

CPB Netherlands Bureau for Economic Policy Analysis

# An imperfect *Improvement* measure *required*



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## Structural budget balance

A love at first sight turned sour

Johannes Hers Wim Suyker

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## Summary

The structural budget balance, which corrects the nominal government budget balance for one-offs and business cycle effects, is used to assess underlying fiscal policy effort. Estimates of the structural budget balance play a central role in the preventive arm of the Stability and Growth Pact.

The drawbacks of using structural budget balances as an indicator of a government's fiscal policy effort and as a policy target include the following:

- The indicator is highly dependent on the volatile and often-biased estimate of the output gap. Estimates of the output gap (defined as the difference between actual and potential GDP) are very volatile. As a result, significant changes in the estimated structural balance for the same year can occur between different forecasting moments.
- The indicator can give the wrong signal. Substantial adjustments for a year can occur, even if fiscal policy does not change at all. The reverse is also possible, as significant fiscal policy changes can be offset by revisions of the output gap. Despite these policy changes, the structural balance then remains stable, suggesting a neutral fiscal policy effort. As will be shown in this Policy Brief, both cases have arisen for the Netherlands in the past years.
- Different estimates of the indicator lead to confusion. International institutions (European Commission, IMF, OECD) often provide diverging estimates of the size of the output gap, which results in marked differences between these institutions in both the level of the structural balance and the assessment of the fiscal policy effort.

The volatility of the structural balance is especially problematic because the indicator is used in the EU as a basis for the recommendations for a country. Volatile estimations could, for example, cause a government to be obliged to undertake significant additional fiscal consolidation in order to meet the structural balance requirement— only to be confronted with a structural balance that does not change at all, because of revisions in potential growth.

Given these drawbacks, a case can be made for improving the structural balance forecast by reducing revisions of potential output gap estimates (and thereby revisions of the structural budget balance). This could be done by shifting to stricter filters in the cyclical adjustment of actual series. It could also be done by shifting to an approach using underlying indicators to estimate structural unemployment and trend total factor productivity. As a commendable side-effect, this would bring European Commission estimates closer to the estimates of the OECD and the IMF, reducing confusion regarding the policy effort of member states.

Another way to improve forecasts would involve formulating recommendations for a country's future policy in terms of ex ante fiscal consolidation measures. Monitoring and assessment could then focus on the actual additional policy effort vis-à-vis the required effort. Alternatively, some explicit provision could be made for interpretation of the outcomes of the structural balance.

#### Introduction 1

Last June, the European Council closed the excessive deficit procedure (EDP) of four euro area countries: Austria, Belgium, the Netherlands and Slovakia.<sup>1</sup> This decision effectively transferred those countries from the corrective arm to the preventive arm of the Stability and Growth Pact (SGP). Of the other fourteen euro area countries, six countries<sup>2</sup> were already in the preventive arm, while eight countries<sup>3</sup> remain in the corrective arm and therefore continue to undergo an excessive deficit procedure.<sup>4</sup>

The focus in the corrective arm of the Stability and Growth Pact (featuring the EDP) is on the nominal deficit (below or above the 3% of gross domestic product (GDP)). The focus in the preventive arm, however, is on the structural budget balance.<sup>5</sup> Is the structural budget balance in line with the medium-term objective (MTO)— and if not, is the MTO being approached at sufficient speed (by at least 0.5% of GDP per year)? The MTOs, which are updated every three years, are set to provide a safety margin with respect to the 3% of GDP deficit limit and to ensure sustainability of government finance in the long term. The focus in the structural budget balance of the preventive arm can be clearly seen in the box on the next page, which summarises the recent key fiscal policy recommendations for euro-area countries.

The high number of countries now situated in the preventive arm increases the importance of the structural budget balance as an indicator of fiscal policy effort in the euro area.<sup>6</sup> At the same time, the problems and drawbacks of this indicator have become more apparent.<sup>7</sup> This Policy Brief focuses on the role of the structural budget balance in the process of determining fiscal policy effort and formulating fiscal policy recommendations for the different euro-area countries.

