

Czech Proposal on a New EU Fiscal Rule

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Non-paper

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Contents

Introduction and Summary	1
1 The Fiscal Rule.....	2
2 Structure of Expenditure	5
3 Escape Clauses	5
4 Non-compliance and Sanctions.....	6
5 Illustrative Examples and Implications	8
6 Summary of Basic Relations.....	13
References	14

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Introduction and Summary

Fiscal rules are no new arrangement in public finance management, although over the years their underlying concepts have undergone significant changes. In essence, the pursuit of a small and annually balanced budget using the so-called classical approach is a fiscal rule. Fiscal rules began to enter legislation approximately 150 years ago and as recently as 1990 only seven countries had incorporated fiscal rule formally (Pirdal, 2017). The International Monetary Fund (IMF, 2017) currently registers fiscal rules in 96 countries and five multinational monetary unions, including the Euro area. Today, more than a hundred rules operate in the European Union alone, of which about half place restraints on the budget balance.

Since its inception, the European fiscal framework has undergone many changes, responding to general needs, as well as to individual Member States and the legal interpretations of the European Commission. The European Fiscal Board has recently criticised many aspects of the framework in its current form (EFB, 2019). It has shown that many Member States have missed the opportunity to build up fiscal reserves in good times and, on the contrary, have been procyclical. Although compliance with the rules is far more common today than before the Great Recession, the rules are different. In consequence of the crisis, several flexibility clauses have been adopted, without which countries were not able to stand the conditions of the rules before the Great Recession. The European Fiscal Board also points to the excessive complexity of the overall framework and proposes “a simple medium-term debt ceiling and one operational target, namely, a ceiling on the growth rate of primary expenditure net of discretionary revenue measures, and an escape clause triggered on the basis of independent economic judgement.” (EFB, 2019, p. 7) The dynamics of potential output then determines the growth of primary expenditures.

Currently, there is a general shift towards expenditure rules as an operational component, complemented by other ones, such as the debt rule. Numerous studies (e.g. Andrieu et al., 2015, Cordes et al., 2015, Eyraud et al., 2018, Claeys et al., 2016, Darvas et al., 2018, or Bénassy-Quéré et al., 2018) incline to expenditure rule. Even the Organization for Economic Co-operation and Development (OECD, 2016) proposed in its euro area economic survey a system based on a choice between the balance or expenditure operational rule, leaving the decision to each country.

In our proposal of the European fiscal rule, we prefer to return to a simpler and more transparent form of the fiscal rule, that at the same time will stand up to a complex economic environment. The simplicity of the rule must go hand in hand with its stability between fiscal policy settings and its ex-post assessment as well as countercyclical setting. A transparent rule should be easy to replicate and monitor. This requires the rule based on observed and publicly available aggregates or such benchmark can be easily derived. In the European context, the design of the rule complicates the fact that many member states have incorporated a structural balance rule or convergence towards a certain level of the structural balance (the medium-term budgetary objective) in their legal systems.

Despite all the shortcomings associated with the structural balance calculations, we still consider the institute of the medium-term budgetary objective to be a suitable countercyclical instrument, taking into account also explicit and implicit liabilities of the general government. Efforts to meet all of these requirements have shaped our proposal. It draws also on the practical experience of the Ministry of Finance of the Czech Republic with, in some respects, similarly grounded national fiscal rule that originally drew its inspiration from the Swiss fiscal rule at the federal level. Moreover, this proposal brings several enhancements and additions stemming from the European context.

The basic idea behind the proposed rule is that the expenditure should grow at most as the dynamics of trend revenue adjusted for the value of medium-term budgetary objective and excessive past errors. The aim of the rule is a structural balance at a level of at least of the medium-term budgetary objective. In other cases, an automatic correction takes place, reducing expenditure growth in the forthcoming years by an excessive accumulation of past errors. Apart from the limit set on total expenditure, current expenditure is not allowed to grow at the expense of capital expenditure during the times of fiscal consolidation.

The proposal continues with the basics of the fiscal rule in section 1 and explains the rationale behind the proposal. Section 2 then introduces the concept of current versus capital expenditures division to avoid cuts in capital expenditure during the fiscal tightening. Section 3 elaborates more on the escape clauses and section 4 on non-compliance and sanctions. Section 5 brings some illustrations on how the rule works on actual and simulated data. The last section summarises the rule in a few simple equations that being put together on the same page strengthens the understanding of the rule relations.

1 The Fiscal Rule

The main idea of the proposed rule can be generally described as follows: general government expenditure over the business cycle must correspond to its revenue without one-off measures. It is essential to find “structural” revenue that can be easily and transparently derived and as stable as possible over time. As revenue is concerned, it is desirable that they were symmetrical throughout the business cycle and do not deviate in any direction.

A Trend Revenue

We, therefore, analysed several approaches in various modifications, whether moving averages or simple statistical filters. Ultimately, the Hodrick-Prescott (HP) filter, using the values in outlook up to the t+3, appeared the most promising. There are two reasons for this. The first is the nature of the years of the outlook in revenue prediction. We see them more like a trend where discretion usually plays a relatively minor role. The second reason was the known end-point bias problem with HP filters, which is alleviated by the projection. The rule should therefore only be binding for year t+1 and recalculated annually to the most up-to-date data, thus fulfilling the necessary flexibility element. The filter uses adjusted annual general government revenue (AR) with smoothing parameter λ (we work with a standard value of 100). As trend revenue values no longer include one-off measures, structural revenue (SAR) can be entered as:

$$SAR_{t+1} = HP(AR_{t+1}, \lambda) \quad (1)$$

Adjusted Revenues

However, the aggregate of total general government revenue includes several items that we prefer to be adjusted for before applying the HP filter. Apart from the revenue one-off measures (R^{OF}), we strip the European structural and investment funds (R^{EU}) from total revenue, i.e. both current and capital transfers with a mirror effect on the expenditure side. Thus, the adjusted total revenue (AR) intended to filter out the symmetric cyclical component is the total revenue of the general government sector (TR) less EU transfers and one-off measures:

$$AR = TR - R^{EU} - R^{OF} \quad (2)$$

Adjusted Expenditures

As expenditure is determined by the trend of adjusted revenue, both one-off expenditures (E^{OF}), as well as the part of expenditure financed from the European structural and investment funds (E^{EU}) must be excluded. In addition to consistency in the accrual methodology ($R^{EU} = E^{EU}$), co-financed expenditure from the EU budget is, on the principle of additionality, intended primarily to accelerate the convergence of EU member states and to complement national spending in this sense. Moreover, the financial perspective has its own cycle, to a certain extent shaped by the administration of allocation conditions or individual operational programmes.

