

Requirements regarding the cyclical adjustment procedure under the new debt rule

The reform of the public debt incurrence rules, which was adopted in 2009 with a broad consensus of both houses of parliament (Bundestag and Bundesrat), provides a good basis for achieving sound public finances in Germany. In the light of past experience, it is particularly important when implementing this reform to rigorously adhere to the objective of strictly curbing new borrowing. Thus, in accordance with the legislative intent, the upper bound of the deficit reduction path up to 2015 should be lowered in line with the more favourable macroeconomic and fiscal outturn for 2010 so as not to create additional scope for government borrowing. When it comes to cyclical adjustment, the cyclical components of the budget gauged at respective points in time must achieve a symmetrical balance over the course of the business cycle. Another requirement is to ensure the transparency and verifiability of the calculations by publishing in full the relevant methods and data in a clear and timely manner and avoiding discretionary *ad hoc* adjustments of the calculation methods. Now that the new constitutional debt rule has been deployed for the first time to draw up the 2011 central government budget, it would therefore seem appropriate to significantly enhance the transparency of the cyclical adjustment procedure.

The cyclical adjustment procedure used at the European level was recently modified. In view of the associated objectives, it would appear questionable, however, whether that adjustment is suitable for the German debt rule and should be adopted as planned commencing with the 2012 central government budget. The procedure is relatively complex, opaque and elastic on account of the numerous discretionary modelling options. For this reason, it would be preferable to retain the comparatively straightforward adjustment procedure used for the 2011 central government budget. A key prerequisite of any methodological changeover is to ensure that government borrowing does not as a result overshoot the limits defined by the budget rule in the long run.

Another important point to note is that, irrespective of the cyclical adjustment procedure used, the medium-term budgetary outlook is subject to considerable estimation uncertainty. In order to accommodate unforeseen budgetary burdens within the prescribed borrowing limits without resorting to short-term and mostly procyclical adjustments, the constitutional limit for government borrowing should not be fully exhausted as a rule. Instead, a provision for unexpected developments should be factored into the target figure in the form of an adequate safety margin.

Background

New budgetary rules can ensure sound public finances ...

Over the past few decades, the government debt-to-GDP ratio in Germany has risen more or less continuously and has now reached a very high level. Parallel to this, the stock of net government assets has been depleted.¹ The new German budgetary rules present an opportunity to halt this development and initiate a reversal, not least to take account of the foreseeable demographic burdens. In order to achieve the objective of sustainable public finances and to lend the rules credibility, rigorous implementation will now be key. Given the existing leeway for interpreting and implementing the rules, it will be crucial to adhere to their unambiguously formulated objective of curbing public debt. It would thus be a cause for concern if, in the very first year of the rule's deployment within the transitional period up to 2015, the scope for borrowing were to be enlarged by not adjusting the consolidation path for the structural deficit to the considerably more favourable macroeconomic and fiscal outturn of 2010.² Moreover, the rules will have to be applied in a transparent and comprehensible fashion so as not to jeopardise their acceptance and enable effective monitoring by parliament and the general public. All this places special demands on the cyclical adjustment procedure under the debt rule.

... provided they are strictly applied

Acceptance is predicated on transparency and verifiability

borrowing, ie after adjustment for cyclical effects and financial transactions, may, as a rule, not exceed 0.35% of nominal GDP. During the transitional period from 2011 to 2015, the upper limit for structural new borrowing will decrease to this target in graduated steps, starting from the level in the base year 2010. Cyclical effects during the upturn and subsequent downturn are to be taken into account symmetrically in order to prevent permanent debt growth resulting from a prevalence of cyclical deficits.³

Symmetrical cyclical adjustment ...

The sub-constitutional specification of the constitutional rule states that cyclical adjustment is to be performed in line with the procedure used in the European Stability and Growth Pact. Under this method, the cyclical component of the general government budget balance is the product of the output gap and budget sensitivity, whereby the latter gauges the impact of cyclical fluctuations in GDP on the budget balance. The output gap is defined as the deviation of GDP from potential output and thus serves as a measure of the economy's cyclical position. Unobservable potential output must then be estimated

... in line with the procedure used at EU level

Requirements regarding the cyclical adjustment procedure

The debt rule stipulates that, from 2016 onwards, central government's structural net

¹ See also Deutsche Bundesbank, Government debt and interest payment burden in Germany, Monthly Report, April 2010, pp 15-33.

² See Deutsche Bundesbank, Public finances, Monthly Report, November 2010, p 68.

³ See Article 115 (2) of Germany's Basic Law (constitution) and the relevant explanatory memorandum (Bundestags-Drucksache 16/12410 of 24 March 2009).

at the budget drafting stage based on the available information.⁴

Specific requirements of estimating potential output: ...