There are also many other relevant issues concerning fiscal policy. One issue is the complexity of the set of the budget rules (structural budget balance, debt criterion and expenditure benchmark). Budget rules should be simple, plausible and workable in practice; the current set could be improved with regard to these points. Another issue is the role of the government budget in macroeconomic policy at times of restrictions to monetary policy due to the zero lower bound, as currently is the case in the euro area. Those issues are beyond the scope of this Policy Brief and will be topics of future work by CPB Netherlands Bureau for **Economic Policy Analysis.** 

<sup>&</sup>lt;sup>1</sup> Council of the European Union (2014).

<sup>&</sup>lt;sup>2</sup> Estonia, Finland, Germany, Italy, Latvia and Luxembourg.

<sup>&</sup>lt;sup>3</sup> Malta, Cyprus, Portugal, Slovenia, France, Ireland, Greece and Spain.

<sup>&</sup>lt;sup>4</sup> See the webpage on the corrective arm of the European Commission (link).

<sup>&</sup>lt;sup>5</sup> European Commission (2014c and 2013c).

<sup>&</sup>lt;sup>6</sup> Moreover, while the focus in the corrective arm is on the nominal deficit, the structural budget balance also plays a role. If a country has a deficit of more than 3% of GDP, the assessment of effective action taken focuses on the change in the structural budget balance.

Earlier discussed in CPB (2013).

## Key fiscal policy recommendations for euro-area countries in the preventive arm

This box summarises the key fiscal policy recommendations as proposed by the European Commission in June 2014 and subsequently adopted by the European Council (a).

#### Austria

(8) ..... The Commission 2014 spring forecast (....) projects a deterioration of the **structural** balance in 2014 and an improvement by only 0.1% of GDP in 2015

HEREBY RECOMMENDS that Austria take action within the period 2014-2015 to: 1. (...) reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.5% of GDP based on the Commission 2014 spring forecast, pointing to a risk of significant deviation relative to the Stability and Growth Pact requirements. In 2015, significantly strengthen the budgetary strategy to ensure reaching the medium-term objective (....)

#### **Belgium**

(9).... The Commission spring forecast shows no **structural** improvement in 2014 and, under the usual no-policy-change assumption, a **structural** deterioration in 2015. This puts the achievement of the targets at risk and could lead to a significant deviation from the adjustment towards the medium-term objective over 2014-15

HEREBY RECOMMENDS that Belgium should take action within the period 2014-2015 to: 1. (....) reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.5% of GDP based on the Commission 2014 spring forecast, pointing to a risk of significant deviation relative to the Stability and Growth Pact requirements. In 2015, significantly strengthen the budgetary strategy to ensure the required adjustment of 0.6% of GDP towards the medium-term objective (....)

#### Estonia

According to the Commission Forecast, the **structural** deficit is projected to deteriorate by 0.1% of GDP in 2014, leading to a 0.3% of GDP gap compared to the required adjustment and a significant deviation when assessed over two years. In 2015, the Commission foresees another 0.2% of GDP deterioration in the **structural** balance, pointing to significant deviation from the required adjustment toward the MTO.

HEREBY RECOMMENDS that Estonia take action within the period 2014-2015 to: 1. Reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.3% of GDP based on the Commission 2014 spring forecast, pointing to a risk of significant deviation relative to the Stability and Growth Pact requirements. In 2015, significantly strengthen the budgetary strategy to ensure reaching the medium-term objective and remain at it thereafter. (....)

#### Finland

(9) ..... The Commission 2014 spring forecast projects a deterioration of the **structural** balance by 0.3% of GDP in 2014, entailing a deviation from the medium-term objective, and an improvement of 0.6% of GDP in 2015, while the expenditure benchmark is projected to be adhered to in both years.