Finally, there must be room left for a very exceptional and clearly defined range of situations – escape clauses (E^{EC}). Therefore the expenditure set by the rule (AE) is total expenditure (TE) adjusted accordingly:

$$AE = TE - E^{EU} - E^{OF} - E^{EC} \quad (3)$$

Box 1: Interest Expenditure, Investments and Unemployment Benefits – Should the Controlled Expenditure Be Adjusted for Them?

Several other items can be found in the literature and in practice, which are excluded from the targeted aggregates for various reasons. In this box we discuss three of these and set out the reasons why we do not agree to their exclusion.

Unemployment benefits are excluded sometimes because they are cyclical in nature. However, only part of total unemployment is actually caused by the cyclical fluctuation of the economy, as the cyclical component is also largely influenced by the institutional set-up of the labour market (e.g. Nunziata, 2001, Gnocchi, 2012, Faccini et al., 2012). In other words, the institutional and structural characteristics of the labour market affect the sensitivity of the unemployment rate to the business cycle. Governments should, therefore, seek to reduce cyclical unemployment throughout the reforms, which strengthens the argument for maintaining unemployment-related public expenditure in the rule.

Interest expenditure undoubtedly also has its cyclical component, which is beyond the government’s current direct control. Nonetheless, it is also true that it is dependent on the total amount of interest expenditure paid. And total interest is again a function of the total stock of debt. The pursuit of fiscal consolidation and debt reduction in good times leads to a reduction in interest payments. Here too, the government can positively influence its fiscal space. In addition, there is a purely practical reason in this case – consistency with the medium-term budgetary objective. Given that it is expressed as a structural balance rather than a primary structural balance, maintaining the current concept of the medium-term budgetary objective while exclud-

ing interest expenditure from the managed aggregate is highly problematic.

The so-called Golden Rule is a specific type of fiscal rule concerning mainly the budget balance. That is the rule of balanced values in the current part of the balance, whereas capital expenditure might be financed by deficits. The concept is based on the thesis that investments bring benefits over the longer term and therefore the sources of their financing should be spread over a longer period of time. Although this may be the correct approach in theory, from a practical point of view it would mean determining the specific financing for each investment project. The concept also assumes the efficiency and effectiveness of all investments, as well as finding available amounts of external resources. Provided that these requirements are unattainable in the real world, the general government expenditure aggregate contains the total amount of investments funded from national sources in our proposal.

On the other hand, the fiscal rule should not hinder sustainable and efficient investment activity. A frequent objection to fiscal rules is that, if consolidation is required, it is investment spending that is the first to be reduced, because it is a less politically sensitive solution than cuts in current expenditure. However, special treatment of investment expenditure may be a possible starting point (see below).

Thus, the expenditure given by the rule for year $t + 1$ may reach a maximum of the structural revenue in that year:

$$AE_{t+1} \leq SAR_{t+1} \quad (4)$$

Medium-term Budgetary Objective

With derived structural revenue, the Medium-term Budgetary Objective (MTO) can be included in easily. For the sake of simplicity, we keep the current commonly agreed methodology (EC, 2019). For the purposes of the rule, it is sufficient that it is one specific value expressed as a percentage of expected GDP.

If a member state is allowed to achieve a structural deficit (e.g. a deficit of 0.5% of GDP set by the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union), then this must be taken into account in the maximum allowable expenditure. Including the medium-term budgetary objective, expenditure under the rule may exceed structural revenue by a maximum of the MTO's nominal value (thus MTO multiplied by GDP, i.e. Y) in a given year:

$$AE_{t+1} \leq SAR_{t+1} - MTO_{t+1}Y_{t+1} \quad (5)$$

Automatic Correction of Ex-post Slippages

Even where an unbiased and independently assessed forecast has been made, there is no guarantee that expenditure or structural balance will be in line with the predicted value or ex-post compliance with the rule. Inconsistencies can have many causes; from accidental influences to a deliberate violation of the original plan. Either way, it is essential that public finances return to a sustainable path as soon as possible. On the other hand, it is not desirable for unbiased, i.e., purely random and symmetrically distributed errors, to place burdens and cause fluctuations to planned expenditure.

For these reasons, we propose the creation of a correction account that would record all the errors, omissions, inconsistencies or deliberate violations in any direction. Only if the sum of errors exceeds a certain threshold, the amount above that threshold is gradually dissolved – reducing the scope for maximum allowable expenditure. This means that if errors and omissions are completely random and have a normal distribution with a zero mean value, then there will be practically no dissolution of the excess part of the correction account. However, if the errors are biased and the MTO is more frequently violated, the correction account will increase until the government has to reduce expenditure to compensate for the excess part of the correction account. In other words, if the correction account is being dissolved, expenditure will be able to exceed structural revenue by an amount lower than the MTO. The correction account can be formally expressed as follows:

$$A_t = A_{t-1} + (AE_{t-1} - SAR_{t-1} + MTO_{t-1}Y_{t-1}) - k_t \quad (6)$$

It is, in principle, an ex-post evaluation tool which compares actual expenditure with expenditure as it should have been under the rule applied ex-post. The term A_{t-1} determines the accumulated correction account balance from past errors; k_t represents the amount by which it was necessary to reduce expenditure in the current (on-going) year. If the actual (ex-post) expenditure was higher than what would correspond to the real structural revenue and the MTO, then the correction account will increase.

