



Screwdriver of the Value for money project

The proposal for the implementation of expenditure ceilings into the Slovak budget management



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Summary

The introduction of binding multi-annual expenditure ceilings into Slovak budgetary practice could strengthen medium-term planning. It also has the potential to better anchor fiscal discipline and increase the counter-cyclicality of the fiscal policy. In addition, it could make the use of public expenditures more efficient, facilitate prioritization across public policies and support the application of the value for money principles. Expenditure ceilings could also lead to an additional strengthening of budget control and transparency. Expenditure rules are considered an optimal operational fiscal rule by the wider academic community as well as by various international institutions. This study aims to open a public debate on the possible form of expenditure ceilings in Slovakia. Following the practice of other countries, it is appropriate to test expenditure ceilings, based on real budgetary data over several years, before their final introduction within the country's budgetary rules.

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Attention

The paper presents the views of the authors and the Institute of Financial Policy (IFP), which do not necessarily reflect the official views of the Ministry of Finance of the Slovak Republic (MoF SR). The publication of studies by the Institute of Financial Policy aims to stimulate and improve the professional and public debate on current economic topics. Text quotations should therefore refer to the IFP (and not the MoF SR) as author of these views.

Vote of thanks

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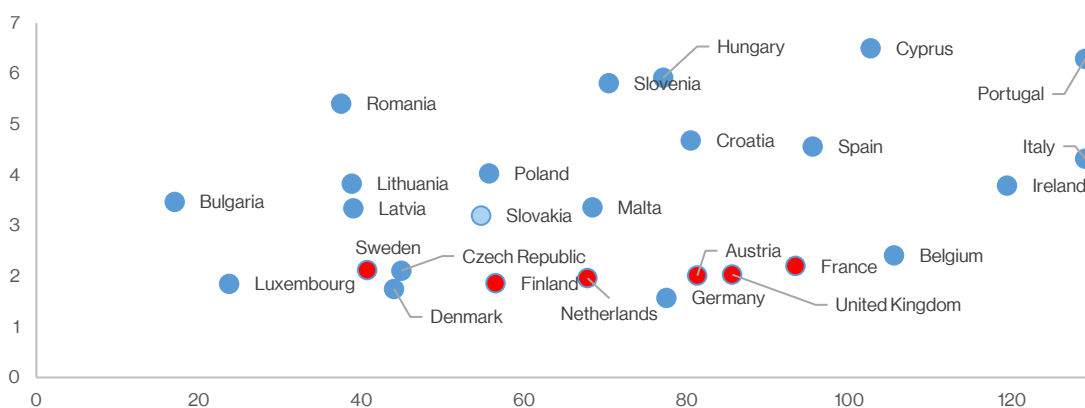
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1 Context and motivation

At the beginning of 2018 the Ministry of Finance of the Slovak Republic (MoF SR) announced preparatory work on expenditure ceilings. This commitment was also confirmed in the current [Stability Programme](#). Simulations of expenditure ceilings prior to their actual implementation (including an assessment of several possible variants) should assess the robustness of the tool for potential shocks in the external environment, other potential macroeconomic shocks, revisions in statistical reporting, and also implications for the budgetary process.

The initiative monitors the most up-to-date international practice within the budgetary planning. Binding expenditure ceilings are considered by the wider academic community ([Carnot, 2014](#), [Claeys et al, 2015](#); [Bénassy-Quéré, et al, 2018](#)), together with international institutions ([IMF](#), [EC](#), [OECD](#)), the most appropriate operational fiscal rule¹ for budgetary management. Today expenditure rules are used by around 45 countries in the world². Already in the 1990s, some European countries introduced expenditure ceilings to meet the Maastricht criteria regarding required levels for general government (GG) debt and the deficit figures. The best-known examples are Sweden and the Netherlands, whose fiscal frameworks are today considered to be one of the best ([EC, 2010](#)). The economic literature points to the fact that mandatory expenditure frameworks are associated with better budgetary outcomes³. Furthermore, countries with binding budgetary frameworks may also be able to refinance their debt even at its relatively higher levels (Chart 1).

Chart 1: Yields on 10Y government bonds (vertical axis) at various levels of general government gross debt (horizontal axis) – 2013



Note: States marked in red have binding medium-term budgetary framework. Austria, Finland, the Netherlands and Sweden at the level of total expenditure. France and the UK at ministerial level.

Source: Eurostat, IMF

Greater emphasis on expenditure ceilings also comes from the development of fiscal surveillance at the European level. In order to simplify European budgetary rules, EU finance

¹ Also, in view of meeting the most important fiscal policy criteria, through evaluation of criteria from [Kopits and Symanský \(1998\)](#). These are the criteria: 1) Good definition, 2) Transparency, 3) Suitability, 4) Consistency, 5) Simplicity, 6) Flexibility, 7) Enforceability, 8) Efficiency.

² According to the International Monetary Fund [database](#).

³ Several authors have analyzed the impact of expenditure ceilings on fiscal indicators by econometric methods (e.g. [Cordes et al, 2015](#)).

ministers agreed⁴ in 2016 to increase [the emphasis on the expenditure rule](#)⁵ when assessing budgets under the Stability and Growth Pact rules. Furthermore, at the end of 2017, the European Commission presented [draft Council Directive](#).⁶ According to the Directive, in addition to the objective of a structurally balanced budget (MTO⁷), national fiscal frameworks should include provisions regarding binding medium-term expenditure plan defined for the whole election period⁸.

BOX 1: The importance of monitoring the development of public expenditure

The lack of emphasis on binding expenditure plans explains the unhealthy fiscal position of several euro area countries before the outbreak of the financial crisis. Deviations from the medium-term budgetary plans were mainly due to developments on the expenditure side of the budget (Chart 2). At the time when the global financial crisis hit, the general government revenues (which in the previous years cyclically increased compared to the budget plan) subsequently dropped sharply. Given certain degree of expenditure rigidity, there was a steep increase in government deficits and total indebtedness (Chart 3). The average GG gross debt in the EU increased by more than 30 percentage points of GDP over the five-year horizon.

Excessively loose expenditure plans in the pre-crisis times is also confirmed by the economic literature. According to the analysis by [Hauptmeier et al. 2011](#), the application of neutral expenditure policies based on binding expenditure rules would have led to a lower level of primary expenditure in 2009 by 2 to 3.5 p.p. of GDP compared to their real value⁹. Similarly [Turrini \(2008\)](#) confirmed that the pre-crisis pro-cyclically-released fiscal policy concerned mainly countries without binding expenditure rules.

Chart 2: Difference between GG budget revenues and expenditures over the budget (average 1998 - 2005, % of GDP)

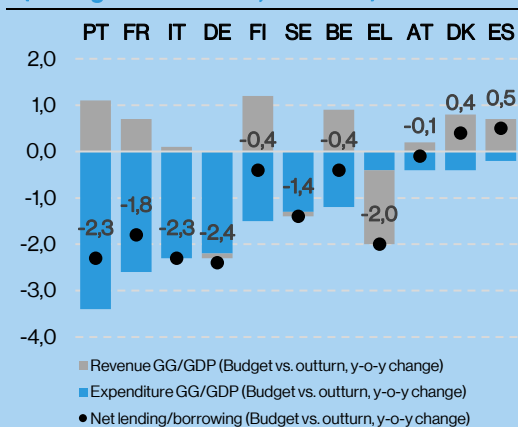
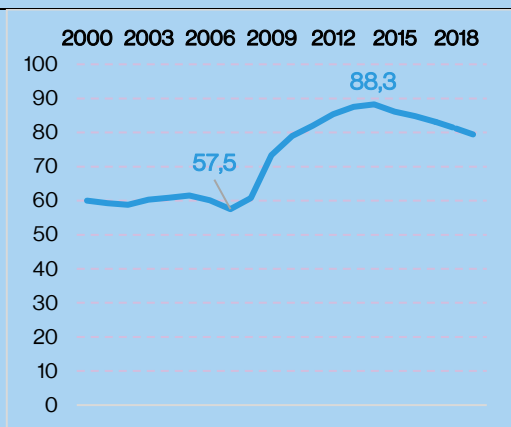


Chart 3: Gross GG debt (EU weighted average, % of GDP)



Source: [Moulin a Wierds, 2006](#)

⁴ The Council of Finance Ministers (ECOFIN) approved the report of the Consultative Economic and Financial Committee (EFC).

⁵ So called "Expenditure benchmark", which was introduced as a tool for assessing compliance with the preventive part of the Growth Stability Pact within the framework of European fiscal rules in 2011. However, this tool does not function as an operational tool for setting and managing the budget in a number of countries, including Slovakia.

⁶ To strengthen fiscal responsibility and fiscal medium-term orientation in the Member States. This Directive partly follows on from the previous [Council Directive of 2011](#), which sets minimum requirements for the medium-term budgetary frameworks for EU Member States.

⁷ Medium term-objective, (the medium-term budgetary objective in the form of a structurally balanced budget), the achievement of which will ensure a sustainable trajectory of public debt.

⁸ This Directive raises the weight of national principles when setting operational fiscal rules.

⁹ It concerns the euro area countries with the exception of Germany.

2 Expenditure ceilings and their benefits

The main benefits of expenditure ceilings include anchoring of fiscal discipline, anti-cyclical fiscal policy, more efficient spending of resources and more transparent budgetary process. Although variants of expenditure ceilings vary considerably among countries, they are associated with several common characteristics. Expenditure ceilings can be understood as an upper limit to a specified portion of general government expenditure under government control, usually over the medium term horizon. In order to strengthen the emphasis on prioritizing expenditure, the aggregate expenditure ceilings are set and announced at the start of the budgetary procedure, before the budget requirements of individual ministries and general government entities. The calibration of expenditure ceilings is mostly linked to the achievement of fiscal targets, abstracting from temporary cyclical fluctuations in revenues. The possible characteristics or variants of expenditure ceilings are described in more detail by Slovak and foreign economic literature (e.g. [Horváth a Ódor, 2009](#), [Ódor, 2016](#), [Cordes et al, 2015](#), [Lledo et al, 2018](#))

- **Strong anchor for fiscal discipline**

In the medium term, the expenditure ceiling is generally bound to meet specific output fiscal targets. It is the expenditure side that is most closely associated with the problem of "deficit bias"¹⁰ (BOX 1). A clear and credible commitment not to exceed expenditure ceilings over the set horizon therefore encourages fiscal discipline¹¹. Improving the fiscal discipline also results from the fact that mandatory medium-term budgeting prevents additional expenditure increases in subsequent years. The fact that the existence of expenditure rules leads to better fiscal outcomes is also confirmed by the economic research ([Cordes et al, 2015](#)). The positive impact on public finances is stronger if the expenditure ceilings are binding for a period of at least three years ([Nerlich a Reuter, 2013](#)) and if they are also legally anchored ([von Hagen et al, 2005](#))

- **Counter - cyclical fiscal policy**

Expenditure ceilings ignore temporary cyclical surprises, both positive and negative, thus increasing anti-cyclical fiscal policy¹². Expenditure ceilings are a desirable tool especially in good times. They help to achieve that the additional cyclical revenues are saved at the time when the economy is overheating. Similarly, during economic downturn, they anchor fiscal space for the functioning of automatic stabilizers (in particular unemployment benefits), which mitigate the economic downturn. Medium-term mandatory expenditure ceilings can also help diminish the budgetary impacts of the election cycle ([Bonfati a Forni, 2017](#)), which causes excessive expenditure growth in the pre-election year. Overall, expenditure ceilings are thus effective in alleviating economic imbalances.