HEREBY RECOMMENDS that Finland take action within the period 2014-2015 to: 1. Reinforce the budgetary measures for 2014 in the light of the emerging gap relative to the medium-term objective. In 2015 and thereafter respect the medium-term objective as planned, and ensure that the debt criterion is fulfilled (....)

#### Germany

(9) ..... Based on the assessment of the Stability Programme and the Commission Forecast (...), the Council is of the opinion that public finances in Germany remain overall sound as the medium-term objective is forecast to continue to be maintained and the debt rule respected.

HEREBY RECOMMENDS that Germany take action within the period 2014-2015 to: 1. Pursue growthfriendly fiscal policy and preserve a sound fiscal position, ensuring that the medium-term budgetary objective continues to be adhered to (....)

(a) The Commission web page on the European semester 2014 presents the proposed recommendations of the European Commission (<u>link</u>), while the website of the European Council presents the final recommendations (<u>link</u>). There were no changes by the Council concerning the presented fiscal policy recommendations. See General Secretariat, 2014, Explanations of modifications to Commission Recommendations for the Country Specific Recommendations, 18 June (<u>link</u>);

## Key fiscal policy recommendations for euro-area countries in the preventive arm (continued)

#### Italy

(9). The Commission 2014 spring forecast points to non-compliance with the debt reduction benchmark in 2014 as the projected structural adjustment (only 0.1 percentage point of GDP) falls short of the required structural adjustment of 0.7 percentage point of GDP. (...), the Council is of the opinion that additional efforts, including in 2014, are needed to be in compliance with the requirements of the Stability and Growth Pact.

HEREBY RECOMMENDS that Italy take action within the period 2014-2015 to:1. Reinforce the budgetary measures for 2014 in the light of the emerging gap relative to the Stability and Growth Pact requirements, namely the debt reduction rule, based on the Commission 2014 spring forecast. In 2015, significantly strengthen the budgetary strategy to ensure compliance with the debt reduction requirement.

#### Latvia

HEREBY RECOMMENDS that Latvia take action within the period 2014-2015 to: 1. Preserve a sound fiscal position in 2014 and strengthen the budgetary strategy as of 2015, ensuring that the deviation from the medium-term objective remains limited to the impact of the systemic pension reform.

#### Luxembourg

(9) According to the Commission forecast, which does not take into account the most recently announced measures, the **structural** surplus is estimated to decline to 0.6% of GDP in 2014 and turn to a deficit of 1.3% of GDP in 2015. The growth rate of government expenditure, net of discretionary revenue measures, is estimated to be above the reference medium-term rate of potential GDP in 2015, when a significant deviation is expected.

HEREBY RECOMMENDS that Luxembourg take action within the period 2014-2015 to: 1. Preserve a sound fiscal position in 2014; significantly strengthen the budgetary strategy in 2015 to ensure that the medium-term objective is achieved

#### Malta

(9) At the same time, based on the Commission forecast, the fiscal effort over the period 2013-2014 falls short by 1.6% of GDP in terms of (corrected) change in the **structural** balance (...)

HEREBY RECOMMENDS that Malta take action within the period 2014-2015 to: 1. Correct the excessive deficit in a sustainable manner by 2014. In 2015, significantly strengthen the budgetary strategy to ensure the required **structural** adjustment of 0.6% of GDP towards the medium-term objective.

#### Netherlands

(9) The Commission 2014 spring forecast expects a stabilisation of the **structural** balance in 2014 and an improvement of 0.5% of GDP in 2015. According to the Commission forecast, the Netherlands would comply with the expenditure benchmark in 2014, but not in 2015.

HEREBY RECOMMENDS that the Netherlands take action within the period 2014-2015 to: 1. Following the correction of the excessive deficit, reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.5% of GDP based on the Commission 2014 spring forecast, pointing to a risk of significant deviation relative to the Stability and Growth Pact requirements. In 2015, significantly strengthen the budgetary strategy to ensure reaching the medium-term objective.

