).

The disadvantages are much more apparent. Consolidation from a statement of financial performance perspective would also require the debt brake to be viewed from this perspective, which would entail the elimination of the comprehensive perspective of planned activities as well as give rise to the corresponding incentive problems (cf. Section 5.2.2).

If consolidation were to take place from the financing statement perspective, the solution of using the separate accounts to deal with the problem of investment spikes would be reversed. Moreover, the separate accounts – including the fund solutions anticipated in the near future – are already indirectly subject to the debt brake in any case, as they are financed through the federal budget. As the funds are unable to take on debt and the repayment of Treasury loans is guaranteed (cf. Section 5.3.4), the effectiveness of the debt brake is assured. For these reasons, the Federal Council believes the incorporation of the separate accounts is not advisable.

5.2.4 Application of the debt brake to specifically defined areas

Dividing up the expenditure ceiling by task area is impractical and would result in considerable drawbacks. The existing approach of the Federal Council, namely formulating target growth rates for task areas, is a better way of preventing undesirable displacement effects in the federal budget.

Issue at hand

The postulate of Jean-Pierre Graber (10.4022) that gave rise to this report also suggests applying the debt brake to specific task areas. This is based on the assumption that investment in particular might be squeezed as a result of rapid growth in certain task areas.

Analysis and discussion

In order for a "sectoral" debt brake to be implemented, individual expenditure ceilings would have to be set for the individual task areas, or at least for the areas deemed relevant in this context, with a residual ceiling applying to the remaining areas. In its effect, this would be similar to a ringfencing of receipts, as already exists today in the case of special financing for road transport, for example. From the fiscal policy perspective, a ringfencing of this kind has the undesirable effect of restricting budget flexibility. The main problem of ringfencing funds – and analogously the problem of establishing sectoral expenditure ceilings – is the rigid nature of the approach: it becomes politically difficult to adapt to new parameters, and indeed to intervene at short notice in a financial crisis. Furthermore, it can also be inefficient, as the level of expenditure in the affected task areas is made dependent on earlier resolutions rather than on actual requirements.

Ultimately, the problem of the budget structure (potential "crowding out" or displacement of certain tasks) would at most be resolved partially by allocating individual expenditure ceilings to individual task areas. Displacement effects can also manifest themselves within a task area, such as in the case of motorways or railway infrastructure, for example. In such task areas, a

sectoral application of the debt brake would not resolve the problem, but would shift it from overall budget level to individual task area level. Ultimately this would also impair federal budget transparency, as the overall view of the budget would be compromised.

For another reason too, the proposed approach would only influence the budget structure conditionally with respect to investment. The allocation of funds to task areas does not guarantee that actual investment (i.e. expansion and replacement investment) will be the beneficiary – as opposed to ongoing expenditure on operations, for example. In the transport area in particular, the competition for funds between investment and operational expenditure is very significant.

Conclusion

The Federal Council has found an alternative way of achieving an economically healthy budget structure. As part of its task evaluation, it set target growth rates for expenditure by task area for the period 2008–2015. As part of the 2011–2015 legislative period planning process, it set itself the future goal of drawing up a priority profile of this kind for the next eight years prior to each legislative period. On the one hand, this requires the Federal Council to get to grips with the fiscal policy issues of the next decade at an early stage. On the other, the Federal Council is obliged to ascertain expenditure requirements at a technical level at an early stage as well as set priorities at a political level.

This observation period, which goes beyond the standard financial planning process, is designed to enable any negative developments (e.g. disproportionate growth of certain task areas or undesirable displacement effects) to be identified at an early stage so that any necessary measures can be taken. In the future, the Federal Council will publish the corresponding scenarios and its expenditure policy priorities in the legislature financial plan. As a result, parliament will have the opportunity to influence expenditure policy priorities through planning resolutions or decisions of principle. This is a target-oriented instrument and will be sufficient to ensure a healthy budget structure, particularly as displacement effects generally do not arise in the short term or come out of the blue.

5.3 Implementation of the debt brake

5.3.1 Significance of receipts

Receipts play a key role in the debt brake, as – after adjustment for cyclical influences – they determine the expenditure ceiling. To achieve this, reliable receipt forecasts are required, as is a close correlation between GDP development and that of receipts. As statistical analyses demonstrate, both of these prerequisites are met.

Issue at hand

Ever since the debt brake was introduced, federal expenditure has been geared around cyclically adjusted receipts for the corresponding year. Together with economic forecasts, receipt estimates are thus a key determinant of expenditure-side parameters. According to the debt brake concept, the credits and debits that arise from forecasting errors should be balanced in the compensation account. This in turn requires budgeted receipts to be based on a reliable estimate for receipts that is neither too high nor too low systematically. In other words, any forecasting errors should cancel each other out over time.

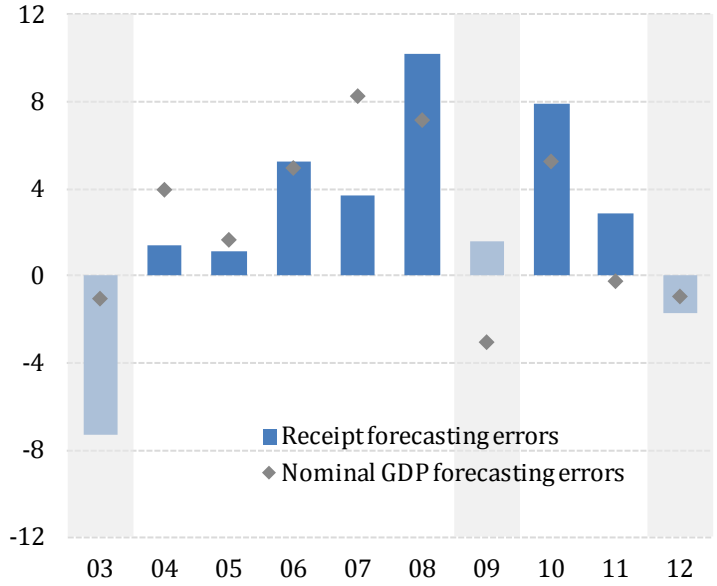
The debt brake's expenditure rule implies that federal receipts develop in line with gross domestic product (cf. Box) on average. In order to adjust receipts for cyclical influences, the cyclical factor is applied directly to receipts. The associated assumption here that requires scrutiny is that receipts develop at the same rate as GDP (i.e. short-term GDP elasticity of receipts = 1).

Analysis of forecasting errors

Figure 18 shows the forecasting errors for ordinary receipts since the introduction of the debt brake in 2003. Forecasting errors are expressed as a percentage of budget value in order to allow for a comparison over time. A positive forecasting error means that the actual receipts exceeded the budget value (upward deviation). A negative error accordingly indicates overestimation (downward deviation). The largest overestimation of ordinary receipts – with a negative forecasting error of 7.3% – occurred in 2003. The largest positive deviation (i.e. underestimation of receipts in the budget) of 10.2% occurred in 2008.

Receipt forecasting errors exhibit a pattern that mirrors the economic cycle. In a period of growth weakness or recession (grey shading in Figure 18) they are negative (2003, 2012) or – as in 2009 – at least much less pronounced than in years of more buoyant economic growth on either side. By contrast, in periods of strong economic growth, the forecasting errors are almost exclusively positive during the observation period.

Figure 18: Forecasting errors of ordinary receipts (in % of budget value; years of growth weakness or recession shaded in grey)



Forecasts are deemed to be unbiased as long as budgeted receipts are neither overestimated nor underestimated systematically. For the observation period in question (2003–2012), the results reveal (through a regression of forecasting errors to a constant) that the average forecasting error amounts to +2.5%. However, this value is not statistically significant. The annual fluctuations in receipts and the forecasting errors that result are too great for the influence of random elements to be excluded. The same picture emerges for other observation timeframes, as well as for longer ones.

As the goal is an average forecasting error of zero, there is clearly potential for improvement in the area of receipt estimates. Accordingly, the forecasting methods for withholding tax and nontax receipts ("other revenue") were adjusted for the 2012 budget.

In Figure 18, the errors in forecasting nominal gross domestic product (GDP; grey diamonds) are likewise shown. These are equivalent to the percentage difference between expected nominal GDP at the time of budgeting (level in CHF bn) and actually realised nominal GDP. Here, it is apparent just how much the quality of receipt estimates depends on the accuracy of economic forecasts. This can also be captured statistically with a correlation coefficient between the two series of 0.69. The resulting coefficient of determination (square of coefficient) shows that GDP forecasting errors between 2003 and 2012 account for half the variance of receipt estimate errors.

Short-term developments of receipts

In addition to forecasting quality (unbiased nature of forecasts), the cyclical behaviour of federal receipts also plays a key role in the conception of the debt brake. The receipts of the Confederation react proportionately to changes in gross domestic product in the short term, as demonstrated by various pre-analyses back in the project phase of the debt brake. The formula

for the debt brake's expenditure rule was therefore conceived accordingly. Receipts ought not to deviate from expenditure any more than the output gap (in %). In other words, the implicit assumption of short-term GDP elasticity of receipts = 1 (for further details on elasticity see Appendix 4). The elasticity of receipts depends heavily on the tax system, and may change as a result of individual tariff adjustments or other tax reforms. Were the actual GDP elasticities of receipts to change and therefore deviate from the level of 1, this would have undesirable consequences for the way the debt brake responds to the economic cycle in its current guise. For example, a GDP elasticity greater than 1 would mean that a cyclical decline in receipts would be underestimated and the Confederation would be forced to make pro-cyclical savings during a recession.

Current analyses show that short-term receipt elasticity has not changed materially since the debt brake was introduced. According to investigations into adjusted receipts, it currently lies slightly above 1 (1.06; for details on the estimates see Appendix 4).

The debt brake and GDP elasticity of receipts

For the debt brake to be applied, the receipts of the Confederation need to be broken down into a structural and a cyclical component. According to the basic rule, the level of permissible expenditure is geared around structural receipts (cf. Section 2.3). These are determined with the help of the cyclical factor (proportion of real trend GDP to real GDP), which is the measure of the output gap or the degree of capacity utilisation in the economy. The basic rule assumes that receipts develop proportionally in line with the cyclical factor. In other words, the concept of the debt brake is based on an elasticity of receipts of 1, and specifically with reference to the output gap. Undertaking an empirical estimate of this elasticity is difficult, however, as the output gap cannot be observed directly. The results therefore depend heavily on the method applied to estimate the output gap.

Based on certain assumptions, however, it can be shown that the debt brake likewise implies a proportional development of receipts in line with GDP. This is the case if both trend GDP and trend receipts are not influenced by short-term GDP fluctuations. In contrast to the elasticity of receipts with respect to the output gap, the connection between receipts and GDP has already been investigated on numerous occasions.