- **More efficient public expenditures**

Expenditure ceilings create better incentives for the reallocation of public resources towards more efficient expenditure titles. An ex-ante top-down ceiling creates more pressure for effective allocation of limited financial resources. The positive effect is stronger if, in the second step, the aggregate expenditure ceilings are also divided into individual line ministries. Clearly determined fiscal space in the medium term should also help with expenditure items

¹⁰ It stems in particular from the problem of time inconsistency when the costs of a higher deficit are not internalized in short term ([Kydland and Prescott, 1977](#)).

¹¹ Greater predictability of fiscal policy over the longer term horizon is an important signal for the business environment.

¹² Assuming the expenditure ceiling are defined ex-ante in the form of year-on-year growth or maximum ceilings and not in relation to GDP.

over one fiscal year (especially investment projects). Medium-term expenditure ceilings (with the possibility of expenditure shift between years) can also help to prevent inefficient spending of last-minute expenditure (the so-called December effect). In several countries, the introduction of expenditure ceilings was accompanied by further budgeting reforms ([Ayuso i Casals, 2012](#), [Cordes et al, 2015](#)). In Slovakia, expenditure ceilings would become the main strategic framework for the Value for Money project and would enhance its deeper implementation. In the longer term, they could support reforms aimed at enhancing the program budgeting.

- **A more transparent budgetary process and improved budget control**

Expenditure rules are more transparent¹³ and easier to manage and control compared to other fiscal rules ([Deroose et al, 2006](#)). Expenditure ceilings focus on the part of revenue and expenditure that is under direct government control. The clear definition of responsibility increases the incentives for the delivery of budgetary commitments. Expenditure ceilings are therefore an appropriate operational rule for ex-ante budget management and its ex-post evaluation. In addition, to operationalize expenditure ceilings in the budgetary process, usually, a baseline scenario of existing costs of current policies and a quantification of the costs of new policies and priorities is quantified. Such a structure of public finances makes clearer how public funds are redistributed, which in turn improves the accountability of government policies.

3 Proposal for expenditure ceilings in Slovakia

Appropriate parametrization of expenditure ceilings is important for its reliability and stability. Up to one third of the expenditure rules were abolished in different countries for various political and economic reasons ([Cordes et al, 2015](#)). Therefore, it is important that the final form of expenditure ceilings reflects political preferences and national specificities and is subject to wider political debate in the country. This will ensure consensus and its stability in the future. In the following sections, we describe key parameters of our proposal for the expenditure ceilings. We divide them into three main areas: 1) Formulation of expenditure limits and their connection to aggregate fiscal targets; 2) Their range and detail; 3) Tools for controlling uncertainty.

3.1 Formulation of expenditure ceilings and their connection to aggregate fiscal targets

The numerical calculation of expenditure ceilings is based on expected economic developments, budgetary targets, defined ceiling scope and reserve for unexpected developments. Expenditure ceilings are determined in the first step by the expected GG revenue stemming from medium-term forecasts and existing legislation. On the top of it the ceiling is additionally higher in case of planned GG deficit and, on the other hand, lower in the case of the planned surplus. As the next step, it is appropriate to exclude certain items from the expenditure ceiling, especially those not under the control of the government. Due to the uncertainty of medium-term macroeconomic developments, the initial expenditure ceiling to be allocated to line ministries may be reduced by a reserve for unexpected macroeconomic developments. The individual parameters are explained in more detail in the following parts. An illustrative numerical example is given in Appendix 2.

¹³ Especially if they are expressed nominally as maximum ceiling of authorized expenditure levels.

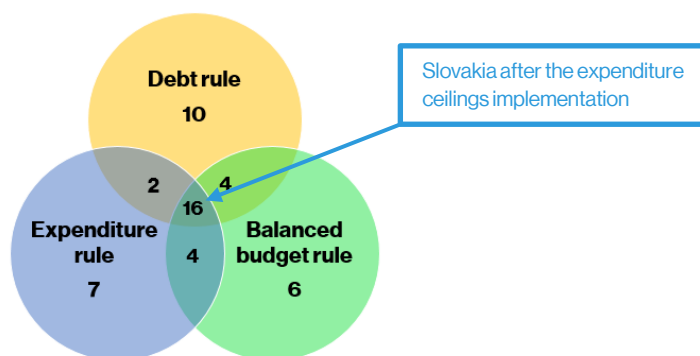
Expenditure ceiling t =

- targeted (structural) balance of general government t
- + estimation of GG (structural) revenues (tax and non-tax) t
- general government items deducted from the expenditure ceiling t
- reserve for unexpected development t

3.1.1. Main fiscal target

It is appropriate to quantify the expenditure ceilings in such a way, that their fulfillment leads to the achievement of the aggregate fiscal targets. Many countries limit public expenditure by a simple numerical rule, for example by allowing growth in expenditure at the level of inflation or economic growth (e.g. Spain). An alternative is to link their calculation to achieve the main fiscal target. In this way, the expenditure rules serve in many countries as a main operational tool to achieve a balanced budget (Sweden), or even a more directly, at targeted level of public debt (e.g. Israel). By combining both approaches, it is possible to calibrate expenditure ceilings linked to the trajectory to achieve overall long-term sustainability.

Graph 1: Combination of expenditure rules with other fiscal rules (number of countries)



Source: IMF Fiscal Database

Calibration of the expenditure ceilings could take place in three steps - starting with the determination of the safe debt threshold, calculation of corresponding structural balance objective, leading to the final value of the nominal expenditure ceilings. To establish a long-term anchor for public finances a safe level of gross debt, which does not create risks to the long-term fiscal sustainability and does not prevent sustainable economic growth, should be defined. In the next step, it is necessary to outline a medium-term budgetary objective¹⁴ (in the form of a structural balance), as an intermediate medium-term anchor. The medium-term budgetary objective corresponds to the level of the government deficit or surplus that has a direct and predictable link to the desired path of the debt trajectory towards its anchor value. The medium-term budgetary objective can be derived from the so called minimal MTO under the Stability and Growth Pact rules or from the long-term sustainability indicator (GAP indicator)¹⁵, taking into account the national specificities. As a third step, the nominal expenditure ceilings themselves can be quantified based on the ex-ante targeted improvement of the structural balance in the set horizon towards the MTO value.¹⁶ In this way,

¹⁴ The English medium-term objective (MTO) is used as a medium-term budgetary objective in the preventive part of the Growth Stability Pact.

¹⁵ The sustainability indicator quantifies the level of improvement in the medium-term horizons so that the gross general government debt does not exceed the set risk level even at the long-term horizon (50 years), taking into account demographic pressures for several decades in advance. Implicitly, it quantifies the medium-term budgetary objective (in the form of a structural balance) consistent with long-term sustainability.

¹⁶ The horizon can also be set for a period exceeding one electoral cycle.

nominal expenditure ceilings would serve as the main operational instrument under direct government control to converge to long term sustainability (BOX 2).

Linking expenditure ceilings to aggregate fiscal targets

A natural choice for the main fiscal anchor is the optimal (safe) level of the gross debt. An anchor to which a state of public finances should converge (or which should not be exceeded) should be expressed as a stock variable. This is, for example, the general government gross debt, which reflects better the long-term trends, potential materialization of risks outside the balance of the economic outturn, and also takes into account the past deviations. Flow variables, such as the general government balance, which reflect only a short one-year horizon, do not take into account these impacts sufficiently. The maximum debt level could thus represent an appropriate fiscal anchor for the desired state of public finances, from which the annual fiscal objectives should be determined in the first place. The role of such an anchor in Slovak fiscal framework is the debt brake, which assumes that a safe level of Slovak debt is at 40% of GDP¹⁷. A less strict option would be the Maastricht threshold of 60% of GDP, which, however, may not fully reflect national specificities.

To operationalize the debt threshold within the budgetary framework, medium-term objective expressed as the targeted structural balance of the GG management, needs to be set as well. Gross GG debt (and hence its safe level) is not a measure over which government has a direct control (e.g. because of the volatility of GDP growth or off-balance sheet operations). Therefore, a more operational budgetary rule is needed for better budgetary control and stability. Such a rule is a so-called the medium-term budgetary objective (MTO) from the Stability and growth pact, the achievement of which is consistent with the ex-ante targeted debt trajectory at the chosen horizon. The medium-term budgetary objective quantifies the level of general government management balance that needs to be achieved, so that the GG gross debt converges to the chosen optimal level of indebtedness, given the expected rate of economic growth.

The value of MTO should take into account, in addition to the current budgetary and macroeconomic trends, future implicit liabilities. Many liabilities that will burden the Slovak public finances in the future can be estimated already today with satisfactory degree of precision. This is, in particular, the expected impact of ageing, which will increase GG expenditure, in particular on health care, pensions and long-term care. At the same time, ageing of population will also moderately slow down the growth potential of Slovak economy¹⁸. It is also appropriate to take into account the fact, that approximately once every decade public finances face the materialization of risks outside the general government balance sheet, with a negative fiscal impact of several percentage points of GDP¹⁹. Quantification of the above mentioned impacts is to a large extent the focus of long-term sustainability indicators (e.g. indicators [S1](#), [S2](#) from the European Commission or long-term sustainability indicator, the so called [GAP indicator](#) calculated by the Slovak Council for Budget Responsibility). These indicators indirectly quantify required level of GG balance to be

¹⁷ According to the current version of [Constitutional Fiscal Responsibility Act](#) the general government gross debt at 40% of GDP is considered as the lowest sanctioning band only from 2027 (when the transition period ends). During the transition period, the sanctioning zones are higher by 10 p.p. and their final values are gradually decreasing in the period 2018 - 2027 (by 1 p.p. per year).

¹⁸ More in [IFP Policy Brief](#) on update of the long-term projections of the European Commission on aging populations.

¹⁹ On average, once every 12 years there is a materialization of off-balance sheet events with an average fiscal impact of 6% of GDP ([Bova et. al, 2016](#)). These include, in particular, the rescue of the banking sector, natural disasters, the failure of PPP projects, the rescue of state-owned enterprises, the litigation, etc.

achieved in the medium term horizon, so that the gross general government debt does not exceed its higher risk levels even in the longer run, under no policy change assumption.