#### Slovakia

(8) According to the Commission 2014 spring forecast, which incorporates the impact of the expenditure savings due to the debt brake, the deviation from the adjustment path would be smaller in 2014 than foreseen in the programme, while a sufficient **structural** adjustment is projected in 2015, with the expenditure benchmark being met both in 2014 and 2015.

HEREBY RECOMMENDS that Slovakia take action within the period 2014-2015 to: 1. Following the correction of the excessive deficit, reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.3% of GDP relative to the Stability and Growth Pact requirements based on the Commission 2014 spring forecast. In 2015, ensure the required adjustment of 0.1% of GDP towards the medium-term objective

## 2 Drawbacks of the structural budget balance indicator

Policymakers and economic analysts need to be able to ascertain fiscal policy effort: to what extent is the effort contractionary or expansionary? Economic analysts use this information to forecast economic growth and unemployment. Policymakers use these forecasts as an instrument to compare the actual policy effort with the targeted effort and to assess compliance with fiscal rules. The *structural budget balance* (be it the *total structural balance* or the total structural balance excluding net interest payments, also known as the *primary structural balance*) is the most commonly used indicator of fiscal effort. The measure is preferable to the *actual budget balance*, as it corrects for the economic cycle and for one-off events. The cyclical component shows the impact of the business cycle on the government budget balance and is calculated as the output gap (the estimated difference between actual and potential output)<sup>8</sup> times the budget balance elasticity with respect to the output gap.<sup>9</sup> To give a numerical example: the cyclical component of the budget balance of a country will be 1% of GDP when actual GDP is 2% less than potential GDP and the budget elasticity is 0.5.

Assuming that the output gap and elasticity correctly adjust for cyclical effects on the budget balance, a rise in tax revenues due to a pick-up of the economy does not show up in the structural balance indicator, while a rise caused by a tax measure does. If this is the case, the indicator performs as envisaged (measuring the size of fiscal policy effort). It can then be used not only as an indicator of the policy effort, but also as a fiscal policy target. The indicator could prevent that in good times, with a favourable nominal budget balance, governments decide on structural government spending increases or tax cuts that are not sustainable in the long run. It has the additional advantage to facilitate comparison between countries. As a consequence of those advantages, international organisations (European Commission, OECD<sup>10</sup> and IMF) and national economic institutes (such as CPB Netherlands Bureau for Economic Policy Analysis) use the structural budget balance as one of the key variables and publish it in their economic outlook publications.

From a rise in the structural budget balance, it is generally concluded that the fiscal policy of a country has become more restrictive (and vice versa). An upward revision in the indicator often leads to the conclusion that fiscal policy is more restrictive than assessed earlier. A stronger rise in the structural budget balance in one country generally leads to the conclusion that fiscal policy has become more restrictive than elsewhere. Those conclusions are, however, not always fully justified and could lead to incorrect policy reactions.

The estimated structural budget balance can be a biased indicator of fiscal policy effort for several reasons, reducing its value as a fiscal policy target. Firstly, measurement errors in the output gap will lead to measurement errors in the structural balance. During crises, but also just after crises, the chance of measurement errors is even bigger than usual. Tereanu et al.

<sup>&</sup>lt;sup>8</sup> For details, see D'Auria et al. (2010). Recent updates to the methodology are presented in European Commission (2014a, 2014b).

<sup>&</sup>lt;sup>9</sup> Girouard, N. and C. André (2005) and Mourre et al. (2013).

<sup>&</sup>lt;sup>10</sup> See 'The OECD Methodology for generating potential output', appendix 1 in Ollivaud and Turner (2014).

(2014) calculated for EU countries the mean absolute value of revisions to the output gap for the budget horizon: during the crisis years of 2008 and 2009 it was some 3% of GDP (in the Netherlands 2%); during non-crisis years there was a smaller revision of 0.8% of GDP on average.<sup>11</sup> The size of these revisions and the resulting revisions in the structural balance forecast reduce the usefulness of this indicator for practical purposes of fiscal policy targeting.<sup>12</sup> Figure 1 shows the recent revisions of potential growth and output gap for the Netherlands.