The correction account is dissolved if the cumulative amount of the account exceeds the given threshold. This is set at 2% of GDP for the Czech fiscal rule. The correction account in the current year will obviously decrease by the same amount. Similarly to the Czech regulation, we propose the period for dissolving the excess part to be three years.

The part of the correction account excess, which is being dissolved, can be entered in formal terms as:

$$k_{t+1} = \max \left\{ \left(\frac{A_t}{Y_t} - \alpha \right) / 3; 0 \right\} Y_{t+1} \quad (7)$$

Finally, expenditure under the rule is determined by this final relationship:

$$AE_{t+1} \leq SAR_{t+1} - MTO_{t+1} Y_{t+1} - k_{t+1} \quad (8)$$

Box 2: An Example

This is perhaps the right place to set an illuminating example. Suppose we have a country and observe the development for three years (years t, t+1, t+2). The rule in this country has been valid for several years already. The country's MTO is -0,5% of GDP. Nominal GDP grows at a rate of 5%, the same is true for filtered revenues. This can be summarised in the following table (NC stands for a national currency):

		t	t+1	t+2
GDP	bn NC	4 000,0	4 200,0	4 410,0
MTO	% of GDP	-0,5	-0,5	-0,5
MTO*GDP	bn NC	-20,0	-21,0	-22,1
HP(AR)	bn NC	1 000,0	1 050,0	1 102,5
AE	bn NC	1 020,0	1 071,0	1 119,6

Having filtered adjusted revenues, we derive expenditure by deduction the level of MTO in national currency for the year t, t+1 or t+2 (see equation 5).

This is just the ex-ante value that the government should fulfil. However, actual expenditure is usually different, for whatever reason. Suppose the country reaches the following expenditure:

		t	t+1	t+2
AE actual	bn NC	1 040,0	1 060,0	1 140,0

As the rule is supposed to have been valid for several years, the correction account is operating and accumulating past errors (equation 6 above). Let us say the value in year t (that means accumulated past errors until last year) is 79. This is to be compared with the threshold of 2% of GDP and, if in excess, dissolved within three years (see equation 7).

		t	t+1	t+2
A_t	bn NC	79,0	99,0	83,0
Threshold	bn NC	80,0	84,0	88,2
k_{t+1}	bn NC	0,0	5,0	0,0

When we look at year t, the correction account (79) is compared to the threshold of 2% of GDP (i.e. 2% from 4000). As 79 is lower than 80, nothing is dissolved in t+1 (meaning that k_{t+1} in year t is 0). However, the actual expenditure is in this year 1040 bn, which means by 20 bn higher than should have been. That is why the correction account rises by 20 bn in year t+1 (see the rise from 79 to 99). Preparing the budget for year t+2 (in t+1), we see the correction account exceeds the threshold by 15 bn (99 versus 84). This brings the dissolving of the excess in three years, which is 15 divided by 3. If we compare the rule-set expenditure above for t+2, it is 1102.5 bn of filtered revenue, taking into account the MTO adds 22.1 bn (so the sum is 1124.6 bn) and dissolving of correction account by 5 bn decreases the ultimate expenditure to 1119.6 bn.

Finally, let us take a look at the year t+2 where we stand preparing the budget for t+3 (not shown). As the actual expenditure in t+1 is lower by 11 bn than is derived by the rule, correction account goes down year-on-year to 83 (from 99 bn by 11 bn corresponding to better performance and 5 bn decreasing the limit for t+2). And as the correction account in t+2 is lower than the threshold, there is no dissolving in t+3.

2 Structure of Expenditure

Investment expenditure is often one of the first options for cuts in times of fiscal consolidation. This type of attitude is short-sighted because it, beyond current demand, affects negatively the economic growth over the long term. Therefore, the proposed fiscal rule does not end with an overall “envelope” for adjusted general government expenditure but also ensures a more stable distribution of the ratio between current and investment outlays over time. The sustainability of public finances is also linked to long-term growth of potential product.

Nevertheless, every country, in relation to its relative economic development and initial institutional setting (e.g. different weights between private and public investments), has a different optimal size of government investment. Besides, the optimum changes over time, as a result of growing economic advance and shifts in the structure of the economy.

Knowing that the investment is at risk especially during the period of fiscal consolidation, it is desirable to protect them at least in these times. Such a situation occurs when consolidation towards the MTO is required. Therefore, the rule to maintain the minimum proportion of capital expenditure should apply to situations where the level of the MTO is breached or returns to a specified MTO after the application of the escape clause.

Thus, the expenditure aggregate determined by the rule is divided into the current (PE) and capital (CE) expenditures, i.e. the relation $AE = PE + CE$ applies. Compliance with the rule then requires that capital expenditure grow at least at the rate of total expenditure, while current expenditure grows at the maximum rate of total expenditure:

$$\frac{PE_{t+1}}{PE_t} \leq \frac{AE_{t+1}}{AE_t} \leq \frac{CE_{t+1}}{CE_t} \quad (9)$$

Although the government is constrained by the rule in terms of both total spending and the boundaries of its structure (in times of required consolidation), it still has considerable choice in the settings. Within these constraints, setting current and capital expenditures is entirely the responsibility of the government based on its programme priorities, without jeopardising long-term economic growth.

3 Escape Clauses

In a certain sense, the simpler and clearer the rule, the more inadequate it is in unforeseen and many unpredictable circumstances. If the rule is to succeed in practice, it must contain escape clauses that can incorporate anomalies into the rule. On the other hand, too many escape clauses would make the rule complicated and vulnerable to abuse. It is therefore important to strike a balance between flexibility and transparency.