The choice on the level of the MTO is at the discretion of the government, but it should reflect on the recommendations of individual institutions such as the European Commission or the Council for Budget Responsibility (CBR). Taking into account long-term demographic developments means that Slovakia needs a stricter medium-term budgetary objective than one that would correspond to today's economic growth and the current evolution of expenditure policies. At the same time, this means that a sufficient fiscal reserve should be created against the safe debt level threshold, which would also absorb the expected increase in ageing-sensitive expenditure. While it may appear that the medium-term objective is purely a technocratic concept, the decision of its value also reflects the desired level of inter-generational justice, which is also a political concept. Therefore, when setting the medium-term budgetary objective the government should take into account the recommendations of individual institutions (European Commission, CBR) and to publicly justify its choice by a "comply or explain" principle. **However, a minimum requirement could be to respect the medium-term budgetary objective stemming from the requirements of the Stability and Growth Pact (in more detail Box 2).**

BOX 2: Setting of the medium-term budgetary objective (MTO)

The medium-term budgetary objective could be ultimately based on the long-term sustainability indicator (GAP), which takes into account the specificities of the Slovak economy. While the European Commission quantifies the minimum level of the medium-term objective as a structural deficit of 1% of GDP, the Council for Budget Responsibility (CBR) calculates necessary MTO as structural surplus of 0.3 to 0.4% of GDP. The reason is, in particular, the different methodology and technical assumptions and, to a lesser extent, the input data of the long-term forecast by both institutions. CBR derives a sustainability indicator from the 50% of GDP debt threshold, according to the highest national debt brake band, also supported by [a study](#) on even lower current safe level of debt at 40 % of GDP. The debt limit at 40% of GDP is considered adequate for Slovakia by the OECD, as well ([Fall et al, 2015](#)). On the other hand, the EC uses as maximum debt limit reference value of 60% of GDP for all EU countries, without taking into account the national specifics. Alternatively, it uses the assumption of non-increasing current value of the debt in the infinite horizon. Besides, in the EC's calculation of the MTO, the weight of cost of population ageing accounts only for one-third.

Graph 2: Linking the medium-term expenditure ceilings to aggregate fiscal targets



*Structural balance level, which corresponds to long-term sustainability

For the stability of medium term budgetary planning, it is appropriate that the MTO is set in a fixed manner, without revisions during the election term. The long-term sustainability

indicator by the CBR is updated annually²⁰, which would implicitly influence the value of the medium-term budgetary objective and planned trajectory to achieve it. In the context of the operational budget management, the annual update of the sustainability indicator would require a very frequent calibration of expenditure ceilings. This would prevent binding medium-term budgetary planning and predictability of fiscal policy. Moreover, the long-term sustainability indicator often indicates fiscal risks in a fairly long horizon. Therefore, unless revisions are not very high in term of degree of the risk, the sudden change in the direction of fiscal policy would be suboptimal²¹. In view of this, we propose that the medium-term budgetary objective based on the long-term sustainability indicator is valid for the whole electoral period, over which the ceilings are binding. An exception could be the adoption of new, fundamental reforms that impact on long-term sustainability.

In order to achieve direct budgetary control, the planned path of the structural balance towards the medium-term budgetary objective needs to be recalculated into nominal expenditure ceilings. The path towards the MTO should first be set in the form of targeted structural balances in individual years of the election term. As in the case of debt, the structural balance is not under direct control of government. In real-time it is calculated on the unobserved output gap, which is subject to frequent revisions in the context of annual and even in-year updates ([Tereanu et al. 2014](#), [Turrini, et al. 2008](#)). Similarly, it is very difficult to reliably estimate in real time the elasticity of GG revenues and expenditures on the output gap. Especially at the time of the overheating of the economy, significant part of the revenues can be mistakenly regarded in real time as structural revenue (within calculation of structural balance) even after the cyclical adjustment (e.g. [Mourre et al. 2015](#), [Boschi a d'Adonna, 2017](#)). Therefore, it is more appropriate to quantify the expenditure ceilings according to the targeted structural balance levels estimated ex-ante.

3.1.2. Trajectory to achieve the medium-term budgetary objective (improvement of the structural balance)

In addition to the ultimate medium-term objective linked to the long-term sustainability, it is also appropriate to set out the minimum rules that will determine the medium term trajectory to achieve it. The rules should lead to a faster consolidation at a time when there is a larger gap of long-term sustainability, since the risks to refinance public debt are multiplying. At the same time, it is also desirable to take into account the state of the economic cycle to avoid pro-cyclical policy. In order to support an economy below its potential, neutral (automatic stabilizers) or even expansionary fiscal policy should be temporarily allowed. On the contrary, in the period of overheating the economy, the stronger planned consolidation is desirable because it would also mitigate the potential rise of macroeconomic and financial imbalances. At the same time, it is important to ensure that the trajectory towards the medium-term objective is not guided by several, and even contradictory, rules.

The planned path of the structural balance towards the medium-term budgetary objective could be derived from the [European fiscal rules](#). Although the European fiscal rules have their own drawbacks, their calibration reflects the balance between the objectives of sustainability macroeconomic stabilization²². The preventive part of the Stability and Growth Pact calls for

²⁰ Sustainability indicators are also updated on the basis of changes in a number of factors beyond government control (e.g. demographics review, revision of expected macroeconomic developments, modeling assumptions).

²¹ In addition, a revision of the originally set ceilings would also require an overrun of the debt brake. Its application, in view of its anchoring in the constitutional law, would probably take precedence over the originally set expenditure ceilings.

²² European Commission [Reports](#) on the assessment of the functioning of the Stability and Growth Pact.

annual improvement in the structural balance of 0.5% of GDP per year on average (and mild revisions upwards and downwards, depending on the long-term sustainability risks and the economic cycle phase)²³. If the deficit exceeds 3% of GDP (corrective part), the required consolidation is determined individually. On average, it is slightly higher than the preventive part, between 0.5% and 1% of GDP.

A faster trajectory of necessary reduction in the structural balance would be triggered in case the debt brake is breached²⁴. Should the higher debt sanction thresholds be exceeded, budgeting of expenditures would be governed by the Constitutional Budget Responsibility Act. This requires a year-to-year freeze of expenditure if the third sanction threshold is exceeded.²⁵ However, it is worth noting that the compliance with expenditure ceilings in standard and good times that should ensure that the gross debt of the GG does not approach the sanction thresholds.

Table 1: Minimum required consolidation effort to improve the structural balance

Identified situation	Fiscal rule determining structural adjustment (change in structural balance)	Required change in structural balance
GG gross debt < 55 % GDP** Headline balance > -3 % HDP	Preventive arm of SGP	On average 0.5 % of GDP (0 to 0,75 % GDP based on debt level, sustainability risks and output gap)
GG gross debt < 55 % GDP** Headline balance < -3 % HDP	Corrective arm of SGP	On average from 0.5 % of GDP to 1 % of GDP , till the GG headline balance reaches -3 % GDP
GG Gross debt > 55 %** GDP regardless GG balance	Debt brake sanction mechanism	Sanction threshold of 55 % GDP - No nominal increase of GG expenditures y-o-y. Furthermore, freezing of 3 % of central government (state budget) expenditures in the current year. <i>Simplified simulations imply structural adjustment of around 2 % of GDP*</i>

*Assumptions: real growth 3 %, inflation 2 % (both at the level of the same potential GDP growth). Unit tax elasticity with respect to GDP.

Source: MoF SR

3.1.3. Planning (binding) horizon

The planning binding horizon for expenditure ceilings could be aligned with a four-year electoral cycle, to achieve more stable agreements on budgetary priorities. The period over which the expenditure ceiling is established should take into account the stability of economic forecasts, budgetary planning practices and the length of electoral cycle. A longer binding horizon is associated with better budgetary outcomes, as it operationalizes current expenditure into outer years as well. Moreover, in case of short binding horizon, it is easier to postpone the fulfillment of medium term budgetary targets (the so-called moving target syndrome). In most countries, expenditure ceilings are set for a period of three or four years (although not in all of them the nominal ceilings are fully binding). This is a horizon in which the trends in public finances on the revenue and expenditure side can be relatively accurately estimated. The practice differs

²³ In practice, as for rules this would mean that the MTO would be expected to achieve if its underlying structural balance is less than 2% of GDP (while normal economic times are expected, i.e. there is no expectation of a significant deviation of economic growth from its potential level).

²⁴ The application of debt brake establishments is preceded by the need to apply a debt rule from the Stability and Growth Pact, which requires a debt reduction after exceeding the level of 60% of GDP.

²⁵ In practice, therefore, the expenditure ceiling would be replaced by the debt brake compensatory measures when the third brake leakage zone (currently at 55% of GDP and decreasing annually by 1 pp GDP to 45% of GDP in the period 2018-2027) was exceeded.

among countries in whether the ceilings are set out in bounded horizon (e.g. election term in the Netherlands), or in a rolling system, which consist of the annual update of the last year (e.g. Sweden). For Slovakia's budget practice, it could be appropriate to have a four-year bounded planning cycle corresponding to the length of the electoral term. Clear and binding fiscal space for government priorities during the whole electoral mandate, could lead to better and more strategic planning of expenditure. At the same time, it could mitigate the political budget cycle associated with a sharp rise in expenditure in the last year.

3.1.4. The numerical formulation of the expenditure ceiling

Expenditure ceilings would ideally be set in a numerical form of a maximum nominal ceiling for the amount of public expenditure (in euros) in each year²⁶. Some countries (such as Spain) report the expenditure ceiling in individual years as their maximum percentage increase over the year, or, in a few cases, as the maximum amount of expenditure in relation to GDP²⁷. However, easier communication of expenditure limits to the public can be achieved by setting the nominal upper ceiling of the permitted level of expenditure (in euros) in individual years. Such ceilings would be easier to verify. Another advantage is also built-in memory” of any deviations registered in first years. The expenditure ceiling set for several years in advance requires an automatic correction for deviation of expenditure in one year by returning to its originally set level in subsequent years (see the charts below).

Chart 1: Expenditure ceilings set as the maximum level (deviation in year t + 1)

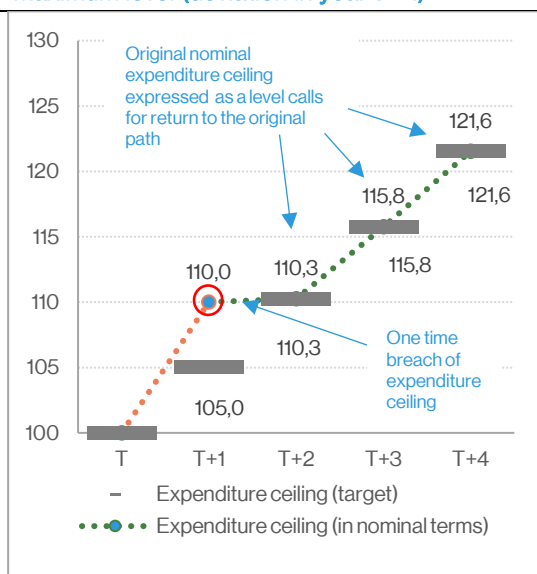
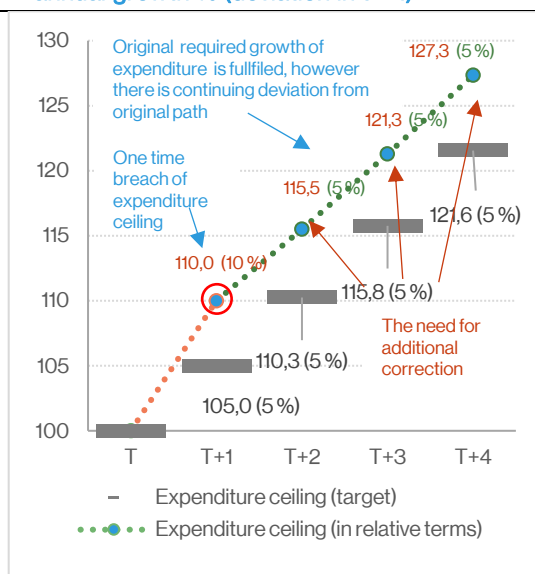


Chart 2: Expenditure ceilings set as maximum annual growth % (deviation in t + 1)



Source: own processing of authors

²⁶ Throughout the discussion study, an accounting standard according to ESA2010 is considered unless otherwise stated.