In view of the stated objective of the new budgetary rules, namely to combat the propensity to borrow that is inherent in the political budgetary process, the procedure for estimating potential output needs to satisfy a number of specific requirements. It is crucial that the constitutional requirement of symmetrical output gaps calculated on this basis is safeguarded. Here, it is also necessary to consider the effects that discretionary parameter changes as well as methodological innovations have on the cyclical components gauged in real time and assigned to the respective budget plans. In this context it is important to avoid making parameter and methodological changes that would induce asymmetries. It is also essential to ensure that the legislative intent of the rule is not undermined by debt accumulation wrongly labelled as being cyclically induced. This problem is likely to be particularly large in the case of procedures for estimating potential output that embrace very long cycles, such as when a methodologically induced downward adjustment of cyclical effects is carried out during protracted periods of capacity overutilisation but is not matched by a corresponding methodological adjustment during phases of underutilisation.

... symmetry of output gaps as well as ...

Another key need is to safeguard transparency and verifiability. If the estimation results are to be properly verified it is necessary to publish in full the information needed (in particular, the data, programs, documentation

... transparency and verifiability

of methodological changes or modifications of the model specification) in a clear and timely manner⁵ and to avoid discretionary modelling.

Central government cyclical adjustment in practice

Last year, the new debt rule was applied for the first time when preparing the 2011 central government budget, making it possible to gain initial experience. The public availability of the information needed to derive the results of the cyclical adjustment was initially limited. In this respect, it would be desirable to document the relevant information in a more comprehensive and institutionalised manner.

Public availability of the relevant information limited to date

The cyclical adjustment procedure used at the European level was recently changed. In view of the associated objectives, it would appear questionable, however, whether that

Procedure currently in use at EU level relatively complex and elastic

⁴ See section 5 of the Act implementing Article 115. However, the estimation of potential output is not updated for supplementary budgets or when being booked to the control account at budget outturn (see sections 7 and 8 of the Act implementing Article 115). Budget sensitivity, too, has to be estimated, with its value being based on the budget surveillance procedure used under the European Stability and Growth Pact, see section 2 (3) of the Ausführungsverordnung zur Bestimmung der Konjunkturkomponente (Regulation on determining the cyclical component – available in German only) and N Girouard and C André (2005), Measuring cyclically-adjusted budget balances for OECD countries, OECD Economics Department Working Paper, No 434. The estimates of budget sensitivity are, however, relatively stable over time and in most cases only need to be updated intermittently. For this reason, the symmetry requirement hinges largely on the estimates of the output gap.

⁵ This information should be made available no later than when the draft budget is submitted, not least in order to facilitate consideration of the impact of reassessments of the macroeconomic development at a later stage in the budget drafting procedure.

recent methodological adjustment is suitable for the German debt rule and should be adopted, as is apparently planned, commencing with the 2012 central government budget.⁶ The EU procedure estimates potential output on the basis of an aggregated production function. The GDP trend path is determined by linking the potential values of labour and capital, taking into account a productivity trend which is measured as the trend component of total factor productivity (TFP). The estimation result depends on the specification of the production function and, in particular, on the smoothing of the input components. The potential labour input and, more recently, the TFP trend component are determined at EU level using highly complex model approaches. These offer numerous discretionary modelling options and allow a variety of parameter settings which can produce discernible differences in the estimation results. Since it is hardly possible to objectify the choice of the concrete specification, especially at the current end, the same holds true for estimates of the output gap as a key variable in determining the cyclically adjusted deficit. Furthermore, GDP cycles can become very long under this procedure. For instance, European Commission estimation results from autumn 2010 indicate uninterrupted periods of aggregate overutilisation spanning ten years for France or 13 years in the case of the United Kingdom.⁷

As detailed in the box on page 59, the concrete change in methodology at EU level is also an example of how the symmetry of estimated output gaps can be jeopardised in

real time if these modifications predominantly cause downward revisions at the current end (ie a smaller cyclically induced surplus or a larger cyclically induced deficit). In general, therefore, methodological changes should be made rarely, be warranted by major improvements in the estimation method and not impair the latter's transparency and verifiability. To prevent systematic enlargements of the scope for borrowing at the current end through methodological changes, it would, moreover, be necessary to retroactively record corresponding revaluations of past structural deficits on the control account up to the year in which the debt rule was launched.⁸

Given the above considerations, it would seem advisable for cyclical adjustment within the central government debt rule to apply the EU procedure in the form previously used for the 2011 budget. For the purpose of smoothing the time series of variables which are relevant in the production function, exclusive use was made of the comparatively transparent Hodrick-Prescott filter. Over time, this yields sufficiently symmetric cyclical components on the input side, which in the given model context is the precondition for ensuring that the required symmetry is also likely to be achieved for the resulting esti-

Methodological changes can jeopardise the symmetry of cyclical effects gauged in real time

Good reasons to retain the procedure used for the 2011 central government budget ...