Escape clauses should only be applied in exceptional situations. Standard flexibility of the rule is provided by automatic fiscal stabilisers as expenditures grow more or less by the rate of smoothed revenues. Annual recalculation of the structural balance reflecting new forecast grants additional leeway, such as the correction account that compensates random unbiased surprises or forecast errors of a smaller extent. Besides, if the government runs better budgetary outcomes than the MTO, it creates a buffer in the correction account, which can be utilised in less favourable times. However, in most situations, it must be dealt with in a standard way, through revenue coverage. There is no sense in applying escape clauses to every possible anomaly. After all, the main objective of the rule is not only “to comply” with it but to use it to attain sustainable public finances over the long term.

We propose only four escape clauses to be permitted:

- State of war – the government may increase expenditure above the permitted limit if it gets into war.
- State of emergency – the government may increase expenditure above the permitted limit if it is necessary for preserving the country’s security.
- Large-scale natural disaster – the government may increase expenditure above the permitted limit if it is necessary for the recovery from the natural disaster of significant extent (it means escape clause does not apply because of the heavy rain that comes several times every year).
- Severe economic slump – the government may increase expenditure above the permitted limit if it is necessary for recovery from the slump that is exceptional (e.g. decrease of GDP by 3%).

By their nature, escape clauses are not automatic. This raises the question of who decides to launch them and to what extent. If we expect the economy to decline by 5%, there must be someone to assess this forecast. Similarly, for example, in the event of a natural disaster, there must be someone who decides that a minimum level has been exceeded, in order to avoid the application to cases of normal drought or rainfall. In the event that an escape clause is

approved, the amount of expenditure that will be recognised under this measure must be decided and how much the expenditure can be increased (or the correction account adjusted). We believe that this task should be carried out by independent fiscal councils, both at national and EU level (existing or equivalent to the current European Fiscal Board). At the same time, two-stage decision-making should also help to ensure an internationally consistent approach, transparency and objectivity.

Nevertheless, there is a problem with the return to MTO in relation to the application of escape clauses. If the escape clauses expire, the rule leads to an immediate return to the MTO in the subsequent period. Such a development may not only be difficult to implement but also economically sub-optimal. For example, a country with the MTO at -0.75% of GDP but undergoing a severe economic recession and thus permitted 2% of GDP escape clause, meets the rule if it achieves a structural balance of -2.75% of GDP in a given year. But the following year, with the escape clause no longer applying, the rule requires fiscal consolidation of up to 2 percentage points in order for the country to return to its MTO of -0.75% of GDP. At a time of economic recovery, such a restriction would be unbearably expensive in social terms and would likely lead to a further recession. On the other hand, gradual fiscal consolidation should take place during the recovery period. Therefore, the application of escape clauses should be accompanied by a provision that the minimum rate of fiscal consolidation is 0.5 percentage points per year. In this example, this would mean that a country reaches its MTO within four years at the latest. In the event of a slower recovery, the deviations would accumulate on the correction account with the potential risk of a reduction in the rule-based expenditure for the subsequent period.

The proposed minimum restriction rate may appear too slow, but there are several arguments for this. First, as mentioned above, it is important to realise that escape clauses are intended to be exceptional. If applied rarely, the risk of a (relatively slow) return to MTO for long-term sustainability is also reasonably small. Secondly, there is a question of credibility. Higher levels of consolidation required may be seen to be unrealistic from the beginning, leading to the expectation that the rule will be violated in any case. Third and finally, if significant consolidation hinders the economic recovery, this would also have negative impacts on the long-term sustainability of public finances and the potential consequences might be worse than slower consolidation.

4 Non-compliance and Sanctions

The first stage of a review into compliance with the rule is conformity between revenue and expenditure trends as a whole, obviously taking account of the MTO and any adjustments to the relevant part of the correction account. The second stage involves an evaluation of the consistency of the expenditure structure, in cases this condition applies. In general, we can identify the following rule violations:

- The actual expenditure (\overline{AE}_{t+1}) rises faster than the rule-set expenditure because of the current expenditure above the limit.

$$\frac{AE_{t+1}}{AE_t} < \frac{\overline{PE}_{t+1} PE_t}{PE_t AE_t} + \frac{\overline{CE}_{t+1} CE_t}{CE_t AE_t} \wedge \frac{AE_{t+1}}{AE_t} < \frac{\overline{PE}_{t+1}}{PE_t}$$

- The actual expenditure rises faster than the rule-set expenditure despite the current expenditure up to the limit (capital expenditure increase is very fast).

$$\frac{AE_{t+1}}{AE_t} < \frac{\overline{PE}_{t+1} PE_t}{PE_t AE_t} + \frac{\overline{CE}_{t+1} CE_t}{CE_t AE_t} \wedge \frac{AE_{t+1}}{AE_t} \geq \frac{\overline{PE}_{t+1}}{PE_t}$$

- The expenditure aggregate rises slower than the rule-set expenditure even though the current expenditure is above limit.

$$\frac{AE_{t+1}}{AE_t} > \frac{\overline{PE}_{t+1} PE_t}{PE_t AE_t} + \frac{\overline{CE}_{t+1} CE_t}{CE_t AE_t} \wedge \frac{AE_{t+1}}{AE_t} < \frac{\overline{PE}_{t+1}}{PE_t}$$

Evaluation of compliance with the rule is carried out both ex-ante and ex-post. The ex-ante evaluation should be carried out on the basis of the government plans described in the Stability/Convergence Programmes and, if there is a risk of breaking the rule, the Member State is obliged subsequently to adjust its budget for the following year to comply with the rule.

The ex-post evaluation is partially automatic through a correction account. If the structural balance deviates from the MTO (one way or the other), this deviation is directly credited to the correction account. However, changing the correction account is only the first step, since it only reflects a comparison of structural revenue and total expenditure, regardless of circumstances and structure.