²⁷ However, this formulation is not recommended as it may be associated with a more pronounced pro-cyclical extent.

3.1.5. Revisions in the inflation forecast

Relatively stable inflationary environment in Slovakia favors nominally expressed ceilings (ignoring small fluctuations in inflation), which would enhance the transparency, stability and anti-cyclicality of the budgetary planning. In principle, the fiscal space should not be affected by macroeconomic developments that have a generally neutral budgetary impact. Such impacts also include the revisions of inflation, which affect both public revenues and expenditures.²⁸ Therefore, at first glance, it may be more appropriate to determine and update the expenditure ceilings in real terms, which take account subsequent inflation forecast updates. However, nominal ceilings, which ignore inflation revisions, have several advantages. As in the previous case, their first benefit is greater transparency. Nominal limits do not require their recalculation through price deflators each year, which are rather complicated to determine for a defined range of public expenditure²⁹. Nominal ceilings also provide a clearer and transparent reference point for expenditure planning over the medium term. In addition, nominal ceilings could also mitigate short-term imbalances in the economy. In case of unexpected inflation revision upwards, expenditures would not be allowed to increase relative to the originally set ceilings. Vice versa, the downward revision of inflation would automatically create the possibility of a limited short-term stimulus by keeping the initial nominal ceilings unchanged³⁰.

3.1.6. Estimation of structural general government revenues

The expenditure limits should be based on the structural revenue forecast, abstaining from the temporary cyclical fluctuations in the economy and other temporary effects. The level of expenditure ceilings is largely determined by the revenues forecast because the expenditure limit is linked to the projected total general government balance (i.e. the difference in revenue and expenditure). At the same time, where the expenditure ceilings are linked to the structural balance objectives (in order to strengthen the anti-cyclicality of fiscal policy), the expenditure limits should be based only on expected structural revenues. These are the revenues that are net of their short-term cyclical fluctuations. To estimate structural revenues, first, nominal revenues from the tax forecast need to be considered. In the second step, it is necessary to adjust the nominal estimates for the so called cyclical component (i.e. the revenue response to the economy's position within the economic cycle³¹) and one-off and temporary revenue effects. The non-tax revenues should be treated in the same manner, which, given its volume, also significantly affect expenditure space. Therefore, the most significant non-tax items should also be subject to independent forecasts³².

The forecast of structural revenues should also take into account the impact of the new legislation adopted at the inception (or during) the election cycle. Incorporation of new revenue measures strengthens the link to aggregate fiscal targets. At the same time, it ensures that

²⁸ Higher inflation is associated with higher revenues (higher macroeconomic basis for tax and non-tax revenues) and higher expenditure (rising prices for unchanged goods and services increases public expenditure).

²⁹ The actual calculation of real expression on the basis of the GDP deflator is not accurate, because the growth of prices in the whole economy is not equal to the increase in prices in the volume of goods and services in general government.

³⁰ Inflation surprises are often the result of temporary fluctuations in economic development. Negative demand shock coupled with a downward revision of inflation will allow a higher total volume of expenditure under the original nominal ceiling to create room for a short-term anti-cyclical fiscal stimulus. On the contrary, the overheating of the economy and the temporary rise in inflation require a counter-cyclical reduction in the volume of public expenditure to meet the nominally set expenditure limit.

³¹ The cyclical component may be negative or positive, and expresses part of the revenue that is related to the position of the economy above (or below) its potential level.

³² The Tax Forecast Committee currently estimates only the majority of tax revenues (approximately 90% of tax revenue and 80% of total revenue under ESA2010 methodology). Non-tax revenue, however, is associated with a lower cyclical component, so it is not necessary to clear its predicted height by the cyclical component.

the expenditure ceiling instrument is apolitical. It would not restrict fiscal policy from the point of view of the size of public expenditure if the expenditure increases are covered by new structural revenues. Expanding the tax base or raising individual tax rates brings additional revenue and thus increases the scope for public expenditure without the negative impact on aggregate headline balance. Symmetrically, in the case of revenue- measures with negative impacts (including tax exemptions ³³) the original expenditure ceiling would need to be reduced ³⁴.

Update of structural revenues, leading to possible revision of expenditure ceilings, should also include significant shifts in tax collection efficiency. The space for public expenditures is also influenced by structural changes in the tax collection efficiency. Given that it is difficult to quantify any significant change in tax compliance ex-ante, it is advisable to update the expenditure ceiling only ex-post, when the change in the effectiveness of collection is confirmed by actual data. These changes should be treated in a symmetrical way, reflecting not only positive budgetary impacts of tax evasion, but also possible worsening of tax collection (BOX 3).

BOX 3: Estimation of (structural) tax revenues and its revisions

The evaluation of tax forecasts shows unexpected revenues in recent years have not been primarily caused by the upward revision of the economic growth above its potential. Chart 4 illustrates how actual tax revenues evolved between 2011 and 2016 compared to their forecast for one budgetary year ahead. Additional revenues between 2013 and 2016 (defined as the difference between forecast and actual revenue) cannot be easily assigned to a positive cyclical surprise. While the unexpected tax revenues in 2014 and 2015 were higher than EUR 1 billion in each year (significantly above 1% of GDP), the positive revision of the economic cycle (in the form of a revision of the output gap) was not higher than 0.1 p.p. of GDP. In 2014, the negative output gap was even revised towards higher negative output gap (by 0.2 p.p. of GDP), which would ceteris paribus imply revenue shortfall of around 0.1% of GDP.

Positive tax surprises from 2013 to 2016 are mostly due to the difference between the estimated and confirmed tax collection efficiency. The difference is also related to the adopted structural measures. The Chart 4 indicates that in all years the main factor of differences was upward revision of the collection efficiency (EDS³⁵), i.e. revenue growth beyond the growth of macroeconomic bases. Improved tax collection was mainly the result of the fight against tax evasion, which reduced the VAT gap by approximately one third since 2012. At the same time, it was probably also reflected in a better collection of corporate tax³⁶. It is therefore to a large extent a structural increase in revenue related to government measures.

Changes in tax collection efficiency cannot always be separated from macroeconomic developments, which calls for independent individual analysis. The reason for the improved or worsened tax collection can be to a large extent the pro-cyclicality of the tax revenue elasticity to the growth of the economy³⁷. However, this forecast error analytically attributed

³³ In a number of countries, expenditure rules have been circumvented by tax exemptions.

³⁴ Within the framework of discretionary revenue measures, account should also be taken of possible changes in state-paid insurance, to which the government has a direct impact. Otherwise, there would be a potential space for circumvention of expenditure ceilings.

³⁵ The impact of EDS or the effective tax rate simply explains how much tax is levied on its macroeconomic basis.

³⁶ In more detail, the current Stability Program for the years 2018-2021.

³⁷ The cyclical decline (or revival of the economy over its potential growth) also influences the real collection of taxes, that is, the willingness of households and firms to grant their tax liability (Mourre et al. 2016).

to the changes in the efficiency of tax collection (ETR), even though they may not correspond proportionally to the real shift in structural revenues. Given the complexity of the tax collection efficiency estimates, its changes with the effect on the revisions of nominal expenditure ceilings should be evaluated on a case-by-case basis. Given the importance of estimates for the correct calibration of expenditure ceilings, this role should also be assumed by an independent authority.

Chart 3: Errors * in the tax forecast compared to the revision of output gap

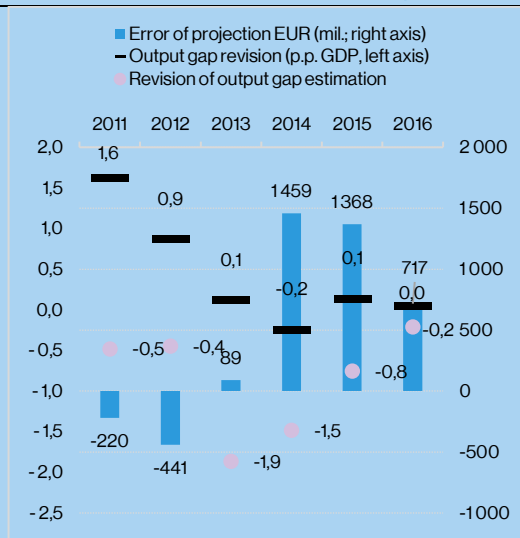
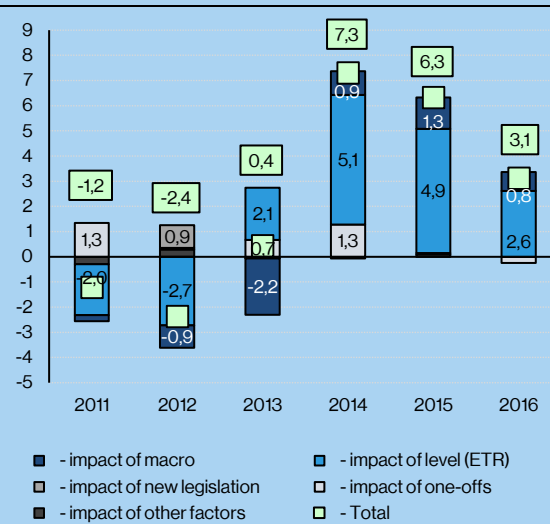


Chart 4: Factors explaining the tax forecast errors (in %)



*Reality versus one year projection

Source: MoF SR

Alternative forecast of structural revenue ex-ante

For the estimation of structural revenues less prone to revisions, it is also possible to use trend estimates of stable medium term potential economic growth³⁸ and the average sensitivity of (tax) revenue to economic growth. However, the positives of trend based tax forecasts (simplicity and transparency) can be offset by inaccuracies (especially inadequacy of supply shocks). This trend approach could therefore serve only as a stable "benchmark" to the main method (to compare the structural revenue estimates calculated on the basis of nominal point estimates of the economy adjusted for the point estimate of the cyclical component)

3.2 Coverage of expenditure ceilings and their division

To ensure link to aggregate fiscal targets, the scope of government expenditure constrained by the ceiling should be as wide as possible in terms of ESA2010 definition. Wide coverage improves transparency and ease of budget monitoring. In addition, it is also associated with better budgetary outcomes³⁹ (Debrun et al, 2007). To strengthen the focus on prioritizing the

³⁸ Potential growth alone may have more pronounced fluctuations in terms of short-term supply shocks. Therefore, potential growth may be eroded at the forecast horizon, e.g. by averaging estimates for a longer period (for example, a 10-year period taking account of both reality and forecasts). This approach is also used by the EC in assessing fiscal developments in EU countries on the basis of the so called expenditure rule, which envisages the growth of revenue under the so called medium-term potential GDP growth. The EC implicitly considers the unit sensitivity of tax collection to GDP growth. In the case of Slovakia, however, we would propose to work with a slightly lower coefficient of sensitivity, which is confirmed by an empirical estimate based on actual data (Výškrabka, 2017).