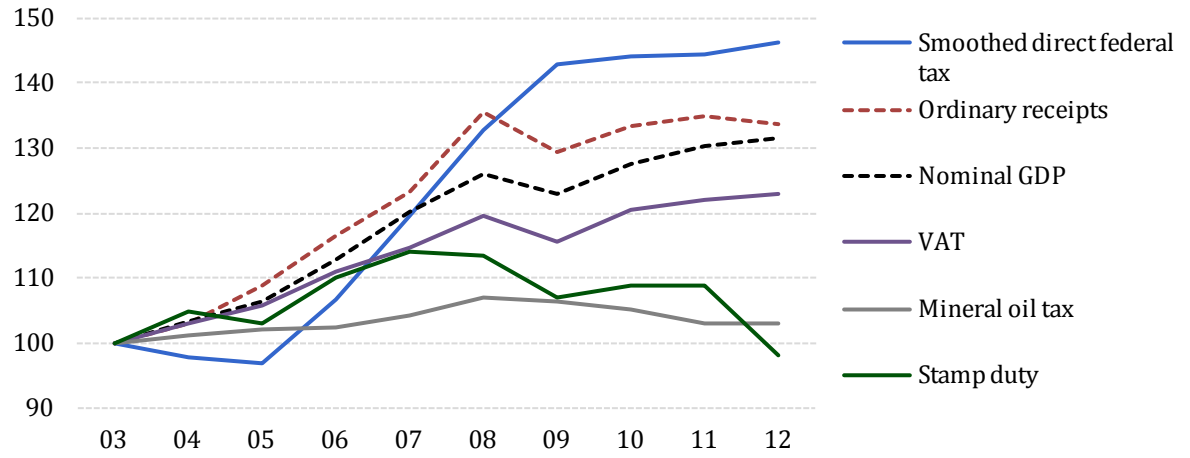
Long-term development of receipts

Whereas short-term elasticity measures how receipts react to cyclical fluctuations, *long-term* GDP elasticity expresses the degree to which the trend level of receipts – i.e. receipts viewed *independently* of cyclical developments – depends on the development of gross domestic product. The long-term GDP elasticity of receipts plays a rather backseat role with respect to a passive anti-cyclical fiscal policy. However, it is of importance with respect to the stabilisation of the expenditure ratio – a stated objective of the Federal Council – as this requires the long-term GDP elasticity of receipts to amount to 1.

Studies reveal a long-term elasticity that is very close to 1 (1.04 for ordinary receipts, unadjusted; for details on this estimate see Appendix 4). Given the very heterogeneous composition of receipts, the reason for the proportional development of total receipts is likely to lie in the political desire to keep the tax ratio stable.

During the period under review since the introduction of the debt brake, it is direct federal tax that exhibits the greatest dynamism (approx. 50% greater than GDP development; cf. Figure 19), whereby this also includes all the tax reforms that slowed the rise considerably from 2010 onward. Value added tax has developed largely in line with GDP growth, whereas mineral oil tax receipts have barely grown. Stamp duty is heavily dependent on economic and stock market developments.

Figure 19: Development of selected tax receipts
(indexed: 2003=100; VAT and stamp duty adjusted for special factors)



If reforms are excluded, direct federal tax shows a long-term receipt elasticity of around 2, i.e. receipts grow on average twice as fast as nominal GDP. The causes of this discrepancy are not easy to pin down. A key reason is likely to be structural change in the labour market: in addition to real wage growth, a tendency towards better-paid activity is also apparent. Both of these factors lead to a permanent shift to higher tax bands. Some of the disproportionate increase in receipts is used to implement tax reforms and thereby alleviate the additional burden caused by changes in tax bands. In addition, the strong growth in federal direct tax receipts over the last ten years is also attributable to strong net immigration on the part of both natural persons and companies.

The development of direct federal tax receipts and their ever-growing weighting in the budget (just under 30% as at the end of 2012) are of key significance for the federal budget, as they offset the stagnant or receding development of other receipts such as those from mineral oil tax and stamp duty. As shown by the sharp rise in the years 2006–2009, unpredictable changes of a considerable magnitude cannot be ruled out in this area.

Conclusion

On average, receipts have been underestimated in the budget over the last ten years, although the main cause of this deviation is now likely to have been addressed thanks to the new forecasting method for withholding tax. Viewed statistically, the deviations are not significant, i.e. receipt estimates are not distorted. The close correlation between the development of GDP and the development of receipts is also confirmed by empirical analyses: cyclically-driven

fluctuations in receipts (in %) are no greater than the change in nominal GDP. The cyclical factor thereby represents a suitable measure for capturing cyclically-driven fluctuations in receipts. In the long term, the significant differences in the dynamism of individual receipt categories also harbour risks, particularly in the case of direct federal tax, which is becoming increasingly important.

5.3.2 Calculation of the cyclical factor

The cyclical factor illustrates the cyclical repercussions of GDP for receipts. The filter procedure has proven itself. Difficulties could arise in the event of a prolonged period of cyclical weakness, as this would be interpreted as structural by the procedure applied. However, the debt brake allows for the economy to be supported at such times with extraordinary expenditure. Today's approach of applying the cyclical factor on a real basis should be maintained.

Issue at hand

The cyclical factor (k factor, or economic cycle adjustment coefficient) is a measure of capacity utilisation in the economy. Any deviation from normal capacity utilisation (output gap or production gap) is calculated with the help of trend GDP. This is determined by means of a statistical filter procedure, although there are also other methods that could be used for such a calculation.

Against this backdrop, the postulate of Jean-Pierre Graber (10.4022) questions the expediency of the method currently used to determine the cyclical factor. In addition, just like the situation with receipts (cf. Section 5.3.1), an investigation can also be conducted into whether systematic forecasting errors could be avoided, as these result in the expenditure ceiling under the debt brake turning out to be too high or too low. Finally, the question may also be raised as to whether (in hindsight) it was correct to undertake the calculation on the basis of real rather than nominal values, i.e. whether the cyclical behaviour of nominal GDP is different from that of real GDP.

Estimation procedure for trend GDP

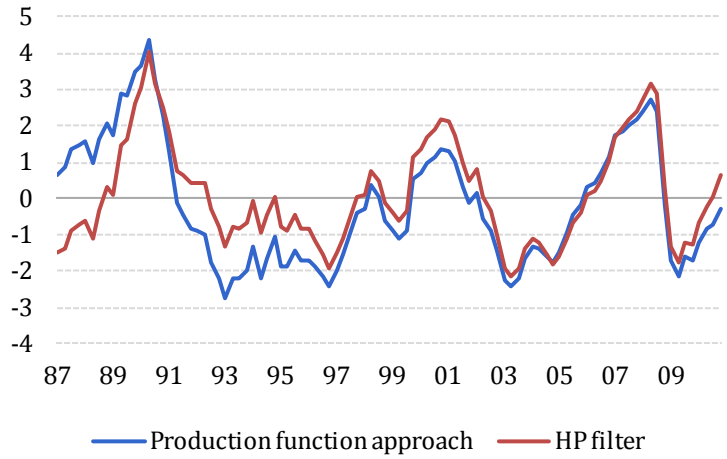
The cyclical factor determines the proportion of receipts that is determined by the economic cycle, and which is therefore – for purposes of expenditure smoothing – not to be taken into account when determining the maximum permissible level of expenditure. Legislation currently defines it as the proportion of trend GDP to actual GDP (both real). Trend GDP is an approximation of potential GDP, namely macroeconomic value creation under normal utilisation of factors of production, and is supposed to show the development of GDP excluding cyclical influences. When calculating trend GDP, *statistical procedures* are used that break down the GDP time series into a trend component and a cyclical component.

Instead of an approximation through trend GDP, potential GDP can also be estimated directly with the assistance of a *production function.* This approach requires additional assumptions to be made with respect to the development of the labour market and economic capital stock. In

addition, assumptions need to be made with respect to the development of total factor productivity (TFP). The production function method makes it possible to take into account developments in the labour and financial markets in a more comprehensive way than a purely statistical method, as it rests on a higher number of economic assumptions and forecasts.

Figure 20 below shows the results of the described procedures for the calculation of trend GDP on a quarterly basis. Both procedures are applied by the Swiss National Bank (SNB),[53] whereby the statistical procedure is based on the Hodrick and Prescott filter method (HP filter). The results are comparable with those of the modified HP filter (mHP filter; cf. Section 3.5), which is used for the debt brake (for which it is calculated on an annual basis). In order to better highlight the differences between the two methods, the percentage differences between actual GDP and ascertained trend or potential GDP (output gap) are shown in each case.

Figure 20: Comparison of procedures for estimating the output gap (in %)



Source: SNB

The results show that the output gap calculated with the HP filter and with the production function approach – and the associated trend or potential GDP – develops in a similar way over the longer term. In individual years or cyclical phases, however, the differences can be relatively striking. This is particularly true of the 1990s. According to the production function approach, macroeconomic capacity was permanently underutilised between 1991 and 1998. This is in keeping with the protracted and only sluggish recovery of the Swiss economy after the severe property market crisis at the start of the 1990s. By contrast, the HP filter procedure does not indicate a negative output gap until five quarters later, and even this is then closed some two years thereafter.

This phenomenon is recognised as a key difference between the two procedures. Whereas the HP filter procedure interprets persistent developments as structural, the production function

[53] cf. Rudolf, B. and M. Zurlinden (2011), "Potential output and the output gap from a monetary policy perspective"; in: Die Volkswirtschaft 6/2011

method can highlight even a long-lasting period of weak growth as a cyclical – and therefore temporary – case of production capacity underutilisation.

Where the debt brake is concerned, if the fiscal policy applied in the 1990s had used trend GDP as calculated using the HP filter approach, it would have been too restrictive and would thus have exacerbated the recessionary cyclical phase of that decade, unless extraordinary expenditure had been approved to support the economy. The fact that a statistical filter procedure was nonetheless chosen for calculating trend GDP in the context of the debt brake is attributable to various reasons.

So-called "univariate" filter procedures – a group that includes the modified HP filter procedure for calculating the cyclical factor – are distinguished by their simplicity and the low demands they make in terms of the underlying data. Trend GDP can be calculated directly from a current time series and from a forecast of real GDP, without any need for additional assumptions to be made. The cyclical factors calculated as part of the budget process (or in the state financial statements) can thus be reviewed by any interested specialists. In the case of the production function approach, by contrast, it is very difficult even for experienced specialists to review the results due to the large quantities of data and numerous assumptions made.

In addition to the communication and transparency of the data situation, the objective of the debt brake itself was also a key factor in selecting the modified HP filter procedure. The debt brake was designed to ensure that federal receipts and expenditure remained in balance over the longer term. The overriding objective of the debt brake is thus to stabilise nominal debt. This objective can be achieved only if cyclical deficits and surpluses cancel each other out over time. In other words, the procedure for determining economic cycles and therefore also the cyclical factor must supply *symmetrical* results. This can be ensured only with statistical procedures, as approaches that apply production functions – as illustrated above – do not necessarily result in symmetrical economic cycles. As a result, the application of such approaches would result in the provisions of the Federal Constitution not been fulfilled under certain circumstances.

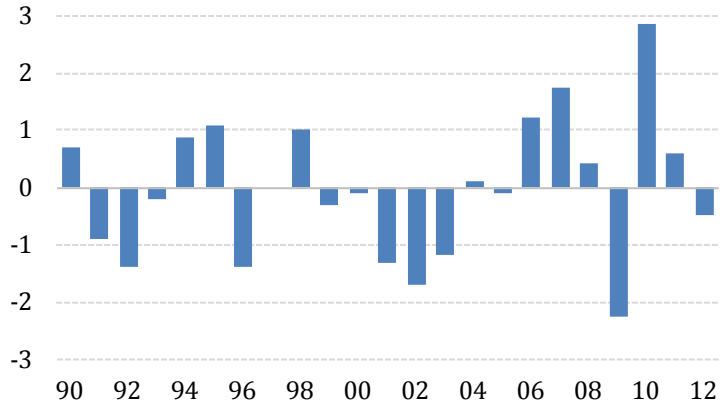
The problem of prolonged periods of weak growth and the associated risk of pro-cyclical fiscal policy is alleviated by the flexible design of the debt brake. Under such scenarios, the Confederation can authorise extraordinary expenditure and therefore additionally support macroeconomic demand.