Anyway, it cannot be argued that failure to comply with the rule reflects intentionally excessive expenditure. Failure to comply with the rule may only be caused by an error in the revenue forecast. Changes in the correction account are therefore quite common. This is also the reason why a breach of the rule in one year cannot be followed automatically by the imposition of a sanction, although the country should be subject to more detailed surveillance by the European Commission. In the event of a longer-term error, the correction account cannot be the only form of correction. Indicating error for three consecutive years or four times in the previous six years that leads to a deterioration in the correction account, the European Commission imposes a sanction in the form of a financial fine.

The fine would be covered by a deposit which each country would pay on the account at the European Central Bank. The deposit would be remunerated at a rate equal to that country's nominal GDP growth for the previous year. This would keep the value of the deposit at the required level, which would be determined as a share of GDP. The deposit should be paid by each member state, but on a pro-rata basis from those sub-sectors that participate in tax revenue, according to the tax assignment. The replenishment would be provided by the member state, again on a pro-rata basis between its sub-sectors. In the case of repeated infringements, the obligatory deposit would increase (e.g. from 0.2 to 0.3% of GDP).

The shared responsibility mechanism for the deposit is beneficial in two ways: it increases the internal pressure to comply with fiscal rules by which it lowers deposits and makes the system cheaper. Finally, the interconnection of the general government expenditure side between sub-sectors makes cost-sharing somewhat fairer and may lead to a revision of these financial links towards a more optimal setting.

5 Illustrative Examples and Implications

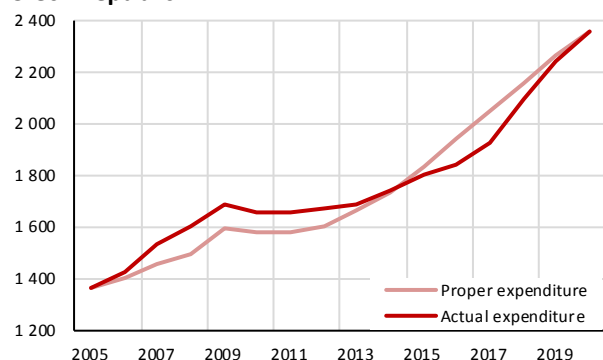
The functioning and resilience of each fiscal rule are tested over time. Creating any simulations on the actual data from the past is, of course, problematic. It cannot be assumed that the existence of a strict rule will force the government to behave in the same way as if it were not bound by anything.

However, the reform of the Stability and Growth Pact in 2005 introduced MTO into the European fiscal framework as part of its preventive arm. This meant that member states had (and obviously still have) obligations to fulfil the commitments that our proposal also expects. In many cases, this has not been the case, either due to inconsistent enforcement, the economic situation resulting from the economic crisis or the flexibility of the current European fiscal framework. In contrast, the flexibility of the proposed rule would only take place in the context of the escape clause applied as a result of the 2009 economic crisis.

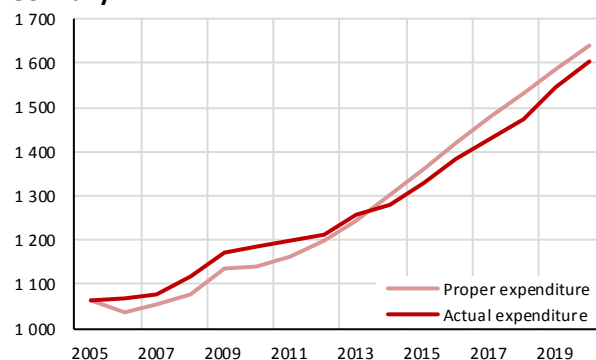
Graph 5.1: Expenditure According to the Rule and Actual Expenditure

billions of national currency

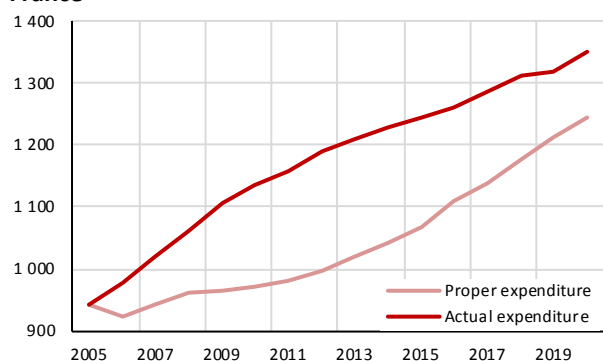
Czech Republic



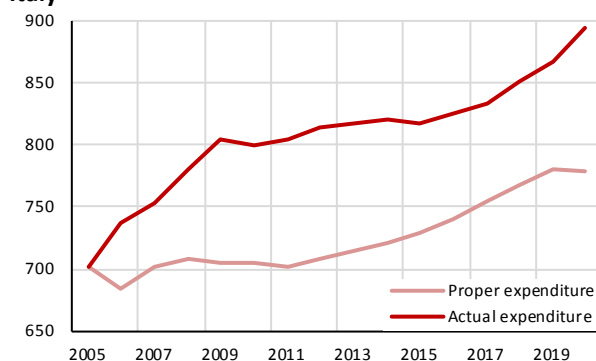
Germany



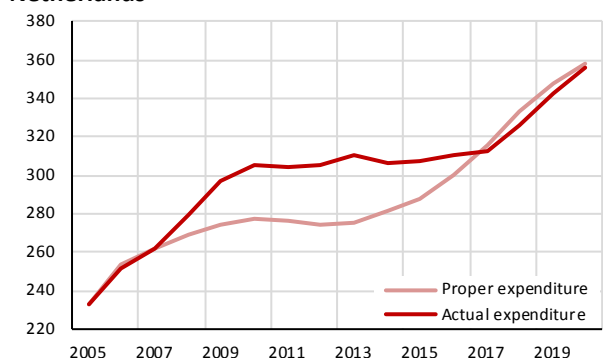
France



Italy



Netherlands



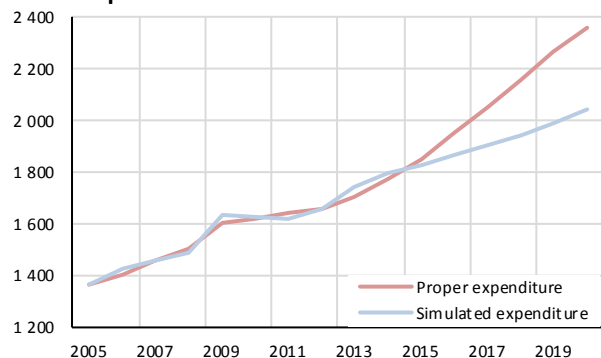
Source: AMECO (2019). MF CR Calculations.