³⁹ In order to be able to fulfill the aggregate fiscal objective of the GG structural balance, it is appropriate to maintain the broadest possible range of the expenditure ceiling. If the excluded items / entities deviated significantly from the

expenditure, expenditure ceiling should in particular cover those expenditure items that are associated with the highest pressure for increase within the budgetary negotiations.

3.2.1 Exclusion of certain expenditure items

On the other hand, it is appropriate to leave out those expenditure items that are not under the control of the government in the short term, have direct revenue counterpart or significantly respond to the economic cycle. Separation of budget items beyond government control is important for increasing stability in budget management. The advantage is that if the budget prerequisites are not met, it is not necessary to reduce other expenditure in the course of the year. Similarly, unexpected savings from separated items cannot be used for unplanned additional expenditure. The most common practice is therefore to deduct expenditure that the government does not control during in-year budget management. In the same vein, it is appropriate to separate expenditures closely related to the economic cycle, in order not to prevent the functioning of automatic stabilizers. Furthermore, it is not necessary to include those expenditures that have their direct revenue counterpart and where the central government serves only as an intermediary⁴⁰.

Therefore, the following items could be separated from the expenditure ceiling:

- Debt service (interest) costs (not under government control)
- Expenditure covered by EU budget revenue (direct counterpart item)
- Co-financing of EU funds (not under government control)
- Contribution to the EU budget (not under government control)
- The cyclical component of selected social benefits, such as cyclical part of pension and unemployment benefits (correlation with economic cycles)

3.2.2 Exclusion of some general government entities

The expenditure ceiling should be applied to all GG entities, except for entities with their own autonomy, such as local governments. We propose not to include the self-government bodies and entities with another specific independent status. The expenditure ceiling should not limit the local governments, since they are governed by their own fiscal rules and have their own autonomous powers⁴¹. We also propose exclusions for some other smaller independent entities (such as the Budgetary Responsibility Council, the Supreme Audit Office, and others). All other entities in the general government, including state-owned enterprises, should be part of the expenditure ceiling⁴². This would also limit the potential for circumvention of expenditure ceilings by financing activities through other entities. Entities outside state budget could be included and attributed to the line ministries according to the policy area to which they belong⁴³. This would strengthen direct budgetary control over their management.

technical assumptions, meeting the expenditure ceiling would not have the effect of meeting the planned structural balance.

⁴⁰ The health insurance scheme, whose expenditures are linked to health contributions, is an exception. If these expenditures were not limited by the expenditure ceiling, there could be a pro-cyclical fiscal policy when overheating would generate a rapidly growing expenditure on health. After these revenues return to their potential level, it would be necessary to reduce the expenditure. This problem, on the other hand, does not arise, for example, in drawing on the EU funds, where the level of drawing of EU resources in one year does not form the basis for their level in the next years.

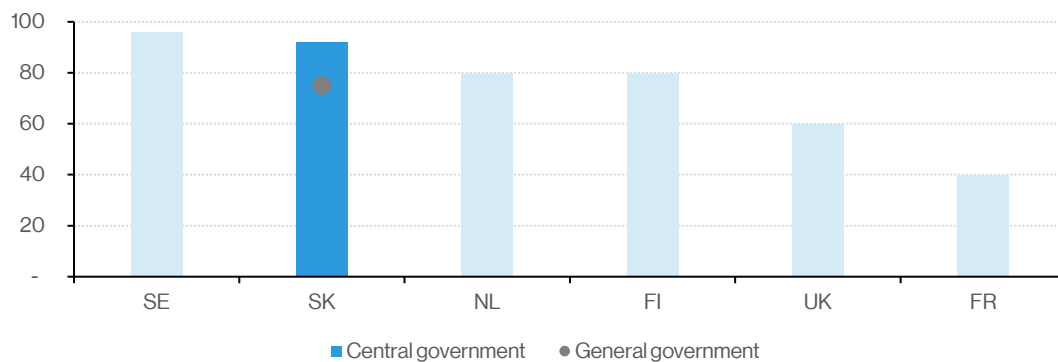
⁴¹ Fiscal rules for local and regional authorities are defined in [Law on budget rules of local self-governments](#).

⁴² Especially National Highway Company, Railways of the Slovak Republic, Railway Company Slovakia, Public Health Insurance, Public Universities, Environmental Fund, etc.).

⁴³ For example, the Social Insurance Company under the Ministry of Labor, Social Affairs and Family and the National Highway Company under the Ministry of Regional Development and Construction.

The expenditure ceiling set in this way would be comparatively large also in international comparison. It would constrain more than four-fifths of the central government expenditures and three quarters of the expenditure of the whole general government (even after the exclusion of mentioned expenditure items).

Chart 5 - Coverage of expenditure ceilings (% of total expenditure *)



* total expenditure is adjusted by expenditure covered by EU funds

** SK: current proposal coverage

Source [IMF](#), calculation of authors

3.2.3 Division of the aggregate expenditure ceiling

Aggregate expenditure ceiling could also be divided into individual ministerial subceilings⁴⁴. While the link to aggregate fiscal targets requires only an aggregate expenditure ceiling. Additional division of the aggregate ceiling into individual ministries⁴⁵ could bring additional benefits. First of all, the responsibility for meeting the expenditure limits by the line ministers would be clearly assigned, which should strengthen fiscal discipline. At the same time, predictability of financial resources throughout the electoral horizon would increase for individual ministers. Hard limits on ministerial chapters could also strengthen incentives to identify savings, thereby reinforcing the implementation of the Value for Money project in the budget process.

3.3 Tools for controlling uncertainty

Without clear rules establishing the commitment and flexibility instruments related to expenditure ceilings, implementation could be weak. Therefore, it is desirable to lay down binding nature of expenditure ceilings in such a way as to make it enforceable in practice. At the same time, however, there must be mechanisms that would deal with standard fluctuations in expenditures around a predetermined planned level. The main reason is the need to respond to unexpected macroeconomic developments, whether these are very strong shocks or just standard fluctuations compared to the forecast. Mechanisms for managing uncertainty should also reflect on the fact that the profile of some expenditure (especially capital expenditure) cannot be accurately estimated over time. It is therefore appropriate to allow for some limited expenditure carry - overs and carry - forwards between years.

⁴⁴ For example, under the chapter of the Ministry of Transport and Construction of the Slovak Republic would be included NDS, ŽSR, ŽSSK and others. The discussion study at this stage does not deal in detail with a compromise between fixed-term ministerial limits for the entire election period and their flexibility in one-year commitment (or ad-hoc re-allocation of expenditure over the year).

⁴⁵ In order to encourage the reallocation of expenditure to the most effective aggregate expenditure ceilings, it should be subdivided into individual ministerial chapters only after submission of proposals for the expenditure of each ministerial chapter.

3.3.1 Legal basis of expenditure ceilings

Expenditure ceilings could be anchored in legislation, for example in the Act on budgetary rules of general government⁴⁶. Legal commitment increases the credibility of the rule and prevents its circumvention. The legislative text on the expenditure ceiling should also clearly define the escape clauses, the role of the individual institutions in setting and monitoring the expenditure ceilings or the corrective procedure in case of non-compliance. In the Slovak context, additional strengthening of the concept's commitment could be achieved by constitutional law. In order to increase the commitment, it is appropriate that the numerical expenditure ceilings are also approved in the Parliament (under a separate law at the beginning of each parliamentary term).

3.3.2 Budgetary reserve

Initial expenditure ceilings could be set slightly below the level of expenditure ceilings that corresponds to the fulfillment of the aggregate fiscal targets. Macroeconomic developments cannot be objectively estimated with full precision *ex-ante*, in particular because uncertainty about their development grows in time⁴⁷. However, this does not mean that expenditure ceilings are to be reviewed annually as a result of standard deviations in macroeconomic forecast. While escape clauses can serve for larger macroeconomic shocks, standard forecast fluctuations should be absorbed by pre-created contingency reserves. Keeping an unallocated contingency reserve under the headline nominal ceiling would ultimately help to achieve a balance between focus on fiscal targets and the need to respond to unexpected developments.

The importance of a reserve increases when the expenditure ceilings are set for a wide range of expenditures, are expressed in nominal terms, and are binding over a longer period. Structural downward revisions to inflation or real economic growth estimate could lead to non-fulfillment of aggregate targets (overestimation of nominal macroeconomic developments)⁴⁸. However, with a sufficient contingency reserve, the standard forecast errors would not pose a problem. Given the cumulative uncertainty of expected developments, a reserve should grow with the four-year horizon of the forecast. In the event of an overestimation of the performance of the economy (standard downward revisions), the reserve should be absorbed to cover the revenue shortfalls.⁴⁹ On the other hand, in case the baseline economic forecast materializes (or when there is even structural underestimation of economic growth), the reserve could be dissolved for additional expenditure (in more detail Box 4)

⁴⁶ The Constitutional Law on Financial Rules assumes that the procedure for determining the expenditure limits will be defined by law.

⁴⁷ IFP regularly evaluates the error of its forecasts (e.g. for the year [2017](#)).

⁴⁸ Revision of inflation or real economic growth downwards will generally also result in lower tax revenues due to lower macroeconomic bases.

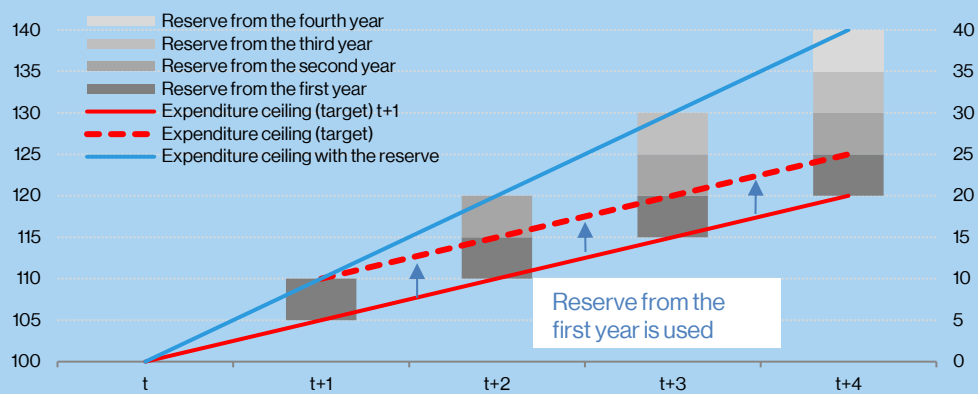
⁴⁹ Another alternative is to use a nominal exponent of the *ex-ante* expenditure ceiling and its adjustment in future years only for inflation surprises above a certain level (for example, the difference in the forecast and revised inflation estimate at 0.5 p.p.).