Reliability of the cyclical factor forecast

In addition to receipt estimates (see Section 5.3.1 for the issue of quality in this respect), the expenditure ceiling in the budget also depends on cyclical factor forecasts. When the state financial statements are drawn up, new values for the cyclical factors – determined on the basis of actual GDP values – are then determined. As a result of the revision of the cyclical factor, deviations arise between the expenditure ceiling determined in the budget and that subsequently determined in the state financial statements. These differences are captured in the compensation account. As is the case for receipt estimates, it is also important that the credits and debits to the compensation account that arise from cyclical factor forecasting errors balance each other out over time. Otherwise, a permanent deficit or surplus would be accumulated in the compensation account.

Figure 21 below shows the percentage difference between the cyclical factors forecast in the budget and those subsequently determined as part of the state financial statements. The values for the period prior to the introduction of the debt brake are based on simulation calculations made by Geier (2011)[54] using historical forecasting data.

Figure 21: Difference between the cyclical factors in the budget and those in the state financial statements (in %; + overestimation; - underestimation)



The discrepancies between the cyclical factors applied in the budget and those in the state financial statements are kept within narrow bounds. Major discrepancies occur above all around turning points in the economic cycle. This is evident in the years 2009 and 2010, when neither the deep recession of 2009 nor the strong economic upturn the following year was correctly anticipated by the cyclical factor in the budget.

As mentioned earlier, the fact that the cyclical factor forecasting errors do not show any systematic overestimation or underestimation is more important than discrepancies in individual years. During the period under review, the average forecasting error amounts to virtually zero (-0.03%), which means that any systematic error in the forecasting of cyclical factors can be ruled out. The forecasting of cyclical factors depends solely on the GDP forecast applied, which is taken from the Confederation's independent group of experts for economic forecasts.

Taking inflation into account

The cyclical factor is calculated on the basis of real (i.e. inflation-adjusted) values for GDP and trend GDP. Receipts and expenditure are nominal values, however, which contain a price component. Cyclical fluctuations in the level of prices are thus not compensated for by the cyclical factor. On the one hand, when the debt brake was introduced this was justified by the fact that inflationary forecasts are insufficiently reliable and would therefore result in fluctuations in the level of maximum permissible expenditure. On the other, the objective of the

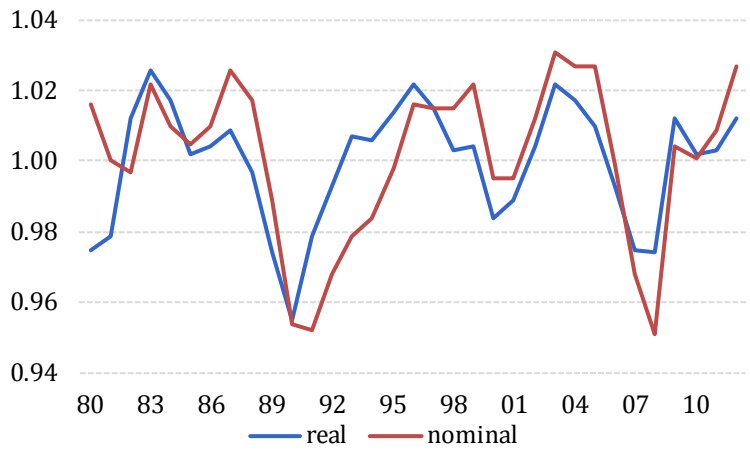
[54] Geier, A. (2011), "The debt brake of the Confederation – background and impact", dissertation at the University of Neuchâtel

debt brake is to compensate for cyclical fluctuations indicated by the degree of economic capacity utilisation.

Any cyclical fluctuations in inflation that are not compensated for by the cyclical factor can lead to undesirable fluctuations in the level of expenditure. However, it is debatable whether the cyclical factor is the right instrument to counteract such fluctuations, particularly as fluctuations in the price component relative to the real economy react with a time lag. A cyclical factor calculated on the basis of nominal values would be less responsive to the economic cycle under these circumstances than the cyclical factor currently applied, even if the latter does perhaps have the potential to be even pro-cyclical in an unfavourable scenario.

This can be illustrated using the recession of the early 1990s as an example (cf. Figure 22). Whereas the real cyclical factor indicates capacity underutilisation in 1993, the cyclical factor based on nominal GDP values would have permitted a deficit in the financing statement of the Confederation only three years later, and would therefore have resulted in a pro-cyclical fiscal policy. The phase shift between real and nominal cyclical factors is also apparent in the subsequent upturn at the end of the 1990s.

Figure 22: Comparison of nominal and real cyclical factors



Conclusion

The cyclical factor shows a realistic picture of economic development. The use of the modified HP filter to calculate trend GDP has proved its worth. Furthermore, the original reasons for selecting a statistical procedure are still valid (comprehensibility and transparency, as well as symmetrical results). The cyclical factors applied in the budget have also proved to be unbiased forecasts. In the observation period of 1990 to 2012, the average forecasting error is virtually zero. Given the problem described above, the use of real cyclical factors is also the correct decision from today's perspective, particularly where the compatibility of the debt brake with the economic cycle is concerned.

5.3.3 Financial planning and budget adjustments

The financial planning process covers four years in total, namely the initial budget year and the three following years of the financial plan. The annual updating process enables the figures to be firmed up in stages ("rolling financial planning"). Experience since 2003 shows that complying with the debt brake in the years of the financial plan is a good way of keeping later budget adjustments as low as possible.

Issue at hand

Consistent fiscal policy requires a budget to follow the course set by the last financial plan (predictability) and avoid any abrupt changes in course relative to the prior-year budget (no "stop and go"). This can be achieved only if the need for adjustment is kept to an absolute minimum in the budget year.

According to the Federal Constitution and existing legislation, the requirements of the debt brake are binding only for the budget, and not for the financial plan. The question therefore arises as to whether this situation has had a negative impact on the consistency of fiscal policy.

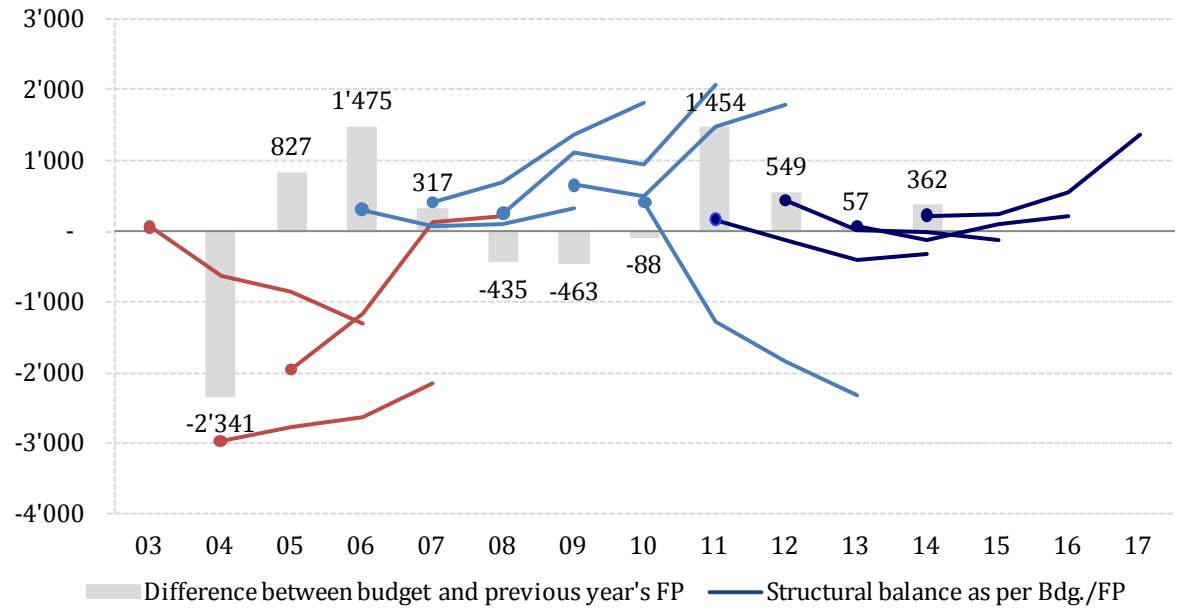
Rolling financial planning and the debt brake

Drawing up the budget and the financial plan takes place on a rolling basis. In other words, the financial plan of the previous year is used for this process, and developments in the interim lead to the updating of receipts and expenditure. Figure 23 shows the development of budgeting/financial planning over time. This shows the structural balance, i.e. the deviations relative to the requirements of the debt brake as per the budget and financial plan (points/lines) and the change in the structural balance of the budget compared with the previous financial plan for the same year (pillars).

In the period 2003–2014, the structural balance in the budget year changed relative to the old financial plan for the same year by an average of CHF 760 million (1.4% of expenditure; average of absolute deviations). This value is affected by consolidation efforts in the introductory years of the debt brake. In the period 2007–2014, the average change is lower (CHF 470 mn; 0.8% of expenditure).

On average, the structural balance in the budget has worked out better than in the previous year's financial plan (2003–2014: CHF +160 mn). As a percentage of expenditure, however, the deviation is minimal (+0.2%).

Figure 23: Development of structural balance in budget and financial plan (Bdg./FP; in CHF mn)



Development since the introduction of the debt brake can be broken down into three phases:

- *Consolidation 2003–2006:* The introductory years were characterised by an unexpected slump in receipts. Only thanks to a transitional provision in the Financial Budget Act was it possible to pass a budget that complied with the debt brake. This transitional provision enabled the Confederation to correct the structural imbalance gradually with the help of a deficit reduction plan. Following another huge (receipt-side) deterioration in 2004 (CHF -2.3 bn), the structural deficit was then brought down thanks to the relief programmes of 2003 (annual volume of up to CHF 3.0 bn) and 2004 (annual volume of up to CHF 1.7 bn) together with the deployment of the credit freeze (2003–2005: annual volume of up to CHF 0.2 bn).
- *Boom and crisis 2007–2010:* From 2006 onwards, structural surpluses were budgeted, together with another credit freeze imposed in 2007 (CHF -0.1 bn). The financial plans approved with the 2007–2009 budget contained consistently rising surpluses, as the debt reduction requirements from the task evaluation were additionally factored in (annual savings of up to CHF 1.2 bn). However, the debt reduction requirements were only partially implemented. As a result of the financial and economic crisis, the structural balance worked out lower than in the prior-year planning from the 2008 budget onwards. One reason for this was the additional expenditure incurred for economic stabilisation measures (2009/2010). In the recession year of 2009, fears were expressed that the economic slump (the greatest since the 1970s) could lead to a permanent decline in trend GDP; for this reason, the financial plan for 2011–2013 indicated rising structural deficits.
- *Weak growth 2011–2014:* Although the economy recovered with surprising speed in 2010, the 2010 budget contained a number of consolidation measures that could be implemented rapidly (CHF -1.8 bn). For the following years, the Federal Council unveiled

the 2012/2013 consolidation programme (annual savings of up to CHF 1.7 bn) in September 2010. However, the 2010 financial statements turned out to be better than expected (additional receipts of CHF 1.5 bn), which led to a suspension of the smaller part of the 2012/13 consolidation programme which had not yet been implemented. Despite moderate economic growth due to a lack of export momentum, the budgets for 2012 to 2014 revealed a consistent fiscal policy with comparatively low adjustments relative to the old financial plans. At the request of parliament, and to create a certain amount of leeway in fiscal policy, the Federal Council unveiled its 2014 consolidation and task evaluation package (annual savings of CHF 0.6 bn) in December 2012. However, these measures are not contained in the 2014 budget, as they were rejected by the National Council (they are contained in the 2015–2017 financial plan, however).