We examine the rule in two scenarios. The first scenario is fully based on past values achieved by the member state surveyed (Graph 5.1). The second scenario, on the other hand, is based on the assumption that, although the country did not always comply with the rule, to some extent expenditure dynamics followed the countercyclical course and mitigated the effects of cyclical fluctuations (see Graph 5.2). In both scenarios, an escape clause is applied if the decline in GDP exceeds 3%. The extent of the escape clause depends on the size of the output gap, where the subsequent trajectory of return to this objective is 0.5 percentage points each year.

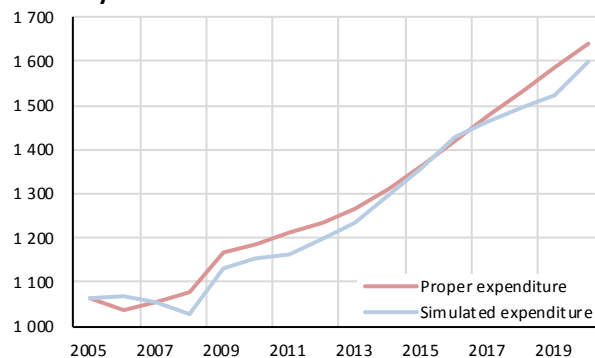
Graph 5.2: Expenditure According to the Rule and Simulated Expenditure

billions of national currency

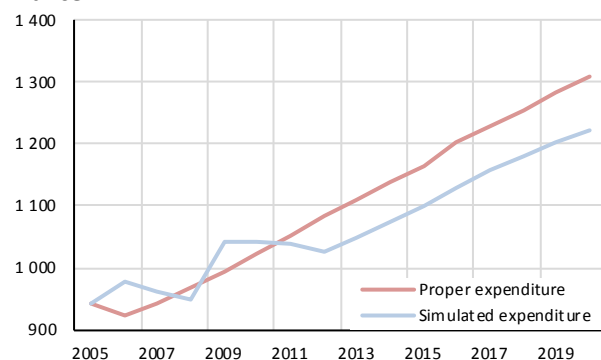
Czech Republic



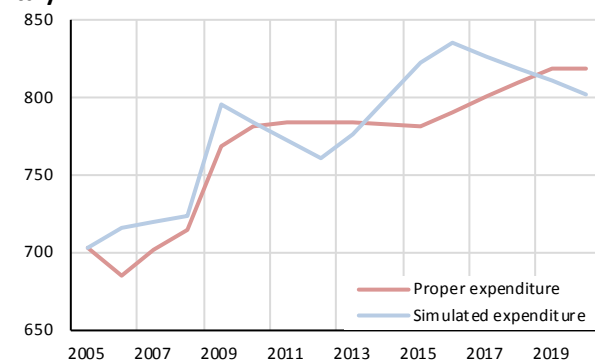
Germany



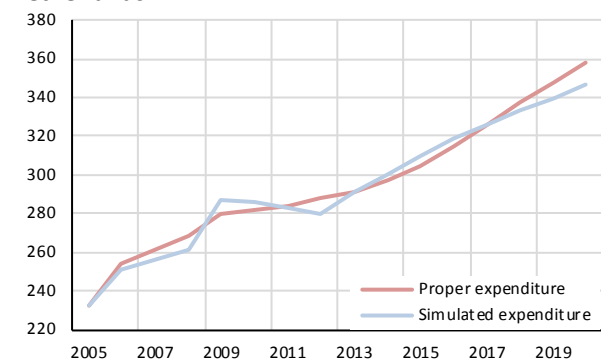
France



Italy



Netherlands



Source: AMECO (2019). MF CR Calculations.

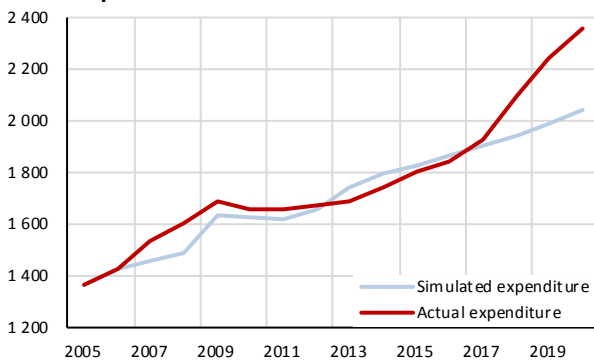
Illustrative cases include the CR, Germany, France, Italy and the Netherlands. The escape clauses were applied in all cases except France, where the economic performance during the entire horizon of the simulation has never dropped by more than 3%. However, its long-term persistence in the negative output gap indicates structural problems that make the implementation of the rule significantly more difficult. A similar case is Italy, where GDP volatility is relatively high. The whole situation is further accentuated by a correction account, which significantly reduces expenditure according to the rule, but the actual expenditure does not reflect this element. In both these cases, it is absolutely obvious that the general government expenditure settings are not sustainable and there are major problems in achieving the MTO. On the other hand, the situation in the CR, Germany and the Netherlands is different. In all these cases, general government expenditure in 2020 is at a lower level than allowed by the rule itself. Expenditures are

reduced by the correction account over the entire horizon of the simulation. However, this only shows that fiscal policy settings are generally more or less pro-cyclical (Graph 5.3).