⁶ See Bundestags-Drucksache 17/4154 of 10 December 2010, p 39.

⁷ See the estimation results published by the European Commission on its website: <http://circa.europa.eu/Public/irc/ecfin/outgaps/library>.

⁸ As a rule, the final recording for a fiscal year is made in September of the following year. In the event of methodological changeovers, however, it would be necessary to revalue the deviations from the upper limit accumulated in the control account in order to safeguard the legislative intent behind the rule.

... as it is relatively simple and transparent

mation of the output gap. Furthermore, this procedure would be transparent and verifiable and should therefore continue to be used at least until the end of the transitional period in 2016, which would also be methodologically consistent. If a methodological changeover were nonetheless to be introduced during the transitional phase, it would be necessary to at least calculate the borrowing limit that is derived from the 2010 structural deficit for the period up to and including 2015 using the new procedure, so as to prevent an enlarged scope for government borrowing in contravention of the legislative intent behind the debt rule.⁹ Failure to do so would violate the rule's legislative intent in that it would create substantial additional leeway for incurring debt, albeit on a gradually declining scale, for the period up to 2015.

Steady fiscal policy requires forward planning

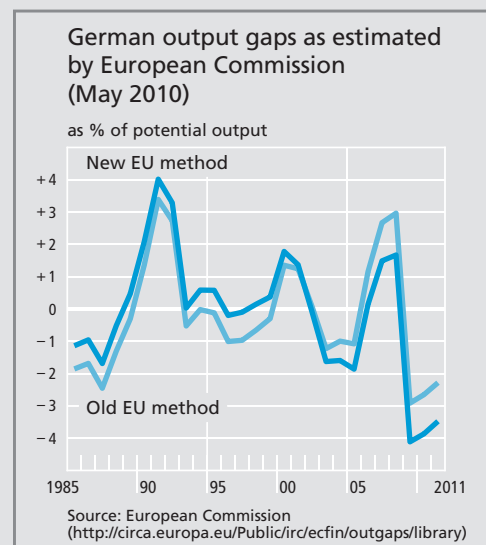
Addressing estimation uncertainty via appropriate safety margin below borrowing limit

Irrespective of the cyclical adjustment procedure used, major estimation uncertainties exist regarding the medium-term budget outlook, and revisions owing to unforeseen developments are unavoidable. However, in order not to be forced into very short-term consolidation measures which mostly have a procyclical impact, the binding nature of the upper borrowing limit should also be adhered to

⁹ Based on the figures from summer 2010, which are currently used by the central government and which also served as the calculation basis for the adjacent box, failure to make such an update would effectively push up the central government budget's structural deficit for the base year 2010 by €7½ billion.

Result of applying the old and new EU estimation method to Germany

The chart below shows the European Commission's output gap estimations for Germany from May 2010 when results according to the old and new estimation methods were provided simultaneously. It shows how the symmetry of the cyclical components of the budget gauged in real time can be impaired by a methodological change. If Germany's new debt rule had applied since 1985, for instance, then a methodological change with the 2010 budget would allow larger cyclical deficits at the current end, which would be only partially offset by allowing smaller cyclical deficits on balance in the years up to 2009. This is because the estimated output gaps during the period 1985 to 2001 would be significantly revised upwards. Consequently, applying the new method indicates that a commensurate excessive scope for borrowing was granted up to 2001 as the size of the negative cyclical effect was overstated up to that point in time by the old method. This overstated scope for borrowing up to 2001 is only partly offset by the fact that the new method would have indicated a higher cyclical scope for borrowing between 2002 and 2009. Furthermore, the new method would permit an additional larger scope for borrowing from 2010 onwards, which would now be fully exploitable. To the extent that such future scope for borrowing were to be exploited without making offsetting adjustments for past years, a changeover to the new method would lead to additional debt accumulation in contravention of the legislative intent underlying the new debt rule, even though both methods exhibit the required symmetry of the cyclical components.



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when generally unforeseen budgetary developments arise. Past experience suggests that relaxation of the upper bound can unleash a massive increase in government debt. Rather, the debt ceiling defined in the constitution should not be fully exhausted on a regular basis. Adequate safety margins should be put

in place to take account of unexpectedly adverse budgetary developments.¹⁰

¹⁰ See also: Deutsche Bundesbank, Reform of German budgetary rules, Monthly Report, October 2007, pp 47-68, as well as J Kremer and K Wendorff (2010), Für eine stetige Finanzpolitik: Konjunkturbereinigung und Berücksichtigung von Schätzfehlern, in: C Kastrop, G Meisterscheufelen and M Sudhoff (eds), Die neuen Schuldenregeln im Grundgesetz, pp 416-431.