Instruments for adjusting the budget

Table 7 shows the options available to the Federal Council for adjusting the budget on the expenditure side. The shorter the lead time and the less broad-based the measures, the smaller the savings potential of these instruments. In the short term, receipts can make only a small contribution to budget consolidation, as legislative changes are typically required for tax increases or the removal of tax breaks.

Table 7: Instruments for adjusting the budget on the expenditure side (ordered by lead time)

	Functioning and lead time	**Savings potential**	**Focus of measures**
Credit freeze	Linear freeze of budgetary credits	Freeze of 1–2% of selected expenditure (1% = approx. CHF 240 mn)	Expenditure with low to medium ringfencing
Budget cuts	Targeted requirements in budget instructions (approx. 5 months)	CHF 500–800 mn	Expenditure with low to medium ringfencing (generally no legislative amendments required, e.g. correction for inflation)
Savings programmes	Dispatch with legislative amendments (incl. consultation process, min. 9-12 months)	CHF 800 mn and upwards	Greatest possible scope while retaining political priorities (in particular taking into account proportional weighting of task areas)

Credit freezes can be implemented very quickly. With a freeze rate of 2% – and going beyond this level is virtually inconceivable – the savings would amount to just under CHF 500 million. The areas that would be affected by this instrument are those with a low to medium degree of expenditure ringfencing. The credit freeze is limited to the individual budget and therefore has no lasting impact.

Instead of credit freezes, *targeted cuts* can also be approved for adjusting the budget. The Federal Council requires more time to prepare such measures. Ideally, the requirements will be set at the same time as the budget process is initiated. As no legislative changes can be prepared and approved within just a few months, targeted cuts likewise focus on expenditure areas with low to medium ringfencing. Compared to the credit freeze, targeted cuts have the advantage of allowing priorities to be set, and if necessary they can remain in force beyond the budget year itself. The upper limit for targeted cuts is likely to be in the region of CHF 800 million.

If greater budget relief measures are required, actual *savings programmes* are inevitable. On the one hand, the savings base increases as a result, since legislative amendments can also be submitted to parliament as part of a savings programme. On the other hand, the "package character" of the measures is easier to emphasise with savings programmes. This increases both their political acceptability and their binding nature.

The long lead time of savings programmes is a disadvantage insofar as a programme needs to be launched prior to the actual budget adjustment process. As the experience of the 2012/2013 consolidation programme showed, this brings with it a risk that the adjustment requirement will be changed by unforeseen developments, which in turn can raise a question mark over the need for the savings programme in question. This risk is particularly prominent around economic turning points, which are extremely difficult to predict (e.g. the upturn in 2010 and its repercussions for the 2011 budget). Otherwise, it can be assumed that the receipts situation and the economic situation (both being responsible for a large proportion of fluctuations) will not change fundamentally within a 12-month period. This strengthens the case for saving programmes being deployed only when the need for adjustment is considerable.

As a general rule, it is better for the credibility of fiscal policy if saving programmes can be avoided for the most part. This requires sufficiently forward-looking receipt and expenditure planning, ongoing structural reforms, and possibly also regular task evaluation programmes. In this way, fiscal policy leeway is created that renders the need for saving programmes largely superfluous.

Conclusion

In order to keep the need for adjustment in the budget as low as possible (and thereby maintain consistent fiscal policy), it is important that the previous year's financial plan is already structurally balanced, or even in positive territory. In other words, the need for adjustment should be eliminated at the financial planning stage. This also enables sufficient account to be taken of uncertainty over future economic developments, which are generally symmetrical (equal probability of improvement/deterioration).

Switzerland's experience since 2003 has shown that complying with the debt brake in the financial plan years is a sensible "guideline", even if it is not prescribed by law. Given this background, the Federal Council set itself the goal in the 2013–2015 legislature financial plan of achieving a structurally balanced budget in the years of the financial plan too. Accordingly, structural deficits are permissible in the financial plan only if they can be corrected as part of the budget process (i.e. without legislative amendments). Adjustments of up to CHF 800 million can

be implemented as part of the budget process. Savings programmes should be deployed only when the need for adjustment is very high.

5.3.4 Prevention of debt brake circumvention

The debt brake should encompass the budget and the associated flows of funds as comprehensively as possible in order for the development of debt to be controlled. There are a number of instruments that can bypass the debt brake and lead to an increase in debt. Examples include Treasury loans, fund solutions, "ad hoc" solutions, and separately managed federal institutions. These instruments need to be deployed carefully if circumvention of the debt brake is to be prevented.

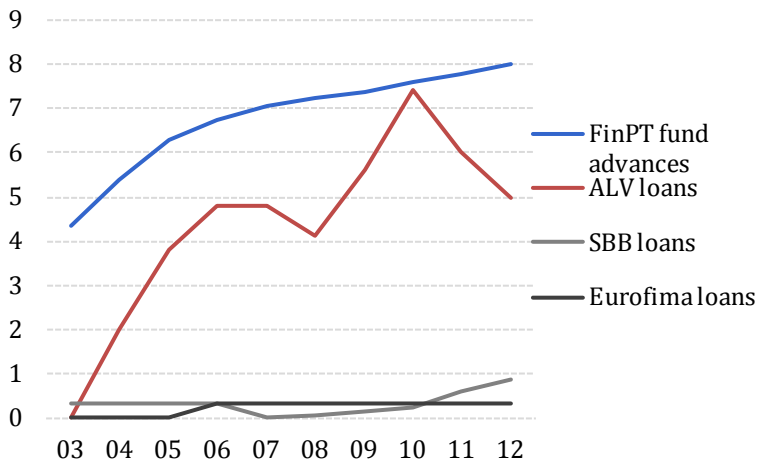
Issue at hand

Every fiscal rule has borderline areas. In such areas, the scope of application needs to be determined (i.e. what is covered and what is not), and political clarity is required with respect to how often (or to what degree) special solutions are acceptable. Various borderline areas are discussed and evaluated below. The key criterion for evaluation is their implications for the level of debt, as it is debt stabilisation that lies at the heart of the debt brake.

Treasury loans

Treasury loans are based on Articles 60 and 61 of the FBA and on the provisions of the relevant special laws. Treasury loans are granted only in individual cases, but when viewed cumulatively they can amount to a significant sum (cf. Figure 24). Outstanding Treasury loans are designed to compensate for payment spikes for a limited period (advances to the FinPT fund), stabilise the economy in keeping with the economic cycle (unemployment insurance loans), and hedge against financial risks (SBB and EUROFIMA loans).

Figure 24: Development of Treasury loans since the introduction of the debt brake (year-end levels; in CHF bn)



The largest position is that of *advances to the fund for major railway projects* (FinPT fund). These have increased continuously over the last decade. According to the dispatch on the financing and expansion of the railway infrastructure, the advances will amount to a maximum of CHF 8 billion in 2016. The plan is for these to be repaid between 2019 and around 2030.[55] As a result, *gross* debt (temporarily) increases by the total amount advanced. By contrast, *net* debt is not affected, as the advances are considered to be fully recoverable (whereby full recoverability reflects a high level of security). Although the repayment deadline has been repeatedly postponed, which suggests a certain degree of political risk, repayment is nonetheless viewed as assured due to the legislative basis. For this reason, the Swiss Federal Audit Office (SFAO) has so far recognised the loans as recoverable.[56] From this perspective, these advances do not result in a (permanent) circumvention of the debt brake.

The second-largest position is that of *unemployment insurance loans*. These make it possible to finance unemployment insurance in a cyclically stable way. Thanks to the revised Unemployment Insurance Act (UIA[57]), which entered into force on 1 April 2011, this insurance fund was put back on a level footing, thereby ensuring that it would no longer be indebted to the Confederation when viewed over an entire economic cycle. The measures taken and the fixed-term additional contributions (together with the removal of the ceiling for the solidarity percentage, which will take effect from 2014 onwards) should ensure a reduction in debt within the next 15 years. This in turn would ensure a reversal of the increase in gross debt.

The two other (much smaller) positions comprise *loans to the SBB* for investment in the transport area and commercial investment – which have increased slightly in recent years and lead to a rise in gross debt insofar as they often have to be refinanced through new loans – and a long-term loan to *EUROFIMA*.[58]

In summary, it can be said that Treasury loans do not lead to a significant increase in debt by circumventing the debt brake, as the repayment of these loans is assured. However, as political risks can never be ruled out, the Confederation should be very sparing in its granting of Treasury loans, as indeed it has been to date.

Fund solutions

Separate accounts (pursuant to Art. 5 FBA)[59] and special funds (pursuant to Art. 52 FBA)[60] that obtain their funding from the federal budget are used to demarcate the corresponding expenditure from the rest of the federal budget. These funds are often used to finance

[55] Dispatch: Federal Gazette **2012** 1577. The draft was approved by parliament on 20 June 2030 (Federal Decree on the Funding and Expansion of the Railway Infrastructure, FERI; Federal Gazette **2013** 4725).

[56] In its report on the 2009 state financial statements, the SFAO commented as follows: "If this repayment deadline [2017] is 'pushed back' further over the next few years, the recoverability of this balance sheet position should be reviewed anew." In its report on the 2012 state financial statements, however, the SFAO essentially accepted that this procedure (multiple postponements) was in harmony with parliamentary resolutions.

[57] SR **837.0**

[58] Company financed by 25 states which pre-finances rolling stock for railways.

[59] Separate accounts are defined as "annual accounts of administrative units of the decentralised Federal Administration and federal funds that keep their own accounts subject to approval by the Federal Assembly." (Art. 5b FBA)

[60] "Special funds are assets assigned to the Confederation by third parties with certain conditions attached, or those arising on the basis of legal provisions from budgetary credits." (Art. 52 para. 1 FBA)

investment spikes. Existing funds are those set up to finance major railway projects (FinPT fund) and the infrastructure fund. Other planned funds include the Gripen fund for the procurement of new fighter jets, the railway infrastructure fund, and the motorways and urban transport fund, whereby the last two funds will subsume the existing funds in these areas.

With the exception of the FinPT fund, which also receives Treasury loans[61], these funds derive their funding exclusively from the federal budget. All ordinary deposits are subject to the debt brake, as are any extraordinary deposits thanks to the amortisation requirement. As long as this condition is adhered to, it is not necessary for the funds to be directly subject to the debt brake (i.e. including fund expenditure; cf. Section 5.2.3).

An associated question is whether the funds should be allowed to take on debt or not. In principle, the possibility of taking on debt should be ruled out because of the political risk with respect to repayment. However, indebtedness (via Treasury loans) is in any case envisaged for the FinPT fund, which was set up prior to the debt brake's entry into force. More consistent from a fiscal policy and debt brake perspective is the solution for the Gripen fund, the funding for which must be accumulated in advance.

In *conclusion*, it can be said that funds are subject to the debt brake through deposits. However, it needs to be ensured that they cannot take on debt (Treasury loans), as this could increase the gross debt of the Confederation over the longer term and would also involve significant political risks with respect to repayment. Moreover, due to the restrictions they place on the overall management of the federal budget, fund solutions should remain the exception rather than the rule.