BOX 4: Managing the reserve for unexpected developments

The reserve created under the specified expenditure ceilings should respond in real time to deviations in the forecast. Therefore, there should be at least principle rules for its use.

- **The reserve could be dissolved in the following year ($t + 1$) after the June tax forecast in case the macroeconomic variables as well as the revenues are fulfilled according to the baseline forecast.** In this case, it could be used for one-off capital as well as structural expenditure. Likewise, the reserve could be dissolved if there is only a cyclical diversion (shock)⁵⁰. The nature of the shock (its cyclicality) could be judged by an independent authority.

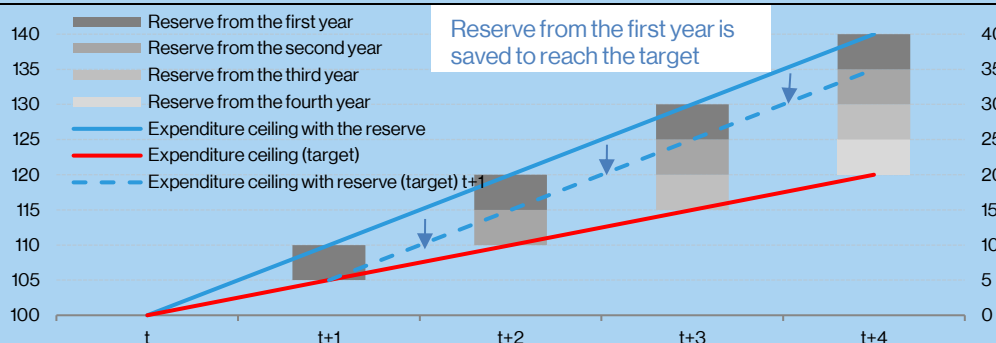
Graph 3 : Use of the reserve when the baseline forecast materializes next year (or in case of only cyclical shock)



Source: own processing of authors

- **The reserve should not be dissolved in case of a structural⁵¹ revision to the baseline projection.** For example, if inflation or economic growth is lower than in the original forecast, the revenues will be lower as well. Saving the reserve on expenditure side would in this case absorb an unexpected structural revenue shortfall.

Graph 4 : Absorption of the reserve to cover for the revenues losses from the structural revision to the forecast



Source: own processing of authors

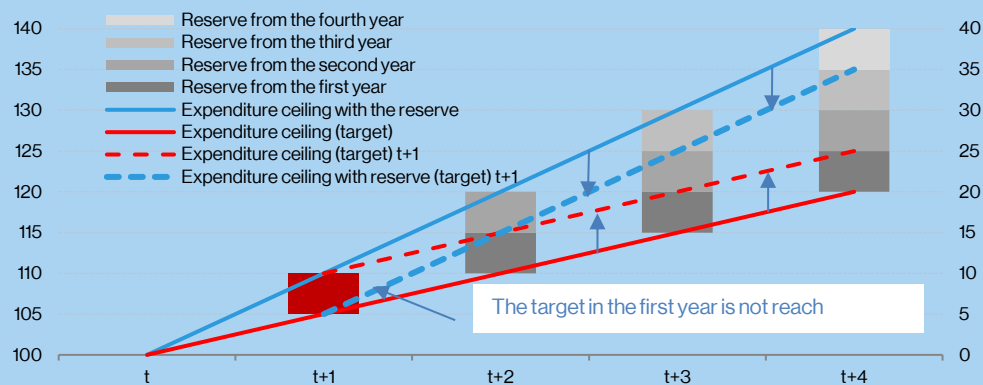
- **If it is difficult to determine the nature of the shock, the reserve should be freezed until the next forecast (alternatively, it may only be used for one-time capital expenditures).**

⁵⁰ For cyclical diversion we consider the temporary deviation from the projection caused by the economic cycle.

⁵¹ For structural shock, we consider the error of projection that persists throughout the horizon. It is due to an inaccurate estimate of macroeconomic variables (inflation, employment growth, GDP) or non-fulfillment of expected revenues (lower growth / fall of CIT).

For instance after the June forecasts in $t + 1$, it still may not be clear whether the economy was hit by a cyclical or structural shock. If the reserve is used for structural expenditure and, subsequently next forecast shows the nature of shock was structural (rather than cyclical), the structural balance target in that year would not be met. Therefore, alternatively, the reserve may be allowed to be used only for one-off (capital) expenditures⁵², or to wait until the nature of the shock is clear.

Graph 5 : Illustration of failure to meet the expenditure limit when mis-estimation of the shock



Source: own processing of authors

Access to use of the reserve should be based on transparent rules. Individual ministerial chapters should, as part of a request for access to the reserve, demonstrate that extra expenditures are unexpected (related to macroeconomic shock), are irreversible and cannot be absorbed by other tools. It is also appropriate to define how the unused reserve can be dissolved if the baseline scenario of the forecast is gradually being fulfilled. Finally, it should be ensured at all times, that the amount of unused reserve over the entire horizon always matches the ex-ante risk based on the remaining length of the planning period.

It is advisable to decide on the use of the reserve for the whole electoral period (pre - financing of contingent / committed expenditure). Use of the reserve should be conditional on the fulfillment of the forecast (or only a cyclical shock). Individual line ministries could determine in advance on which policies they will use later released funds from the reserve. This will ensure strategic planning of eventual use of the reserve and prevent thoughtless purchases at the last minute. An alternative is to report the possibility of using the reserves only after the decision to dissolve it. This means that the reserve is not intended to be used when planning in advance (no expectations for additional expenditure are to be created).

The calculation of the necessary reserve should be based on the potential shocks the Slovak economy faces on average. As a starting point, the level of reserves which are used by other countries can be considered (e.g. Sweden applies growing reserve of 1.5% of the overall expenditure ceiling in the first budget year of the ceiling up to 3% of its level at the end of the three-year term horizon). An alternative to the existence of the reserve into the expenditure ceiling is deliberately conservative forecasts of economic growth and tax revenues (for example, the case of Netherlands). However, this option can be considered less transparent.

⁵² In this case, the reserve should only be dissolved in a given year (year $t + 1$ on the graph). The reserve in the years to come would remain undissolved.

3.3.3 Transfers of expenditure between the years

Expenditure ceilings should allow expenditure to be transferred between years, but only to a certain extent, for example 1% of the total ceiling. The profile of some expenditure items is difficult to estimate for a medium term time horizon. Especially in the case of capital expenditures, their costs depend on different approval procedures, which can suddenly shift the planned expenditure from one year to the next. However, the fully binding annual expenditure limits for each year would not allow such transfers. Therefore, there should be rules⁵³ on authorized transfers of funds to such an extent that the achievement of the fiscal targets is not fundamentally endangered. Therefore, it is appropriate to limit the amount of the transferred expenditure or the total cumulative unused funds account. For the sake of mind, transfer of funds to around 1% of the expenditure ceiling would mean a shift from the planned deficit to 0.5% of GDP. Procedurally, the transferred funds should be monitored in a separate account. Individual transfers could be approved by the government after proposals from the ministry chapters.

3.3.4 Escape clauses

For extreme, unexpected events, it is optimal to define taxative escape clauses, in which the originally determined ceilings can be adjusted. Once in a longer period, extraordinary facts can happen in public finances, which demand a prompt response from the government. These are situations where strict compliance with the original expenditure ceiling could eventually worsen the unexpected event. Such events should serve to define escape clauses where the originally set expenditure ceiling simply would not restrict the need for a government response.

Definition of escape clauses could be based on the Constitutional Law on Fiscal Responsibility. Escape clauses are mostly associated with a more pronounced economic recession. It is also defined in the Constitutional Law on Fiscal Responsibility as a sharp fall in year-on-year GDP growth (by cumulative 12 percentage points in two consecutive years⁵⁴). The law also mentions other exceptional events (rescue of the banking sector, natural disasters). We propose to evaluate these as one-off effects. Due to the unclear borderlines for their identification, it is appropriate to draw on the available manuals at European or national level⁵⁵. Supervision over escape clauses and identification of one-off measures could also be carried out by the Council for Budget Responsibility. For the application of escape clauses, there should also be an accelerated approval process at the Parliament.

3.3.5 Correction mechanism and technical updates of the expenditure ceiling

It is also appropriate to introduce a correction mechanism, to compensate for the positive and negative deviations in the compliance of expenditure ceilings. By definition, expenditure ceilings set for several years in advance should ensure return expenditure to the levels originally specified in case of a temporary fiscal slippage in one year (see section numerical determination of expenditure ceilings). Thus, to a certain extent, an automatic correction mechanism is already incorporated. However, even a one-off deviation (both positive and negative) would affect the value of fiscal indicators (on temporary basis GG balance and

⁵³ As an alternative to the current wording of Section 8 of the Financial Regulation Act. The carryover of expenditure would be reported separately as a so called "Side pocket" (i.e. outside the limit), which would not affect the amount of the limit initially set for the following budgetary year.

⁵⁴ This discussion study does not evaluate the optimal escape clauses determined by the constitutional law on the implementation of expenditure ceilings. The actual calibration of the escape clauses for the expenditure ceilings should be based on a separate analysis.

⁵⁵ [IFP Manual](#), CBR approach or [Vade Mecum to the Stability and Growth Pact](#) (approach of the European Commission).

structurally also the GG debt and long-term sustainability indicators). Therefore, more significant deviations should be offset by the so called *correction factor* used for the update of the expenditure ceiling over the next years (mid-term). Corrections should be symmetrical. Positive as well as negative deviations should be taken into account. Since each variation is of a different nature, we do not propose an automatic formula to calculate the correction factor. However, surveillance over the adjustment of the expenditure ceilings could also be partly performed by the Council for Budget Responsibility. It would issue possible recommendations for updating expenditure ceilings.

The need for a (symmetrical) correction can also occur if the assumptions underlying the original calculation of the expenditure ceilings are significantly changed. Expenditure ceilings aim to achieve the fiscal targets, which are dependent on several macroeconomic assumptions. Their possible revision could therefore lead to a deviation from the targets even if the original expenditure ceilings are met. The proposal to adjust the expenditure ceilings should only concern more significant revisions, in particular in the following assumptions.