Potential output is not observable and has to be estimated. The estimation method agreed among EU members makes use of a filtered series of actual productivity and of an estimate of the structural unemployment rate. This method results in a very steep decline in potential output growth due to very low and negative economic growth in recent years. Tereanu et al. find that a 1%-point short-term output growth revision results on average in a revision of some 0.2-0.3 %-points in potential output growth in the long term in the same direction. The impact on the structural budget balance amounts to some 0.1-0.15% of GDP.

In the Dutch case, the downward revision (by Statistics Netherlands) of GDP growth in 2012, in combination with the downward revision (by CPB) of the projections of actual GDP growth, led in 2013 to a 2¼% drop in the estimated level of potential output in 2014 (Table 1). Potential output growth in 2014 had been estimated at 0.1% in September 2013, compared with 0.8% in November 2012. If potential output is underestimated, the output gap is underestimated and, as a result, the cyclical component of the budget balance is underestimated. Hence, the structural budget balance is overestimated. Meanwhile, the Dutch government decided in the summer of 2013 to double the deficit-reducing budgetary measures for 2014 by implementing additional budget cuts amounting to 1% of GDP. However, as a result of the revision of potential growth between 2012 and 2013, the structural budget balance for 2014 remained more or less unchanged at 1.4%, suggesting no additional fiscal consolidation. In laymen's terms: the fiscal policy effort of the Dutch government was not visible in the indicator used to quantify fiscal policy effort.

<sup>&</sup>lt;sup>11</sup> Tereanu et al. (2014).

<sup>&</sup>lt;sup>12</sup> This is clearly different from the situation before the start of the current economic crisis. At that time, Larch and Turrini concluded that a "love at first sight" has turned into a "mature relationship". See, Larch et al. (2009).

A second reason for why the estimated structural budget balance can be a biased indicator has to do with the constant budget elasticity leading to measurement errors. Economic growth due to exports has a smaller impact on tax revenues than economic growth due to private consumption. Value-added tax causes private consumption to be more tax-revenue enhancing than are exports. Economic growth leading to higher profits has a smaller impact on tax revenues than does economic growth showing up in wages. CPB adopts the proper tax bases to project tax revenues.<sup>13</sup> For instance, projected value-added tax revenues are influenced by the projection of private consumption. The projected government budget balance therefore correctly reflects the composition of the projected economic growth. However, the constant budget elasticity used to estimate the structural budget balance does not.<sup>14</sup> This budget elasticity is currently<sup>15</sup> based on a constant tax elasticity of 0.9.<sup>16</sup> The actual tax elasticity has been smaller since 2009, as the recovery of tax-rich private consumption has lagged behind less tax-rich other expenditures (i.e. exports). This measurement error diminishes the improvement in the structural budget balance indicator, as the cyclical component of the budget balance is probably underestimated. This bias could lead some to conclude that only timid fiscal consolidation measures have been taken in recent years. Such a conclusion would be definitely wrong if budget cuts and tax-increasing measures have been substantial but do not show up in the indicator, due to its flaws.<sup>17</sup>

	2010	2011	2012	2013	2014
Actual GDP volume growth					
Projection September 2013 (a)	1.5	0.9	-1.2	-1¼	1/2
Projection November 2012 (b)	1.6	1.0	-1/2	3/4	1
Potential output growth					
Projection September 2013 (a)	0.5	0.6	0.4	-0.1	0.1
Projection November 2012 (b)	0.9	1.0	0.4	0.6	0.8
Output gap					
Projection September 2013 (a)	-1.5	-1.1	-2.8	-3.8	-3.5
Projection November 2012 (b)	-1.9	-1.8	-2.7	-2.5	-2.2
Actual government budget balance (%GDP)					
Projection September 2013 (a)	-5.1	-4.3	-4.1	-3.2	-3.3
Projection November 2012 (b)	-5.1	-4.5	-3.7	-2.6	-2.7
Structural government budget balance (%GDP)					
Projection September 2013 (a)	-4.1	-3.7	-2.5	-1.5	-1.4
Projection September 2013 on the basis of the					
November 2012 estimate of potential output	-3.9	-3.2	-2.0	-0.7	-0.2
Projection November 2012 (b)	-4.1	-3.7	-2.4	-1.5	-1.9