"Ad hoc" solutions

The (short) experience of implementation of fiscal rules in the EU since the entry into force of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union ("Fiscal Compact") on 1 January 2013[62] shows that states can feel forced to amend or even suspend national provisions in the short term for economic policy reasons.[63] This would also be possible in Switzerland, at least to the extent that such leeway is provided for in the Federal Constitution. Indeed, this is precisely what occurred in the 2003 relief programme (introduction of the deficit reduction plan via a transitional provision in the FBA), so that the structural imbalance could be eliminated in a way that was compatible with the economic cycle.

Conclusion: The idea of special legislative channels of intervention essentially conflicts with the binding nature of the debt brake. Ultimately, whether or not such channels are exploited (in a way that leads to an increase in debt) is a political issue. The key obstacle here is likely to be the

[61] This is also the case for the planned railway infrastructure fund that will "take over" the FinPT fund and the associated repayment of the outstanding Treasury loans, but will not – after the introductory phase – have access to new Treasury loans.

[62] Applies to the majority of signatory states, and to the remaining states following conclusion of the ratification process.

[63] For example, Poland's Prime Minister announced at the end of July 2013 that Poland would temporarily be adjusting certain legislative measures (NZZ Online 30.7.2013: http://www.nzz.ch/aktuell/wirtschaft/wirtschaftsnachrichten/polen-will-die-schuldenbremse-lockern-1.18124967; Download 26.8.2013). [German only]

political acceptance of the debt brake. Even ten years on from the enshrinement of the debt brake in the Federal Constitution, this remains high.[64]

Separately managed federal institutions

For either economic or political reasons, not all federal institutions are managed by the central Federal Administration, and therefore these are not subject to the overall management of the federal budget. Examples of such institutions include in particular the social security funds (ALV, AHV, IV), state-owned companies (such as SBB) and numerous entities of the decentralised Federal Administration (such as the Swiss Financial Market Supervisory Authority). In its capacity as owner and legislator, as well as for political reasons, the Confederation assumes a number of different roles that could have the effect of burdening the federal budget in an unfavourable scenario.

Conclusion: There is no disputing that the social security funds in particular carry political risks. Such risks are reduced greatly if the financing of these funds is governed by stand-alone legislation. But even then another step is necessary: to reduce the risk to the federal budget, independent fiscal rules are required for the social security funds (such as already exists for unemployment insurance). These are a logical complement to the debt brake.

[64] According to "Finanzmonitor", 90% of respondents are in favour of retaining the debt brake. Source: gfs.bern (2013), Final report on 'Finanzmonitor 2013'; study conducted on behalf of economiesuisse, July 2013.

6 Conclusions

A successful debt brake

A review of the ten years of fiscal policy management with the debt brake shows that the desired objectives have been achieved. The balancing of the budget achieved at the beginning of the last decade has been built upon, and a further rise in indebtedness has been prevented. The federal budget has not exhibited a structural deficit since 2006. Thanks to the debt brake, fiscal policy is now also better aligned with the economic cycle. In addition, the debt brake has had a positive effect on the efficiency of the budget process, and the medium-term view has been strengthened. The federal finances are in a significantly better state today than ten years ago when the debt brake was first introduced.

On the basis of these experiences, the report concludes that the way this rule was designed has proved justified, and that there is no reason to amend the provisions of the debt brake:

- The *cyclical factor* paints a realistic picture of economic development. The method for calculating the trend of gross domestic product has proven itself, and the assumption that receipts develop in line with gross domestic product in the short term remains valid. This is key for the cyclical adjustment of receipts.
- Fears that the debt brake has a negative impact on the development of *investment* have proved unfounded. Admittedly, the proportion of investment declined in the years 2003–2007 after a number of major projects had led to an exceptionally high investment spike in previous years. Over the long term, however, it has remained stable. The FinPT fund and the infrastructure fund have enabled investment peaks to be covered thanks to the fact that the accumulation of funds is subject to the debt brake but expenditure is not. If expenditure on education and research is factored in, investment has actually increased sharply since the debt brake was introduced.
- The implementation of the debt brake on the basis of the financing statement has not resulted in the feared negative effects on investment activity. A changeover to the *statement of financial performance as a basis* for the debt brake would bring with it a number of disadvantages. Among other things, giving investment expenditure privileged status could lead to a false political incentive: as new investment only feeds through into the statement of financial performance with a time lag, there would be an incentive to prioritize investment to an excessive degree.

Further reduction in federal debt would be beneficial

The minimum requirements of the debt brake have been exceeded since 2006. This is evident from the balance of the compensation account (mechanism for controlling the success of the debt brake), and is also reflected in a decline in nominal debt. Since peaking at CHF 130 billion in 2005, the gross debt of the Confederation has declined by CHF 18 billion. At 19%, the debt ratio has now fallen back to more or less the same level as in 1994. The debt reduction has also lowered interest expenditure by some CHF 700 million.

The main reasons for the reduction in debt are positive surprises in terms of economic development, errors in receipt estimates, and expenditure-side budget underruns. The errors in receipt estimates have been sharply reduced thanks to methodological improvements. Forecasting errors with respect to the economic cycle and receipts are therefore likely to cancel each other out in the future. By contrast, expenditure-side budget underruns are part and parcel of the current system: as the budgetary credits approved by parliament may not be exceeded, federal departments tend to budget prudently. The existing rules are conducive to budget expenditure being slightly overestimated on a systematic basis. This is likely to lead to a further reduction in debt in the future.

The Federal Council believes it is logical to stick to the existing rules. The debt brake is widely accepted. A further gradual reduction in federal debt will increase Switzerland's ability to withstand crises and will result in even lower interest costs in the longer term. So far, the economic situation has been favourable for the debt brake. If fiscal policy parameters were to deteriorate sharply, with the result that achieving structural surpluses would be possible only if a heavy burden were placed on the economy, the political scales could tilt the other way. In such a scenario, the factoring-in of budget underruns would have to be considered at the budget stage itself.

Economic growth remains an important pillar of fiscal policy

The positive development of the federal finances since the introduction of the debt brake can also be attributed to other influences. The first item worthy of mention is the dynamic development of the economy and therefore receipts. It is unknown whether or not this development will persist in the future. A prolonged period of weak economic growth or sluggish receipts – in contrast to a short economic slump – would also place a structural burden on the federal budget.

Over the past ten years, the Confederation has benefited greatly from the immigration of natural persons and companies. Whether or not this development – and therefore in particular the strong growth in direct federal tax receipts – will persist is also unclear. Much will depend on a number of reform projects both in Switzerland (e.g. the third series of corporate tax reforms) and abroad (e.g. international tax policy). Furthermore, immigration will be heavily influenced by international economic developments (e.g. labour market developments).

Laying solid foundations for future generations

In the long term, the fiscal policy challenges as a result of demographic changes will be felt first and foremost in the social security funds and in the corresponding expenditure of the Confederation.

The repercussions of an ageing population for the economy and public finances have been the subject of many studies. For example, the long-term forecasts of the Federal Department of Finance[65] anticipate a strong rise in expenditure on healthcare and retirement provision. If

[65] FDF (2012), "Long-term outlook for public finances in Switzerland 2012", 25.1.2012

Switzerland does not manage to keep its social insurance mechanism in balance, there is a risk that the federal budget will be adversely affected.

The debt brake is an efficient fiscal rule for managing the budget. It has proven its worth. However, it cannot resolve long-term structural problems such as demographic ageing and the repercussions of this phenomenon for the social security funds. Long-term challenges of this nature need to be tackled through reforms in the individual political areas. By contrast, the best possible starting point for mastering future burdens can be created for future generations by bringing the debt ratio down further.

Appendices

1 Statutory provisions on the debt brake

Federal Act of 7 October 2005 on the Federal Financial Budget (Financial Budget Act, FBA, version as of 1 May 2011)[66]

Section 3: Overall management of the federal budget

Subsection 2: Debt brake

Art. 13 Maximum amount of total expenditure

[1] The maximum amount of total expenditure to be approved in the budget according to Article 126 para. 2 of the Federal Constitution corresponds to the product of estimated receipts and the cyclical factor.

[2] Extraordinary receipts are not taken into account when estimated receipts are determined. Extraordinary receipts include in particular extraordinary investment receipts as well as extraordinary receipts from royalties and concessions.

[3] The cyclical factor corresponds to the ratio of estimated real gross domestic product (according to the long-term smoothed trend) to anticipated real gross domestic product in the budget year.

Art. 14 Taking the maximum amount into account

The Federal Council and the Federal Assembly shall take the maximum amount into account when dealing with all legislative drafts with financial repercussions.

Art. 15 Increasing the maximum amount

[1] When passing the budget or supplementary credits, the Federal Assembly may increase the maximum amount as per Article 126 para. 2 of the Federal Constitution in the event of:

a. extraordinary developments that cannot be controlled by the Confederation;
b. adjustments to the accounting model;
c. booking-related payment spikes.

[2] However, an increase is permissible only if the additional payment requirement is equivalent to at least 0.5% of the maximum amount.

Art. 16 Compensation account

[1] After the state financial statements have been approved, the maximum amount of total expenditure for the previous year shall be corrected on the basis of ordinary receipts actually received.[67]

[2] If the total expenditure reported in the state financial statements is higher or lower than the adjusted maximum amount, the deviation shall be debited or credited to a compensation account managed outside the state financial statements.

Art. 17 Deficits in the compensation account

[1] A deficit in the compensation account shall be offset over the course of several years through a reduction in the maximum amounts established as per Article 13 or 15.

[2] If a deficit exceeds 6% of total expenditure incurred in the previous accounting year, this excess shall be eliminated within the next three accounting years.

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[66] SR **611.0**

[67] Wording as per point I of the Federal Act of 20 March 2009, in force since 1 January 2010 (AS **2009** 5941; Federal Gazette **2008** 8491).

*Art. 17*a *Amortisation account*

[1] Extraordinary receipts or expenditure reported in the state financial statements shall be credited or debited to an amortisation account managed outside the state financial statements.

[2] However, the following items are not to be booked to the amortisation account:

a. Extraordinary receipts subject to statutory ringfencing;
b. Extraordinary expenditure covered by receipts as per point (a) above.

*Art. 17*b *Deficits in the amortisation account*

[1] A deficit in the amortisation account in the previous accounting year shall be offset within the next six accounting years through a reduction in the maximum amounts established as per Article 13 or 15.

[2] If the deficit of the amortisation account increases by more than 0.5% of the maximum amount as per Article 126 para. 2 of the Federal Constitution, the offsetting period as per paragraph 1 above shall be reset.

[3] In special cases, the Federal Assembly may extend the deadlines that apply as per paragraphs 1 and 2 above.

[4] The obligation to balance the amortisation account shall be deferred until any deficit in the compensation account is eliminated as per Article 17.

[5] The magnitude of the budget savings required shall be decided by the Federal Assembly on an annual basis when approving the budget.

*Art. 17*c *Precautionary savings*

[1] To offset anticipated deficits in the amortisation account, the Federal Assembly may reduce the maximum amounts established as per Article 13 or 15 when approving the budget.

[2] The reduction requires that the compensation account is at least balanced as per Article 16.

*Art. 17*d *Credits to the amortisation account*

Reductions according to Articles 17b point 1 or 17c are credited to the amortisation account as long as this credit does not result in a debit to the compensation account.

2 Basis for investment development (Section 5.2.1)

Definition of investment

The introduction of the debt brake did not result in any fundamental change to the treatment of investment (no new concepts, neither more nor less favourable treatment), which means that there are no direct legal (and in particular no definition-related) repercussions for investment.