- Significant deviation in the macroeconomic forecast and revenue forecast (beyond absorption of errors by the reserve)
- Significant deviation of budget items that have been deducted from the expenditure ceiling (e.g. fiscal performance of local governments, interest costs)
- A very significant change in the demographic forecast, on the basis of which the medium-term objective was determined (and the trajectory to reach it)
- The possible application of the debt brake, which would require tightening of expenditure limit in terms of the predefined sanction thresholds

A regular technical update of the originally set expenditure ceilings would also need to take place occasionally. The expenditure ceiling should take into account technical changes in the context of the update of the draft budget or the medium-term budgetary plan (Stability Program) which were not known in the original ceiling determination. These are primarily the following impacts:

- New revenue measures (see previous section of structural revenue estimate)⁵⁶
- New, more fundamental measures with an impact on long-term sustainability (internalization of their impact over the horizon of set expenditure ceilings)⁵⁷
- Sector reclassification of entities to / from the GG⁵⁸

4 Introduction of expenditure ceilings into Slovak budget practice

Implementation of expenditure ceilings in the general government budget would also have a greater impact on the budgetary procedure. The potential impacts of implementing the expenditure ceilings into the budget process are not the subject of this discussion study, but some of them are briefly outlined in the following new indicative timetable for the budgetary

⁵⁶ Including tax expense that was not known at the time of setting the ceilings and regular update of the change in efficiency of collection (EDS). In this case, the expenditure limit would be updated with the confirmed additional structural revenue.

⁵⁷ This type of measure mainly affects the period outside the monitored horizon for which the limits have been set. Upon updating the expenditure ceiling, we propose to approach such measures asymmetrically and to take into account exclusively those measures with a positive impact on long-term sustainability, which will come into effect through constitutional law. For measures that are detrimental to sustainability, measures adopted by ordinary law should be taken into account to weaken moral hazard.

⁵⁸ These are in particular Eurostat's decisions on the transfer of entities to / from the general government. In this case, the expenditure limits would be updated by the level of revenue of these entities, following an official decision by Eurostat.

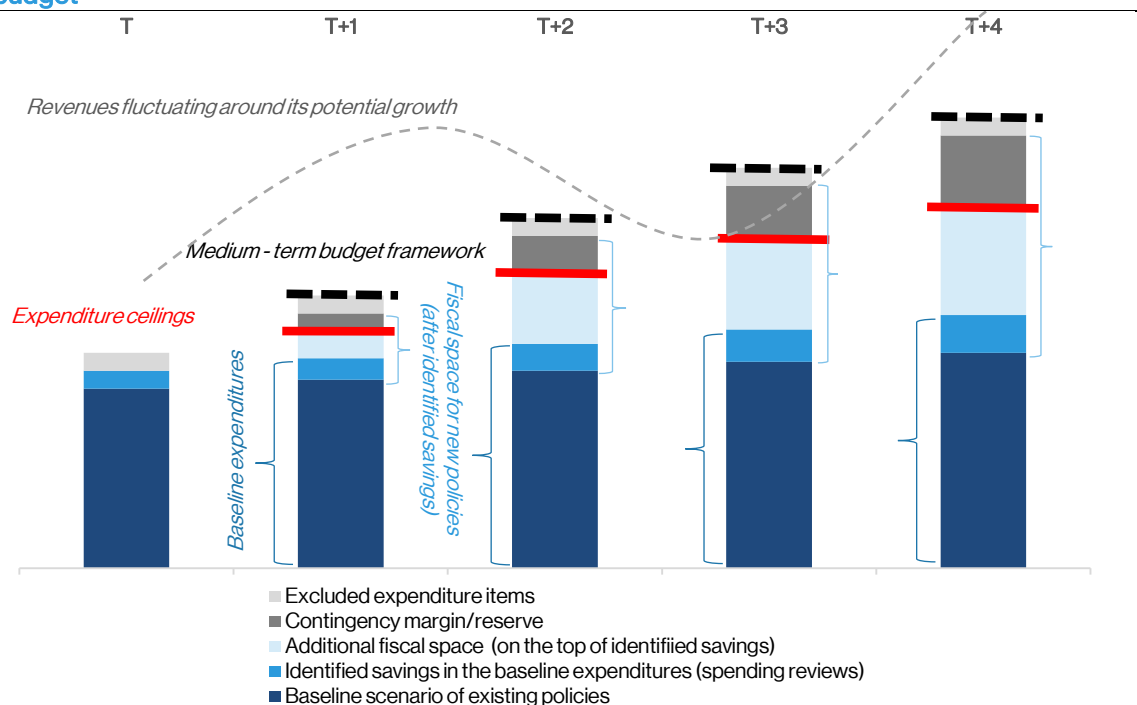
process. Compared to the status quo, the procedure would be slightly different. In particular, the procedure for setting targets would change.

Table 2: Illustrating the possible form of the budgetary process in the case of the implementation of expenditure ceilings into the budget management

Starting period (year T – election year)	Task	Responsibility
February	Estimation of the underlying economic fundamentals for the determination of expenditure ceilings and the baseline scenario of existing policies	Independent authority, MoF SR
till April	EC's calculation of minimum MTO for Slovakia (alternative is MTO derived from CBR's GAP indicator).	EC (alternatively CBR)
April	Slovak Stability program – baseline scenario of existing policies	MoF SR
till June	MTO is set on the basis of EC's or CBR's minimum MTO through comply or explain procedure *. The trajectory towards the MTO is set as well. Budgetary priorities are published.	Government of SR
till June	Aggregate expenditure ceilings and contingency reserve is set (based on June macroeconomic and tax projection)	MoF SR/Government
till August	Budgetary negotiations (two rounds – first: expenditure on the existing policies, second: new policies). Ministerial limits can be set as well.	MoF SR, Line ministries
October	Draft budget of general government, final confirmation of aggregate as well as ministerial ceilings.	Government of SR
November/December	Approval of the GG budget and aggregate ceilings in the Parliament.	Parliament of SR
Next periods (years T+1, T+2, T+3)	Task	Responsibility
February	Update of forecasts with potential impact on update of ceilings (including new legislative revenue measures).	Independent authority, MoF SR
April	Stability Program - update of the medium-term budgetary framework and expenditure ceilings. Indicative volume of expenditure carry – overs or carry - forwards.	MoF SR
May	Evaluation of the implementation of expenditure ceiling for the previous year and recommendation on the update of the ceilings	CBR
June	Update of forecasts. Evaluation of changes in tax collection efficiency (+ new legislative measures). Recommendation to hold or dissolve the reserve.	Independent authority, MoF SR
July	Allocation of released funds from the reserve.	Government of SR
till August	Budgetary negotiations (two rounds). Update of expenditure ceilings	MoF SR, line Ministries
October	Draft budget, updated aggregate as well as ministerial ceilings. Decisions on expenditure carryovers.	Government of SR

** if the government is not established, the full consolidation suggested in the Stability and Growth Pact and the most up-to-date Sustainability Report is taken over.*

Graph 6 : Illustration of the implementation of expenditure ceilings in the general government budget



** Expenditure on existing policies as well as the allocation of additional fiscal space are defined at the ministerial level.*

Source: own processing of authors

The need for a number of changes in the budgetary process has led several countries to gradual introduction of the expenditure ceilings. Implementation of expenditure ceilings in the context of budget management will require several procedural changes (BOX 5), which are unlikely to be implemented in a very short horizon. One option is therefore indicative (non-mandatory) expenditure ceilings prior to their introduction in binding form (United Kingdom). Additionally, preparatory, analytical internal exercises (modeling of multiple variants of expenditure ceilings) could take place over several years before final implementation (Australia and France).

BOX 5: Prerequisites for the implementation of expenditure ceilings

▪ **Real time budget data in ESA2010 methodology**

In order to ensure link to the medium-term fiscal objectives, the expenditure ceiling should be set out in the ESA2010 methodology, i.e. the accrual recording of individual transactions. Consequently, also budgeting and in-year monitoring would be required in the ESA2010 methodology, in a detailed division at the level of GG items and entities. During the transition period, the use of cash data can also be considered. In that case, however, the transition from cash data to ESA2010 methodology is necessary at least on a quarterly basis.

- **Stable and unified methodology for estimating input data for calibration of expenditure ceilings**

In order to achieve greater transparency and control, it will also be necessary to methodically define individual technical inputs into the calculation of the expenditure ceilings (for example, the cyclical component of the projected revenue or one-off measures). One of the main inputs to the calculation of the ceilings themselves is also the quantification of the value of the long-term sustainability gap indicator based on a large number of technical assumptions. Therefore, it is advisable for the CBR to publish a detailed manual for its calculation. In addition to the calculation's methodology, the **scope for expert judgment should be more clearly defined when it comes to the used assumptions**. This would eliminate sudden methodological changes and enhance the predictability of fiscal rules.

- **Direct budget control over items and entities under the expenditure ceiling**

Since the expenditure limit is set almost at the level of the entire general government, there must be direct operational control over all the entities falling under the expenditure ceiling. Implementation of expenditure ceilings would therefore require somewhat greater centralization in budget management than at present (this mainly concerns entities such as National Highway Company, Railway Company Slovakia, Railways of the Slovak Republic, Public Universities and Public Health Insurance).

- **Estimation of the baseline scenario of existing policies (cost of maintaining current policies)**

In order to quantify the fiscal space within the expenditure ceiling, it is important to know trends in expenditure policies at the level of each sector / entity for three to four years in advance (depending on the setting of expenditure ceilings). Therefore, it is crucial to quantify the so called **baseline scenario of current policies**. It explains how expenditures will evolve while maintaining current legislation. The accuracy of estimates of the baseline scenario requires, in particular, good knowledge of the underlying factors of the cost growth of individual budget items and sectors at both macro and micro levels (demography, legislation, inflation, GDP growth, etc.).

The discussion on the baseline scenario of existing policies should be separated from the discussion of the need for savings (or new policies in the case of fiscal space). For decision-making on reallocations, it is appropriate to separate the expenditure structure further to:

- a) discretionary and mandatory expenditure,
- c) one-off / temporary and structural
- d) without a direct source of revenue and with direct source of revenue

- **Estimation of efficiency savings in the baseline scenario (spending reviews)**

The baseline scenario of existing expenditure policies may often exceed the expenditure ceiling to meet defined fiscal targets. In such a case, it is appropriate that the spending reviews have identified potential savings in all the sectors / areas concerned, thus enabling the expenditure ceiling to be met. In other cases, expenditure revisions serve to identify the additional space that can be used for new, more effective public policies.

- **Estimation of new policies and priorities in terms of economic and social benefits**

Fiscal space for new projects should be divided among projects based on the highest economic return in terms of public interest. It is therefore appropriate to establish a methodology for submitting applications for new policies in the context of budgetary

negotiations. At the same time, it is important to know their most accurate fiscal impact, as their undervaluation would additionally require compensation for the intended allocation.

- **Estimates of structural revenue (ex - ante and ex - post)**

The setting of expenditure limits also stems from the adoption of structural revenue measures. Therefore, it is important to ensure a proper process for quantification and monitoring (in particular ex-post estimation of the change in the effectiveness of tax collection as a result of new legislative measures). The study assumes the involvement of an independent authority in performing this task.

- **Estimate of non-tax revenues**

Non-tax revenues account for approximately 5 - 6% of GDP, thus significantly influence the setting of the expenditure ceiling. Therefore, it is also necessary to reliably estimate them on the basis of economic fundamentals throughout the forecast horizon. Currently, the Tax Forecasts Committee does not estimate them. Since the deviation of non-tax revenues from budget assumption would mean deviating from aggregate targets, as a minimum, large non-tax items should pass through approval by an independent authority. In this context, it is first necessary to implement measures to improve the underlying data sources, which are the basis for estimates of non-tax revenues.