#### Table 1 Structural budget balance estimate heavily influenced by potential output estimate

(a) CPB, 2013, Macro Economische Verkenning 2014 (link).

(b) CPB, 2013, Actualisatie Nederlandse economie tot en met 2017 (verwerking Regeerakkoord), CPB Notitie (link).

<sup>16</sup> Mourre et al. (2013).

<sup>&</sup>lt;sup>13</sup> Moreover, in contrast with the structural budget balance method agreed among EU countries, CPB applies a proper lag structure to project tax revenues. In the EU method, there are no lagged effects.

<sup>&</sup>lt;sup>14</sup> See also ECB (2014).

<sup>&</sup>lt;sup>15</sup> Revision of the elasticities is currently being explored by OECD and the European Commission and may lead later this year to changes.

<sup>&</sup>lt;sup>17</sup> Suyker (2013).

## 3 Promise of a mature relationship turned sour

We can illustrate the shortcomings of the structural budget balance as an indicator also by examining the estimates for the output gap and the structural balance (EC definition) for the same year at different points in time (Figure 2), and looking at the forecasts for the structural balance of different institutions at the same point in time (Figure 3). Revisions can be large between forecasting moments. The downward revision for 2009 after the outbreak of the financial crisis in the fall of 2008 was the largest in the series, as shown in Figure 2 (left). However, even if we ignore this data point, the average absolute forecasting revision over 2007-2013 was 0.5% of GDP. This is as large as the yearly improvement of the structural balance required by the preventive arm. In this sense, the structural balance can be a rather confusing beacon for fiscal policy. So, initially the variable may be indicating policy heading south (an improvement in the structural budget balance), while after revision it could be indicating policy heading north (a deterioration in the balance). In some cases revisions in the forecast of the structural balance are the result of real policy changes. But a substantial part of the revisions in Figure 2 arises from a revised estimate of potential growth. In 2010, the upward revision of the structural balance was entirely due to a revision of the output gap. In 2012, the opposite occurred. The result is that it is possible for a government to undertake additional fiscal consolidation of 0.5% of GDP in order to meet its MTO, only to be confronted with a structural balance that does not change at all, because of revisions in potential growth. The reverse is also possible: expansionary fiscal policy does not show up as a deteriorating structural balance as a result of output gap revision (the case of 2010). Table 1 and Figure 2 show that this is not merely theoretical.



Figure 2 Revisions of the structural balance (EC method) for the Netherlands (left) and composition of the revisions (right)<sup>18</sup>

A second illustration is a comparison of forecasts for the structural balance of different international institutions (EC, IMF, OECD) at the same point in time. Figure 3 shows that for the past (1990-2012), structural balance estimates of these institutions are reasonably comparable. However, if we look at the forecasts (all dating from spring 2014) for 2013-2015, we see large differences in the level and changes of the structural balance for the Netherlands. For 2014, the IMF forecasts a slight increase, the EC predicts a stable structural

<sup>&</sup>lt;sup>18</sup> Revisions of structural balance and output gap are calculated as forecast t-1 vis-a-vis the current estimate (fall 2014), only including observations for which at least a t+1 current estimate exists.

balance (implying a neutral fiscal effort, regardless of the additional fiscal consolidation effort of 1% of GDP, see Table 2.1) and the OECD a strong improvement. Levels of the structural balance in 2015 differ markedly; the IMF and OECD forecasts envision the Netherlands easily meeting its MTO obligation in 2015, while this is not the case for the EC forecast. This raises serious questions about the robustness of the various structural balance indicators, and their usefulness as an indicator of fiscal effort and policy target.