The Confederation's definition of investment (according to the FBA: payments to third parties to create assets that directly serve administrative purposes) represents a middle ground between that of the private sector and that of the national accounts. The business management perspective is broad in nature (asset-oriented view, i.e. an increase in fixed and non-administrative assets), whereas the national accounting perspective is narrow (production-oriented view, i.e. investment in means of production).

Investment is defined as follows in the Financial Budget Act:

- *Investment expenditure* is defined in Article 3 of the FBA as payments to third parties to create assets that directly serve administrative purposes.
- Investments are recognized under *administrative assets* in the statement of financial position (as distinct from non-administrative assets). These directly serve the fulfilment of federal tasks, and include inventories, tangible fixed assets and intangible fixed assets, as well as loans and financial interests.
- Treasury investments are not considered investments in this context, as they do not directly serve the fulfilment of public tasks. These are held under non-administrative assets (short and long-term financial investments). This is particularly true of the unemployment insurance loans and the advance to the FinPT fund, both of which constitute bridge financing.

Derivation of underlying basis (numerical series)

The analysis is based on the "time series for the federal budget" published by the FFA.[68] This data encompasses expenditure according to the federal financial statements for the period 1990–2012. The figures have been adjusted for structural breaks (in particular the outsourcing of public companies). Discretionary decisions (particularly for targeted investment) remained part of the numerical series.

The adjustment of investment expenditure was undertaken as follows:

[68] http://www.efv.admin.ch/d/dokumentation/finanzberichterstattung/kennzahlen_bundeshaushalt.php

Investment according to the federal financial statements

a) Ordinary and extraordinary expenditure

Since the debt brake was introduced, a distinction has had to be made between ordinary and extraordinary expenditure. Because one-off spikes distort the longer-term development picture (for example, e.o. expenditure in 2008 of CHF 8.5 billion as a result of the loan to UBS) and extraordinary investment expenditure remains a possibility, only the ordinary budget is considered in this context, i.e. extraordinary investment expenditure is excluded.

Retroactive coding was performed up to 1996 (see report on budget, volume 3, appendix A02). For the observation period 1990–1995, no investment expenditure was incurred that would be assessed as extraordinary according to today's criteria.

b) Loans to unemployment insurance and SIFEM, international loans

When unemployment increased at the beginning of the 1990s, the unemployment insurance fund was granted repayable loans. Between 1993 and 1998, a total of CHF 7.6 billion was transferred. These sums were fully repaid between 1995 and 2002, depending on the term of the individual tranches. Following the complete revision of the Unemployment Insurance Act in 1999, the unemployment insurance fund was no longer granted loans through the federal financial statements, but instead received repayable Treasury loans, which are not booked in the financing statement.

On the expenditure side, these loans – which at least from the economic perspective cannot be viewed as investments – distort the development of investment expenditure to a considerable degree. Therefore, they are not taken into account in investment expenditure.

A correction for the loan granted in connection with the SIFEM outsourcing in 2011 is likewise necessary. The corresponding (budget-neutral) increase of CHF 416 million has been corrected.

Moreover, two bridging loans to Tajikistan and Yugoslavia amounting to a total of CHF 432 million have been removed from the figures for 2001, as these loans are unrelated to the development of investment in Switzerland.

c) Spin-off of federal enterprises and institutions

SBB/transport: The financing of rail transportation was substantially restructured in the second half of the 1990s. From an investment perspective, the following two shifts are relevant:

As part of the railway reforms (first phase, 1999), the contributions of the Confederation for maintaining the asset value of the SBB network were no longer recognised as non-investment operating contributions, but as investment contributions (CHF 300-500 mn). This gave rise to a structural break for which an adjustment is needed: as contributions for maintaining the asset value of the network were determined on the basis of the SBB's depreciation, a proportion of investment in operating contributions for the period prior to 1999

(equivalent to the depreciation reported in the SBB accounts) has to be integrated into the time series of investment expenditure. This shift has no repercussions for the Confederation's total expenditure.

Since the introduction of the fund for major railway projects (FinPT fund), the corresponding investment has been financed by this fund (CHF 220 mn). Up until then, loans had been granted by the Federal Office of Transport, whereas from that point onwards deposits in the fund took the form of investment contributions (amounts prior to 1998 < CHF 100 mn). The corresponding structural break has been corrected for the time series of separate accounts.

ETH: The transfer of funds to the ETH since 1990 can be broken down into three phases:

Situation prior to the outsourcing of the ETH from the central Federal Administration (1990–1999): Investment is reported as investment credits (headings) in the individual administrative units (AU 329−340). The investment of the ETH units is thus recognised just like any other investment. No adjustment is required.

Outsourcing of the ETH, associated with a separate account (from 2000): federal funding of the ETH is classified as non-investment expenditure, but the ETH nonetheless uses part of this funding for investment purposes. Essentially, the outsourcing gives rise to a structural break, as the Confederation now no longer recognises any funding in the statement of investments; the investment for the years 2000–2006 is nonetheless reported as a sub-heading within the financing contribution (which is itself reported under current expenditure). This allowed for mapping, which is already taken into account in the time series that represent the starting point of the analysis. Therefore, no further adjustment is necessary.

New Accounting Model (NAM, from 2007): whereas construction investment is undertaken by the Federal Office for Building and Logistics (FOBL), other investment is listed under the (non-investment) financing contribution. Because no further mapping is carried out in this respect, a correction is necessary with a view to transferring the investment component of the financing contribution to the statement of investments. This is undertaken on the basis of details provided by the statement of investments of the ETH Domain (investment in movable property, plant and equipment, after deduction of an assumed 10% share of investment financed by second-party resources and third-party funds, which cannot be attributed to the Confederation). This shift has no repercussions for the Confederation's total expenditure.

Outsourcing of Swiss Post, Swisscom and PUBLICA: in connection with the corresponding outsourcings, the analyses of the time series in the years in question revealed no significant movements or shifts of the expenditure captured in the financing statement. Without this having been investigated in detail, it can be assumed that these outsourcings resulted solely in changes within the statement of financial position. Therefore, no adjustments are necessary.

d) New fiscal equalization system

The NFE only encompassed transfer expenditure, i.e. tasks jointly financed by the Confederation and the cantons. The majority of the expenditure observed under the new system related to operating contributions (from the Confederation or cantons), with the minority relating to investment contributions. Like internal investment, investment contributions are included in investment expenditure.

When extrapolating the NFE global balance for the 2008 financial plan in 2006, additional NFE-related investment (including investment contributions) by the Confederation of CHF 83 million was offset by lower investment on the part of the Confederation amounting to CHF 86 million (including the expiry of supplementary balancing charges for investment contributions). In other words, the increases and decreases in expenditure were thus

almost wholly balanced (CHF -3 mn). For the 2010 financial plan (extrapolation likewise in 2006), the same picture emerged (balance: CHF +4 mn).

In other words, when all NFE-related tasks (and the related expenditure shifts between the Confederation and the cantons) are taken into account, no structural break can be discerned in the Confederation's investment expenditure.

Investment incl. separate accounts

If the separate accounts are included, two questions arise: firstly, how should the federal financial statements and separate accounts be "consolidated" (without making any claim to comprehensive consolidation), and secondly, should any adjustments be made where the separate accounts are concerned?

a) FinPT fund

On the basis of the federal financial statements, the expenditure of the FinPT fund is augmented as follows:

- The deposits from the federal financial statements in the FinPT fund (= restricted receipts) are deducted. These comprise restricted receipts from the heavy vehicle charge, mineral oil tax, value added tax (from 2001) and contingent receipts (2001–2003).

- On the other hand, the withdrawals from the fund are counted as expenditure (withdrawals for NRLA projects, Rail 2000, noise abatement measures, and the costs of joining the European high-speed rail network). This procedure applies to the figures from the date of the fund's introduction in 1998.

On the issue of adjustments: from 1993, expenditure was incurred by SBB in connection with major railway projects (Rail 2000 and Alpine transit projects), but this found its way into the financing statement in the form of Treasury loans rather than investment contributions. These Treasury loans are accordingly added to investment expenditure (and therefore total expenditure) for the years 1993–1997 so that expenditure *per se* can be observed irrespective of the form of financing.

b) Infrastructure fund

The expenditure of the infrastructure fund (introduced in 2008) is essentially supplemented in the same way as the expenditure of the FinPT fund:

- Deposits are deducted, specifically the annual infrastructure fund deposit (ASTRA/A8400.0100). However, the "motorway construction not eligible for capitalization" item is also deducted, as this is not used for investment expenditure (land modifications, among other things).

- On the other hand, withdrawals from the fund are again added back to expenditure. As with the FinPT fund, withdrawals for projects constitute investment expenditure, whereas of these withdrawals the "items not eligible for capitalization" for the completion of the motorway network and elimination of bottlenecks as well as a proportion of the non-repayable contributions are not viewed as investment expenditure, but as current expenditure (maintenance). While the latter is actually not technically correct from an accounting standpoint, this is left unchanged here in order to ensure consistency with the FS figures [< CHF 100 mn.]).

c) ETH and SAB

The ETH Domain was already taken into account in the federal financial statements in order to avoid a structural break as a result of the outsourcing of the ETH in the year 2000.

The Swiss Alcohol Board (SAB) was not taken into account given its minimal significance from an overall investment perspective.

Adjustment of expenditure development by task area

a) Investment according to the federal financial statements

The time series for "expenditure by task area" form the starting point here. The adjustments undertaken correspond to those as per the individual account group perspective. Specifically this means the following:

- The unemployment insurance loans up to 1999 do not form part of the two task areas observed. However, they are excluded from total expenditure (for purposes of proportionality). The outsourcing of the ETH is undertaken at federal financial statement level. The same is true of the correction made with respect to the loan granted to SIFEM AG in 2011.

- Where the outsourcing of federal enterprises is concerned (with respect to the transport task area), the adjustment is undertaken in the same way as described above.

b) Investment incl. separate accounts

The amalgamation of the figures is identical to that for the individual account group perspective.