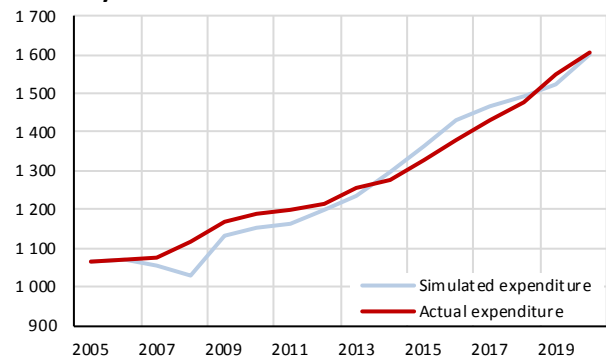
Graph 5.3: Actual Expenditure and Simulated Expenditure

billions of national currency

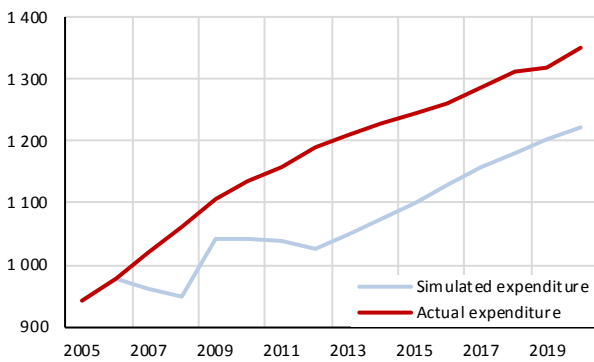
Czech Republic



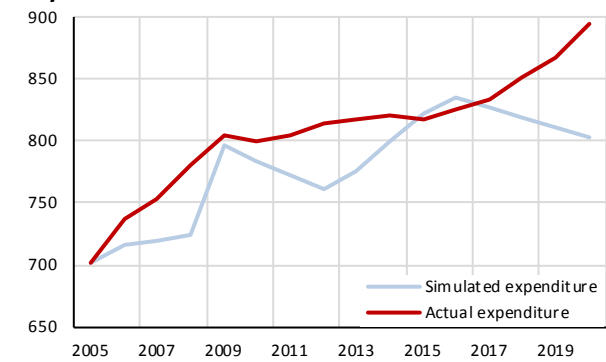
Germany



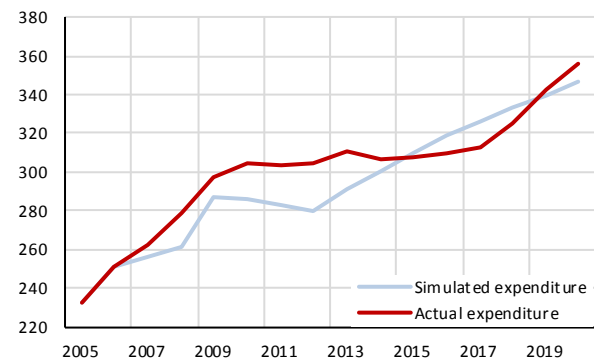
France



Italy



Netherlands



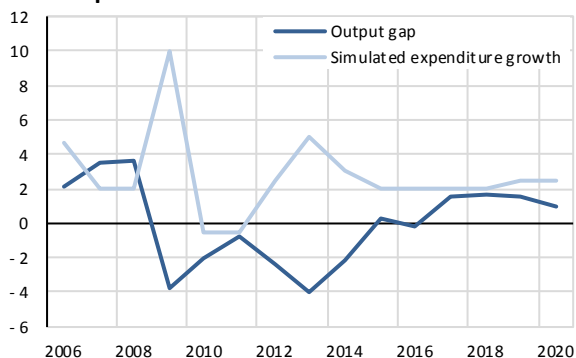
Source: AMECO (2019). MF CR Calculations.

The simulated scenario responds to the 2009 crisis in all countries by increasing spending by 10%. The follow-up is different as the output gap develops (Graph 5.4). Year-on-year spending cuts are not unrealistic, given the strong increases in previous periods with the help of anti-crisis measures, which are gradually being eradicated. In the case of the CR, Germany and the Netherlands, the course of expenditure over the entire horizon is not affected by the correction account, while for France and especially Italy, the correction account pushes down the rule-set expenditure over certain periods. In both countries, the primary setting of public finances is particularly important, as the correction account is beginning to accumulate large deviations in the structural balances from the MTO.

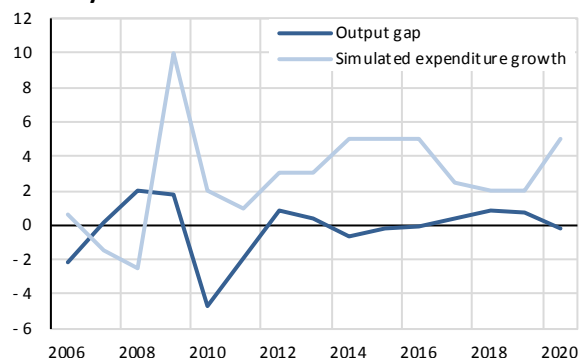
Graph 5.4: Simulated Expenditure Growth and Output Gap