- **Estimate of items and entities separated from the expenditure ceiling**

Similarly to the above-mentioned case (in order to ensure the consistency of expenditure ceilings with the fulfillment of aggregate fiscal targets), an independent authority should also estimate items that are out of government control and outside the expenditure ceiling. This is mainly an estimate of interest costs and EU funds co-financing. Similarly, the realistic assumption of the planned management of municipalities is also important. Imprecise estimates of these items could mean deviations from the targets even if the expenditure ceiling is met. Estimates of items and entities excluded from the ceiling should be entrusted with independent authority.

5 Conclusion

In recent years, Slovakia has made significant progress towards the recovery of public finances. To ensure their long-term sustainability, it would be beneficial to establish a binding medium-term expenditure framework. It is therefore appropriate to complement the existing 'debt brake' rule by the introduction of binding expenditure ceilings. Expenditure ceilings would serve as the main tool for operational budget management. Such reformed budgetary framework would be able to cope more effectively with fiscal sustainability challenges stemming from the population ageing. Through higher anti-cyclicality, expenditure ceilings would also strengthen the role of budgetary policy in mitigating macroeconomic and financial imbalances. In addition, the expenditure ceilings tool could be a useful complement to the Value for Money project.

Based on the final proposal of individual parameters, it is optimal to subject expenditure ceilings to a test phase over several years, before their final implementation. Before its mandatory implementation, the proposed draft of expenditure ceilings should be put to a test run on the basis of real budgetary data or, if necessary, by simulating multiple variants of expenditure

ceilings on past data.⁵⁹ Following the public discussion of this study and subsequent simulations, we expect some parameters of the presented proposal will be adjusted. However, the changes should not undermine the basic principles of the expenditure ceilings. After the end of the test phase, a final (and legislative) proposal for the implementation of expenditure ceilings could be fully ready during the new electoral period.

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⁵⁹ Ex-ante simulations should be complemented by an analytical retrospective exercise, which would consist in "overwriting history" through the simulated existence of expenditure ceilings (for example, from 2010). This would provide a wider data base, enriched by further experience of macroeconomic and budgetary developments.

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Annex 1: Possible proposal for setting the expenditure ceilings in SR (summary of individual parameters)

Area	Body	Description
Formulation of expenditure ceilings and link to the aggregate fiscal targets	The main fiscal target indicator and its link to the expenditure ceiling	<ul style="list-style-type: none"> The main fiscal target is the medium-term budgetary objective (MTO) consistent with achievement optimal level of debt in long term (based on a) Stability and Growth Pact rules or b) Sustainability GAP by CBR) MTO outlines the medium-term objective of a structural balance (valid for the length of the election term) The government will determine both its medium-term budgetary objective on the basis of EC or CBR's calculation of minimum MTO and the trajectory of the structural balance until the end of the parliamentary term in order to meet/approach chosen MTO (see section below). The total expenditure ceilings are used as the main operational tool of the government for the achievement ex-ante targeted structural balances towards MTO
	Minimum required improvement of fiscal target indicator within the chosen horizon	<ul style="list-style-type: none"> The trajectory of the structural balance towards MTO is determined by the government on the basis of the corrective and preventive part of the Stability and Growth Pact and/or the national fiscal rules (Debt brake in the case of exceeding the sanction bands)
	Planning Horizon	<ul style="list-style-type: none"> Election period - at the start of the term, the government sets the binding expenditure ceilings for 4 years in advance
	Revenue forecast (tax - levy revenues)	<ul style="list-style-type: none"> Structural revenues is considered (nominal forecasts of the Tax Forecast Committee for 4 years in advance, adjusted for point estimate of the cyclical component and one-off and temporary measures) The expenditure ceiling is updated during the electoral horizon also with new legislative revenue measures (tax and non-tax) Ex-post the expenditure ceiling is also updated on changes in tax collection efficiency (to be confirmed by the Committee)
	Forecast of non-tax revenues	<ul style="list-style-type: none"> Non-tax revenues data (at least the most significant items) forecasted/or endorsed by the independent authority for four years in advance
	Numerical expression of the overall ceiling (and inflation adjustments)	<ul style="list-style-type: none"> The expenditure ceilings are set in nominal terms as the maximum level of expenditure for election period of 4 years. The revisions in inflations are

		absorbed by pre-created reserve (see section below)
	Reserve	<ul style="list-style-type: none"> The reserve is determined ex-ante as "Contingency margin", which mainly covers the forecast deviations from macroeconomic shocks (mainly real GDP growth and inflation) Reserve volume is increasing towards the end of the period when uncertainty is higher The reserve can be used for expenditure measures resulting from the materialization of positive shocks (e.g. higher wage expenditure due to structural inflation shocks or higher real GDP growth) The reserve is saved in case of materialization of negative shocks (downward revision of growth and inflation) The unused reserve can be dissolved in years t to t + 4 based on the assessment of cyclical or structural shocks
Coverage and Level of detail	Exclusion of expenditure items	<p>The following items are excluded from the expenditure ceiling:</p> <ul style="list-style-type: none"> Expenditure related to the EU budget (including co-financing and EU budget contribution) Interest costs Cyclical component of expenditure on pensions Cyclical component of unemployment Benefits
	Exclusion of entities	<ul style="list-style-type: none"> The expenditure ceiling includes all GG entities, except local governments and other entities with their own autonomy (e.g. the Council for Budget Responsibility) Other GG entities and state-owned enterprises are assigned under the line ministries to which they belong
	Aggregate ceiling`s split	<ul style="list-style-type: none"> The aggregate expenditure ceiling can be divided in the second step into separate ministerial chapters (requires quantification of no policy change at ministerial level for budget negotiations)
Obligatory nature	Legal liability of ceilings	<ul style="list-style-type: none"> <u>The definition of ceilings</u> is anchored in the Constitutional Budget Responsibility Act or in the Budgetary Rules Act <u>The quantification / update of the ceilings</u> is provided under the State Budget Act (indicatively in the Stability Program) Parliament also approves setting and updating of aggregate expenditure ceilings
	Technical update of the ceiling (beyond the reserve framework) during the electoral term horizon	<ul style="list-style-type: none"> <u>Statistical changes</u> (new entities) <ul style="list-style-type: none"> ➔ an increase of the expenditure ceiling based on revenues of new entities <u>New revenue measures</u> adopted during the election horizon (including tax expenditures) not accounted in the original ceiling including significant shifts in tax collection efficiency

	<ul style="list-style-type: none"> ➔ increase of the ex-post ceiling (for year t + 1) by confirmed additional structural revenue from an independent authority (estimate in year t for estimate of year t-1) • <u>New measures with significant impact on long-term sustainability</u> (and without the impact on fulfillment of the ceiling) <ul style="list-style-type: none"> ➔ an update of the ceiling on the impact of measures behind the horizon of expenditure ceilings
Transfers between years	<ul style="list-style-type: none"> • Transfer of expenditure between years, e.g. up to 1% of the limit, are allowed • The individual transfers are approved by the government on the proposal of the line ministers • The amount of transferred expenditures is reported separately as so-called "side pocket" (i.e. out of limit)
Escape clauses (to be reviewed at later stage)	<ul style="list-style-type: none"> • <u>Unexpected expenditure in terms of the constitutional law</u> (rescue of the banking sector, natural disaster) <ul style="list-style-type: none"> ➔ considered as one-off expenditure impact (e.g., the rescue of the banking sector) • <u>Great recession</u> (the drop in year-on-year GDP growth by 12 percentage points over two consecutive years) <ul style="list-style-type: none"> ➔ Authorization to increase the limit as decided by the National Council of the Slovak Republic on the basis of the CBR standpoint
Correction mechanism	<ul style="list-style-type: none"> • without automatic compensation of deviations, or <u>only in the form of a CBR recommendation:</u>
Decisions on adjusting the ceiling (or activating escape clauses)	<ul style="list-style-type: none"> • Public opinion of CBR

Annex 2 - The numerical illustration of possible expenditure ceilings

Expenditure ceiling calculation (mil. of EUR)	2019	2020	2021	2022	Explanation
1. Structural balance of general government (target)	-715	-249	276	459	Structural balance is set for the election period with the objective of reaching structural surplus of 0.4 % of GDP in 2022. (Based on sustainability indicator of CBR). The pace of consolidation trajectory reflects Stability and growth pact requirements (annual consolidation of 0.5 pp. given normal expected times)
(% of GDP)	-0,7	-0,2	0,3	0,4	
of which: targeted structural balance of local government	226	227	179	172	Overall structural balances includes also local government balances
2. Structural revenue of general government (forecast) (a+b+c)	35 113	37 648	38 991	40 783	The main determinant of expenditure level
a. structural tax revenue and social contributions (a1 - a2 - a3)	29 830	31 244	32 472	33 671	Tax revenue and Social security contributions, which specify main room for expenditure ceiling
- a1. tax revenues and social security contributions	30 300	31 755	32 966	34 166	Nominal revenue is given by tax committee revenue forecast
of which: legislative measures (including tax allowances)	120	-122	-163		tax committee revenue forecast includes also new revenue measures
- a2. impact of economic cycle	476	516	500	500	Cyclical part of tax revenue accounts for country's position in the economic cycle
- a3. impact of one-off and temporary measures	-6	-6	-6	-6	Calculated in line with the IFP or EC's manual
b. non-tax revenues of general government	4 320	4 443	4 571	4 663	Analytical forecast of non-tax revenue
c. grants and transfers of general government	963	1 962	1 948	2 450	Analytical forecast of grants and transfers
3. Excluded expenditure items (forecast) (a+b+c)*	2 383	3 187	3 160	3 858	Estimate of items excluded from expenditure is necessary to preserve link of expenditure ceilings to the overall structural balance target
a. expenditure related to EU budget (a1+a2+a3)	1 243	2 058	1 987	2 685	
- a1. expenditure covered by revenues from EU budget	146	720	753	1 395	Official macro forecast/Independent authority
- a2. co-financing of EU funds	252	463	359	415	Official macro forecast/Independent authority
- a3. contribution to the EU budget	845	875	875	875	Official macro forecast/Independent authority
b. cyclical component of selected social benefits (pensions, unemployment payments)	-7	19	30	30	Official macro forecast/Independent authority
c. state debt service costs	1 147	1 110	1 143	1 143	Official macro forecast/Independent authority
4. Excluded entities (forecast/target)* (structural balance of excluded entities and its revenue)	4 084	4 701	4 302	4 471	Exclusion of local government's revenue and their targeted structural (net of transfers from central government)
5. Expenditure ceiling (-1+2-3-4)	29 361	30 009	31 253	31 996	Expenditure ceiling set in line with structural balance objective
6. Reserve for unexpected macroeconomic development	294	450	625	960	The reserve is set in a rising trend. In the last year it accounts for 3% of the expenditure ceiling. It gradually dissolves over time if not used to cover the unexpected shocks.
7. Expenditure ceiling adjusted for the reserve (5-6)	29 067	29 559	30 628	31 036	The aggregate expenditure ceiling announced at the beginning and split into ministerial level after the budgetary negotiations.