Table 8: Adjustment of investment expenditure (expenditure by account group)

Federal financial statements								
CHF mn	1990	1991	1992	1993	1994	1995	1996	1997
Ordinary expenditure	31 616	35 501	37 816	40 600	41 341	40 528	43 220	44 122
Operating expenditure	9 355	9 900	10 347	9 925	10 187	10 238	10 255	9 695
Current transfer expenditure	16 907	19 144	20 702	21 420	22 463	22 924	24 913	24 702
Financial expenditure	1 842	2 061	2 591	2 621	3 199	3 140	3 003	3 160
Investment expenditure	**3 512**	**4 396**	**4 176**	**6 634**	**5 493**	**4 226**	**5 049**	**6 565**
Tangible fixed assets and inventories	582	719	810	934	826	783	741	681
Buildings	243	328	405	521	410	403	401	392
Property, plant and equipment, and inventories	339	391	405	414	417	381	341	289
Motorw ays	–	–	–	–	–	–	–	–
Intangible fixed assets	–	–	–	–	–	–	–	–
Loans	404	580	529	2 566	1 510	343	1 369	2 788
Financial interests	6	5	5	1	0	1	3	3
Investment contributions	2 520	3 092	2 833	3 133	3 156	3 099	2 936	3 093
Fund for major railw ay projects	–	–	–	–	–	–	–	–
Other investment contributions	2 520	3 092	2 833	3 133	3 156	3 099	2 936	3 093
Extraordinary expenditure	–	–	–	–	–	–	620	–
Current expenditure	–	–	–	–	–	–	620	–
Investment expenditure	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Source: Time series for federal budget, FFA, 06/2013								
Adjustments								
1) Loans to ALV, SIFEM, Tajik. & Yugoslavia								
Total => Correction total and investment	0	0	0	-2 050	-1 150	- 100	-1 050	-1 950
2) Outsourcing of federal enterprises								
SBB	289	313	333	347	375	416	405	487
Total => Correction investment expenditure	289	313	333	347	375	416	405	487
Corrected investment contributions	2 810	3 405	3 165	3 480	3 531	3 515	3 340	3 580
Adjusted time series								
Total ordinary expenditure, nominal	31 616	35 501	37 816	38 550	40 191	40 428	42 170	42 172
Ordinary investment expenditure, nominal	3 801	4 709	4 509	4 932	4 718	4 542	4 404	5 102
Investment expenditure growth rates								
annual		23.9%	-4.3%	9.4%	-4.3%	-3.7%	-3.0%	15.8%
Investment expenditure in % ord. expenditure								
annual	12.0%	13.3%	11.9%	12.8%	11.7%	11.2%	10.4%	12.1%
In % of GDP								
annual	1.12%	1.33%	1.25%	1.34%	1.25%	1.19%	1.14%	1.29%
State fin. stmts (fed. fin. stmts & separate accounts)								
3) FinPT fund/infrastructure fund								
Deposits (investment receipts)								
FinPT fund								
Infrastructure fund								
Total								
Withdraw als (investment expenditure)								
FinPT fund				540	212	228	396	261
Infrastructure fund								
Total				540	212	228	396	261
Balance								
FinPT fund								
Infrastructure fund								
Total => Correction total and investment expenditure								
Adjusted time series								
Ordentliche Gesamtausgaben nominal	31 616	35 501	37 816	38 550	40 191	40 428	42 170	42 172
Ordinary investment expenditure, nominal	3 801	4 709	4 509	4 932	4 718	4 542	4 404	5 102
Investment expenditure growth rates								
annual in nominal terms		23.9%	-4.3%	9.4%	-4.3%	-3.7%	-3.0%	15.8%
Investment expenditure in % ord. expenditure								
annual	12.0%	13.3%	11.9%	12.8%	11.7%	11.2%	10.4%	12.1%
In % of GDP								
annual	1.12%	1.33%	1.25%	1.34%	1.25%	1.19%	1.14%	1.29%

(continuation of Table 8)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
44 992	45 368	47 131	49 135	50 033	49 962	50 285	51 403	52 377	53 965	56 598	58 228	59 266	62 333	61'736
9 610	9 548	8 538	8 759	8 615	8 583	8 478	8 282	8 187	8 471	9 107	9 533	9 487	9 789	9'940
25 655	27 038	29 074	29 886	30 851	31 469	32 195	32 822	33 661	35 228	37 146	38 194	39 536	42 494	42'882
3 505	3 701	3 704	3 591	3 969	3 586	3 388	3 711	4 105	4 003	3 791	3 255	2 972	2 605	1'906
6 222	**5 081**	**5 816**	**6 899**	**6 598**	**6 324**	**6 223**	**6 589**	**6 424**	**6 264**	**6 554**	**7 245**	**7 270**	**7 444**	**7 007**
781	844	383	556	601	588	611	585	591	874	2 265	2 512	2 585	2 270	2'359
423	527	229	263	260	223	239	247	243	603	588	635	596	637	659
358	317	154	293	342	365	373	338	347	271	341	378	283	230	239
–	–	–	–	–	–	–	–	–	–	1 336	1 499	1 706	1 403	1'461
–	–	–	2	4	11	13	11	13	13	31	39	46	50	47
1 466	195	523	1 064	514	225	314	504	489	376	366	599	307	854	480
4	4	67	43	51	65	59	53	39	35	31	30	30	110	20
3 971	4 038	4 843	5 233	5 428	5 434	5 226	5 436	5 292	4 966	3 861	4 065	4 302	4 160	4'101
–	–	–	–	–	–	–	–	–	–	1 591	1 548	1 604	1 401	1'282
3 971	4 038	4 843	5 233	5 428	5 434	5 226	5 436	5 292	4 966	2 270	2 518	2 699	2 759	2'819
1 598	288	–	1 080	689	–	1 121	–	–	7 038	11 141	–	427	1 998	–
1 598	18	–	–	–	–	1 071	–	–	7 038	2 613	–	427	1 148	–
–	**270**	**–**	**1 080**	**689**	**–**	**50**	**–**	**–**	**–**	**8 528**	**–**	**–**	**850**	**–**
-1 300			-432										-416	
0	0	0	0	0	0	0	0	0	152	183	185	180	277	196
3 971	4 038	4 843	5 233	5 428	5 434	5 226	5 436	5 292	4 966	3 861	4 065	4 302	4 160	4 101
43 692	45 368	47 131	48 704	50 033	49 962	50 285	51 403	52 377	53 965	56 598	58 228	59 266	61 917	61 736
4 922	5 081	5 816	6 467	6 598	6 324	6 223	6 589	6 424	6 416	6 737	7 430	7 451	7 305	7 203
-3.5%	3.2%	14.5%	11.2%	2.0%	-4.2%	-1.6%	5.9%	-2.5%	-0.1%	5.0%	10.3%	0.3%	-2.0%	-1.4%
11.3%	11.2%	12.3%	13.3%	13.2%	12.7%	12.4%	12.8%	12.3%	11.9%	11.9%	12.8%	12.6%	11.8%	11.7%
1.22%	1.24%	1.35%	1.46%	1.48%	1.40%	1.34%	1.38%	1.26%	1.19%	1.19%	1.34%	1.30%	1.24%	1.22%
219	247	491	878	1 103	1 098	1 061	1 379	1 334	1 328	1 591	1 548	1 604	1 401	1 282
										837	944	980	818	896
219	247	491	878	1 103	1 098	1 061	1 379	1 334	1 328	2 428	2 492	2 584	2 219	2 178
593	844	1 258	1 450	1 927	1 979	1 933	2 161	1 615	1 453	1 667	1 520	1 557	1 370	1 369
										1 228	1 167	1 094	1 126	1 186
593	844	1 258	1 450	1 927	1 979	1 933	2 161	1 615	1 453	2 895	2 687	2 651	2 496	2 554
374	597	767	571	824	881	871	782	281	125	77	- 28	- 46	- 31	87
										391	223	114	308	290
374	597	767	571	824	881	871	782	281	125	467	195	67	277	377
44 066	45 965	47 899	49 275	50 857	50 843	51 156	52 185	52 658	54 091	57 065	58 423	59 333	62 194	62 112
5 296	5 678	6 583	7 038	7 422	7 206	7 095	7 371	6 705	6 541	7 205	7 625	7 518	7 583	7 580
3.8%	7.2%	15.9%	6.9%	5.5%	-2.9%	-1.5%	3.9%	-9.0%	-2.4%	10.2%	5.8%	-1.4%	0.9%	0.0%
12.0%	12.4%	13.7%	14.3%	14.6%	14.2%	13.9%	14.1%	12.7%	12.1%	12.6%	13.1%	12.7%	12.2%	12.2%
1.31%	1.38%	1.52%	1.59%	1.66%	1.60%	1.52%	1.54%	1.32%	1.21%	1.27%	1.38%	1.31%	1.29%	1.28%

3 Basis for statement of financial performance (Section 5.2.2)

Table 9: Debt brake requirements: comparison of statement of financial performance perspective and financing statement perspective

Budget CHF mn		Bdg. 2007	Bdg. 2008	Bdg. 2009	Bdg. 2010	Bdg. 2011	Bdg. 2012
	Financing statement						
1	Total receipts	56 011	58 206	60 198	58 208	62 423	64 751
2	Extraordinary receipts	--	230	230	--	--	634
3	Ordinary receipts [3=1-2]	56 011	57 976	59 968	58 208	62 423	64 117
4	Cyclical factor	0.991	0.987	0.995	1.042	1.013	1.007
5	**Expenditure ceiling [5=3*4]**	**55 507**	**57 223**	**59 668**	**60 653**	**63 234**	**64 565**
6	Extraordinary expenditure	--	5 247	--	431	1 998	--
7	Expenditure ceiling reduction	--	--	--	--	166	435
8	**Max. admissible expenditure [8=5+6-7]**	55 507	62 470	59 668	61 084	65 067	64 131
9	Total expenditure	55 107	62 101	59 020	60 668	65 067	64 131
10	**Difference FS [10=8-9]**	**400**	**369**	**649**	**416**	**0**	**0**
	Statement of financial performance						
11	Total revenue	55 870	58 181	60 755	58 632	62 019	64 622
12	Extraordinary revenue	--	230	230	431	--	634
13	Ordinary revenue [13=11-12]	55 870	57 951	60 525	58 201	62 019	63 988
14	Cyclical factor	0.991	0.987	0.995	1.042	1.013	1.007
15	**Expenditure ceiling [15=13*14]**	**55 367**	**57 197**	**60 223**	**60 645**	**62 826**	**64 436**
16	Extraordinary expenses	--	1 530	230	431	1 148	--
17	Expense ceiling reduction	--	--	--	--	166	435
18	**Max. admissible expenses [18=15+16-17]**	55 367	58 727	60 453	61 076	63 808	64 001
19	Total expenses	55 208	57 929	58 760	60 346	63 264	63 878
20	**Difference SFP [20=18-19]**	**159**	**799**	**1 693**	**730**	**544**	**123**
21	**Difference SFP vs. FS [21=20-10]**	**- 241**	**430**	**1 044**	**315**	**544**	**123**
	Total 2007-2012						***2 215***

Fin. stmts CHF mn		FS 2007	FS 2008	FS 2009	FS 2010	FS 2011	FS 2012
	Financing statement						
1	Total receipts	58 846	64 177	67 973	62 833	64 535	63 735
2	Extraordinary receipts	754	283	7 024	--	290	738
3	Ordinary receipts [3=1-2]	58 092	63 894	60 949	62 833	64 245	62 997
4	Cyclical factor	0.974	0.983	1.018	1.013	1.007	1.012
5	**Expenditure ceiling [5=3*4]**	**56 582**	**62 808**	**62 046**	**63 650**	**64 695**	**63 753**
6	Extraordinary expenditure	7 038	11 141	--	427	1 998	--
7	Expenditure ceiling reduction	--	--	--	416	166	435
8	**Max. admissible expenditure [8=5+6-7]**	**63 619**	**73 949**	**62 046**	**63 662**	**66 527**	**63 319**
9	Total expenditure	61 003	67 739	58 228	59 693	64 331	61 736
10	**Difference FS [10=8-9]**	**2 616**	**6 210**	**3 818**	**3 969**	**2 197**	**1 583**
	Statement of financial performance						
11	Total revenue	58 630	64 375	65 205	63 951	65 922	64 779
12	Extraordinary revenue	630	328	1 060	427	229	738
13	Ordinary revenue [13=11-12]	58 000	64 047	64 146	63 523	65 693	64 041
14	Cyclical factor	0.974	0.983	1.018	1.013	1.007	1.012
15	**Expenditure ceiling [15=13*14]**	**56 492**	**62 959**	**65 300**	**64 349**	**66 153**	**64 810**
16	Extraordinary expenses	--	1 515	189	427	1 148	--
17	Expense ceiling reduction	--	--	--	416	166	435
18	**Max. admissible expenses [18=15+16-17]**	**56 492**	**64 474**	**65 489**	**64 361**	**67 135**	**64 375**
19	Total expenses	54 289	58 102	57 914	59 812	63 828	62 336
20	**Difference SFP [20=18-19]**	**2 203**	**6 372**	**7 575**	**4 549**	**3 307**	**2 039**
21	**Difference SFP vs. FS [21=20-10]**	**- 414**	**161**	**3 756**	**580**	**1 111**	**456**
	Total 2007-2012						***5 651***

4 GDP elasticity of receipts (Section 5.3.1)

Debt brake and GDP elasticity of receipts

The adjustment of the overall fiscal balance for cyclical effects (for the purposes of the debt brake) involves an aggregated approach. Receipts and expenditure are not adjusted in a differentiated way by tax type and expenditure item but in their totality.[69] In formal terms, the calculation of the structural fiscal balance (*SF*) can be illustrated as follows:

$$SF = E \times \left(\frac{\bar{Y}}{Y}\right)^{\varepsilon_E} - A \times \left(\frac{\bar{Y}}{Y}\right)^{\varepsilon_A} \quad (1)$$

According to this formula, receipts (E) and expenditure (A) are corrected for the effect that arises as a result of the deviation of real GDP (Y) from its long-term trend $(\bar{Y})$. The elasticity of receipts (ε_E) and expenditure (ε_A) *in relation to the output gap* $\left(\frac{\bar{Y}}{Y}\right)$ shows how strongly receipts and expenditure react to the economic cycle. For example, if the elasticity of expenditure amounts to 2, then expenditure will rise by 2% in the event of a 1% rise in the output gap.