expenditure growth in %, output gap in % of potential product

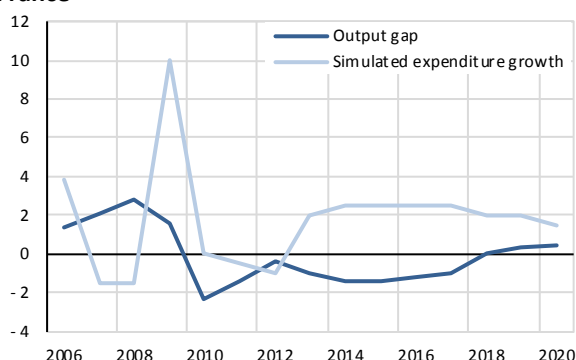
Czech Republic



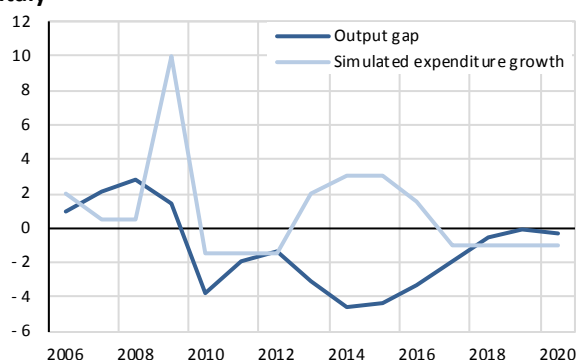
Germany



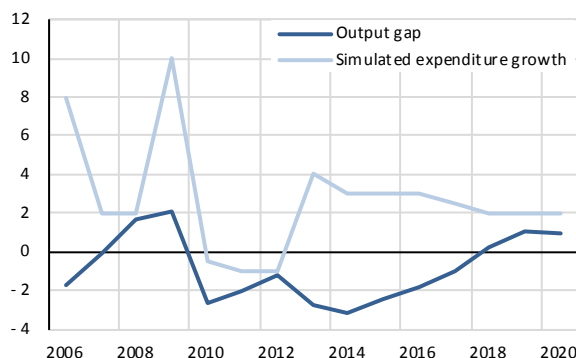
France



Italy



Netherlands



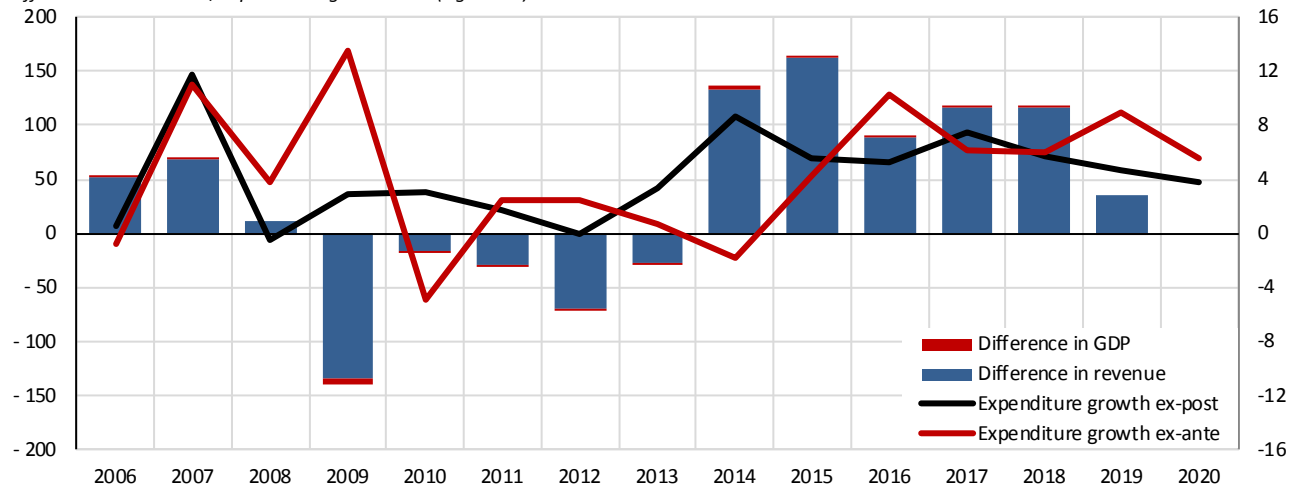
Source: AMECO (2019). MF CR Calculations.

The correction account not only captures the overrun of expenditure, but also the effects of inaccurate revenue predictions, prolongation of the time period being filtered, or different forecasts of nominal GDP. We examine this aspect only in the CR, for which we have sufficient data. A comparison of the forecasts for year $t+1$ and subsequent comparison with the situation in that same year show the effects of unintended discrepancies (Graph 5.5).

Illustrative examples, although with arbitrarily selected parameters, produce certain implications for the operation of the proposed rule. Deviations from the MTO, especially in good times, are sanctioned relatively quickly by the correction account. Penalty reductions in expenditure may also occur in times of economic slowdown or recession, even if an escape clause is applied. A transitional period can be used at the time the rule is launched, as achieving a structural balance around the MTO is crucial for the start of operations and greatly facilitates its later application. Finally, reasonable fiscal behaviour of governments in good times allows the rule to respond fairly generously to deep recessions (backed by an escape clause), as well as milder recessions.

Graph 5.5: Impact of Estimated and Actual Development on Expenditure Growth According to the Rule

difference in CZK billion, expenditure growth in % (right axis)



Source: MF CR Calculations.

6 Summary of Basic Relations

Basic rule (based on structural revenues, liabilities and dissolving of past errors)

$$AE_{t+1} \leq HP(AR_{t+1}) - MTO_{t+1}Y_{t+1} - k_{t+1}$$

Adjusted expenditures

$$AE = TE - E^{EU} - E^{OF} - E^{EC}$$

Adjusted revenues

$$AR = TR - R^{EU} - R^{OF}$$

Explicit and implicit liabilities (absolute value of MTO)

$$MTO_{t+1}Y_{t+1}$$

Medium-term objective

Whatever methodology chosen, MTO as benchmark.

Automatic correction (dissolving part of past errors)

$$k_{t+1} = \max\left\{\left(\frac{A_t}{Y_t} - \alpha\right)/3; 0\right\}Y_{t+1}$$

Correction account (accumulating past breaches of MTO)

$$A_t = A_{t-1} + (AE_{t-1} - HP(AR_{t-1}) + MTO_{t-1}Y_{t-1}) - k_t$$

The structure condition when out of MTO or after escape clauses (current expenditure allowed to grow less or equal to total)

$$\frac{PE_{t+1}}{PE_t} \leq \frac{AE_{t+1}}{AE_t} \leq \frac{CE_{t+1}}{CE_t}$$

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