The debt brake concept assumes that receipts react proportionally to changes in the output gap $(\varepsilon_E = 1)$ and that expenditure is not influenced by the economic cycle $(\varepsilon_A = 0)$. At the same time, the debt brake demands a structurally balanced fiscal balance $(SF = 0)$. By incorporating this into equation (1) and undertaking subsequent simplifications, we arrive at the familiar debt brake formula, whereby the Confederation's expenditure must correspond to cyclically adjusted receipts:

$$A = E \times \left(\frac{\bar{Y}}{Y}\right) \quad (2)$$

In addition, it can also be shown that the debt brake formula implies a unitary elasticity of receipts *in relation to GDP*. By logarithmising equation (2) and subsequently dividing by $ln\,Y$, one arrives at the following:

$$\frac{d\ln A}{d\ln Y} = \frac{d\ln E}{d\ln Y} + \frac{d\ln \bar{Y}}{d\ln Y} - 1 \quad (3)$$

Under the assumption that purely cyclical fluctuations in GDP influence neither the expenditure ceiling nor long-term trend GDP $\left(\frac{d\,ln\,A}{d\,ln\,Y} = 0\ and\ \frac{d\,ln\,\bar{Y}}{d\,ln\,Y} = 0\right)$, equation (3) can be simplified further:

$$\varepsilon = \frac{d\ln E}{d\ln Y} = 1$$

This point is relevant insofar as the empirical estimation of the elasticity of receipts in relation to the output gap can lack robustness. The output gap is not a phenomenon that can be directly observed – it has to be ascertained through estimates. Depending on the method applied, the estimated elasticities may vary to a greater or lesser degree. This problem does not exist with respect to the empirical ascertainment of the elasticity of receipts in relation to GDP.

[69] For a methodological overview of the calculation of structural deficits and further literature on this subject, see Bornhorst, F. et al. (2011), "When and How to Adjust Beyond the Business Cycle? A Guide to Structural Fiscal Balances", IMF Technical Notes and Manuals.

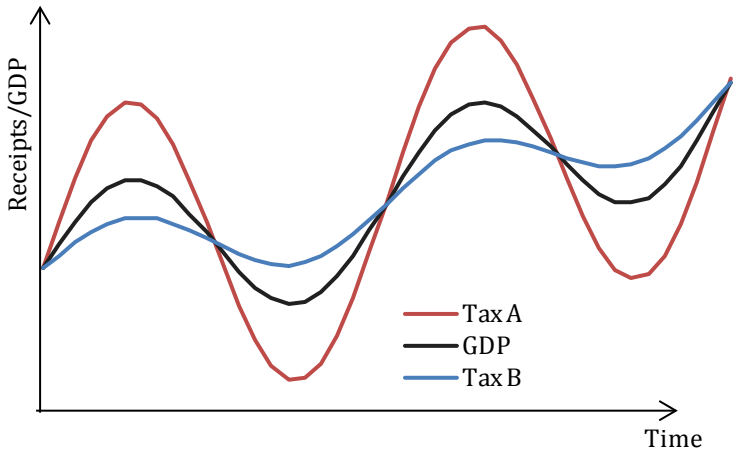
Although the debt brake is based on a real concept in the form of the output gap, elasticities are generally estimated in relation to nominal GDP. For one thing, with the exception of taxes based on volumes, there is no plausible case for linking receipts to the real tax base, while in addition the proportion of nominal trend GDP to nominal GDP must correspond to the real output gap in order for cyclically-related receipts to be isolated. In other words, it is assumed that the deflators of trend GDP and GDP are in accordance with one another.[70]

Distinction between short-term and long-term elasticity

For a variety of reasons, the empirical estimation of the elasticity of receipts is a challenging task. For example, a distinction has to be made between short-term and long-term elasticity. The following graph illustrates the development of gross domestic product as well as that of two different types of tax. Both taxes have the same long-term growth trend as gross domestic product. A regression of tax receipts to gross domestic product would therefore result in the same elasticity of 1 in both cases. This long-term GDP elasticity therefore indicates the extent to which the general receipts trend, i.e. independent of cyclical developments, depends on the development of gross domestic product.

By contrast, the development of these two types of tax differs considerably in the short term: tax A reacts sharply and disproportionately to cyclical fluctuations in gross domestic product, whereas the reaction of tax B is much less pronounced, with macroeconomic fluctuations in production being reflected only to a limited degree. The short-term GDP elasticity of tax A, which measures the direct reaction of receipts to cyclical fluctuations, is therefore greater than 1. In the case of tax B, it is less than 1.

Figure 25: Illustration of GDP elasticities



The relationship between short-term and long-term elasticities is not clear-cut. A tax with a high long-term elasticity need not necessarily be very sensitive to cyclical changes, and a high short-

[70] Cf. Colombier, C. (2004), "A re-evaluation of the debt brake"; with the input of: F. Bodmer, P.-A. Bruchez, A. Geier, T. Haniotis, M. Himmel, U. Plavec, FFA Working Paper no. 2, revised version [German only]

term elasticity does not necessarily allow us to infer significant trend growth. A tax can react immediately and strongly to cyclical fluctuations without exhibiting long-term growth.

Exogenous factors also complicate the process of determining the relationship between receipts and GDP. For example, the GDP elasticity of receipts presupposes a causal link between a change in gross domestic product and that of receipts. However, receipts can also increase independently of macroeconomic production, such as through the introduction of new taxes, increases in tax rates, or changes in the way taxes are levied. Structural changes of this nature are also referred to as "special factors". In order for a statement about causality to be meaningful, the development of overall receipts needs to be adjusted for these special factors. The resulting elasticity is described as the actual GDP elasticity of receipts, in contrast to flat-rate GDP elasticity. Where the debt brake is concerned, it is above all short-term, actual GDP elasticity of receipts that is relevant. Only this elasticity measures how receipts respond to cyclical fluctuations and how much cyclical leeway the debt brake should allow.

Estimation of elasticity

The *long-term GDP elasticity* of receipts can be ascertained through an estimate of the following econometric model:

$$\ln(E_t) = \alpha + \beta \times \ln(Y_t) + \sum_{i=-5}^{5} \gamma_i \times \Delta \ln(Y_{t+i}) + \varepsilon_t$$

The estimate is implemented with logarithmised data, so that the coefficient β measures the long-term GDP elasticity of receipts directly. As we are dealing with non-stationary and cointegrated time series[71] for both GDP and receipts, a lead/lag structure of GDP growth rates is additionally taken into account. This approach, which is known as a DOLS approach (DOLS = "dynamic ordinary least squares"), allows for consistent estimation of the above equation.[72] The estimate was implemented with annual data ranging from 1980 to 2012, using the ordinary receipts of the Confederation on the one hand and ordinary receipts adjusted for special factors on the other[73].

The results of this dynamic OLS (DOLS) estimate are set out in the table below. According to this estimate, an increase in nominal GDP of 1% results in a slightly disproportionate rise in receipts of 1.039%. The coefficient is statistically significant, but given the relatively high standard error, even elasticities of between 0.86 and 1.22 cannot be ruled out with the data sample applied. If the receipts adjusted for special factors are observed, the estimated GDP elasticity of receipts still amounts to 0.958.

[71] On proof of the cointegration of federal receipts and GDP see: Colombier, C. (2003), "The correlation between gross domestic product and Swiss federal receipts", FFA Working Paper No. 5 (old series).

[72] Cf. Sobel, R. S. and R. G. Holcombe (1996), "Measuring the growth and variability of tax bases over the business cycle", National Tax Journal, Vol. 49, No. 4, 535-52

[73] The repercussions of legislative and tax rate changes for VAT as well as stamp duty were taken into account.

Table 10: Result of estimates of long-term and short-term elasticity

	Estimate of long-term elasticity		**Estimate of short-term elasticity**	
	DOLS level evaluation		Error correction model	
	β	R2	β	R2
Ordinary receipts	**1.039***	0.986	**1.374***	0.526
	(0.090)		**(0.306)**	
Adjusted ordinary receipts	**0.958***	0.984	**1.061***	0.541
	(0.080)		**(0.388)**	

Standard error of coefficient in brackets; * = significance at the 5% level

For the determination of *short-term elasticity* the following econometric error correction model is estimated:

$$\Delta \ln (E_t) = \alpha + \beta \times \Delta \ln (Y_t) + \gamma \times [\ln(E_{t-1}) - \delta - \rho \times \ln(Y_{t-1})] + \varepsilon_t$$

The growth rates of receipts are regressed to those of nominal GDP and to an additional error correction term, i.e. the long-term equilibrium relationship between receipts and GDP delayed by a single period. This makes it possible to take into account the fact that the two variables are cointegrated: Short-term changes in receipts are not necessarily attributable to cyclical causes, but can also be attributable to a temporary deviation from the shared trend of receipts and GDP and the subsequent return to this trend.

The short-term elasticity for ordinary receipts registers a value of 1.374, although a value of 1 cannot be ruled out given the high standard error. When receipts are adjusted for special factors, the elasticity works out significantly lower (1.061).

Conclusion

These results are in line with the results of earlier investigations[74] and suggest that the assumption of a GDP elasticity of 1 remains justified. However, the short-term elasticities of ordinary receipts differ fairly significantly from those of receipts adjusted for special factors. This is a clear sign that tax reforms play an important role when evaluating elasticities.

However, taking structural effects of this nature into account in the estimates of actual GDP elasticity of receipts poses an even greater problem. For example, for the estimates set out above only legislative changes with respect to value added tax and stamp duty were taken into account, as their financial repercussions could be determined in a relatively robust way and dynamically across the entire data sample. By contrast, where direct federal tax – which is likewise heavily influenced by reforms – is concerned, the repercussions of tax reforms can only be estimated with a very high degree of uncertainty, which is why no adjustment was undertaken in this

[74] Colombier, C. (2003), The correlation between gross domestic product and Swiss federal receipts, FFA Working Paper no. 5 (old series)

respect. As a rule, however, reforms in the area of direct federal tax are also likely to lead to an overestimation of GDP elasticity.