### 4 The way forward

The preceding analysis has illustrated that the structural balance is from time to time a biased indicator for the assessment of fiscal consolidation effort— especially when economic volatility causes large revisions in output gap estimates. To use the indicator as a precise fiscal policy target is therefore unwarranted. Given these limitations, what would be an appropriate way forward? There are three possibilities:

- Improve the stability of the structural balance estimate by reducing the volatility of output gap estimates.
- Operationalize the required structural budget balance adjustment by translating the required change in this indicator into a required (additional) policy effort expressed in billions of euros, and also fixing this effort over time.
- Establish some explicit room for judgment in assessing fiscal policy.

#### Improve the stability of the structural balance estimate

The stability of the forecast of the structural balance could be improved by reducing revisions in potential output— and therefore in the structural budget balance. One way of doing this would be to introduce stricter filters in the cyclical adjustment of actual series. As a commendable side-effect, this would bring EC estimates closer to those of the OECD and the IMF (Figure 3), reducing confusion regarding the policy effort of member states. Another way to improve stability of the structural balance estimate would involve shifting to an

approach using underlying indicators to estimate structural unemployment and trend total factor productivity.<sup>19</sup> Replacement rates, employment protection indicators and information on active labour market policies could play a role in estimating the structural unemployment rate. A higher replacement rate, for example, would lead to a higher structural unemployment rate. Product market regulation indicators, information on human capital, ICT investment and R&D outlays could play a role in estimating trend total factor productivity. More human capital, for example, would lead to a stronger upward trend in productivity.

Ad-hoc adjustments to the existing methodology could also be explored but would have the clear disadvantage of complicating matters even further. For instance, it would be possible to adapt the calculation of the EC structural balance by freezing the potential output forecast at the spring t-1 estimate. Although this might increase the predictability and stability of the policy effort and recommendations, it would further complicate the budgetary rules, which ideally should be simple, plausible and workable in practice. The same holds for adjusting the structural budget balance for atypical endogenous tax swings.<sup>20</sup>

Apart from improving the stability of the structural balance estimate, an additional indicator could be used to improve the assessment of fiscal policy effort. It would be helpful to calculate the ex-ante effect on the government budget balance of the budget measures taken, by adding up the direct fiscal effects of the various (announced) measures (changes in outlays, tax measures).<sup>21</sup> This calculation does not take into account the secondary effects of measures. Recently, the European Commission began using this ex ante (bottom-up) approach,<sup>22</sup> which may play a role in the careful analysis of shortfalls vis-à-vis recommendations of the European Council.<sup>23</sup> The advantage of this approach is that it does not depend on the biased estimates of potential output and budget elasticity.<sup>24</sup> The disadvantage is that it does not take into account the consequences of the baseline development. It requires a baseline that does not contain (many) policy measures. Another disadvantage of the bottom-up approach is that it is more labour intensive and could be applied differently in individual countries, causing a bias while comparing results for those countries.<sup>25</sup> Overall, however, the advantages of this approach exceed the disadvantages.

*Operationalise the required policy effort by expressing it in a fixed amount of euros* The required policy effort could initially be determined by the Council as a structural budget balance adjustment. For instance, the Council might conclude that an improvement of the structural balance of 1% of GDP is required. This could be operationalized by translating this required change as a percentage of GDP into a required (additional) policy effort in billions of euros, and then keeping this target unchanged afterwards. Later in the process,

<sup>22</sup> European Commission (2013a and 2013b).

<sup>&</sup>lt;sup>19</sup> Orlandi (2012) and European Commission (2014d).

<sup>&</sup>lt;sup>20</sup> Such an adjustment would bring the assessment of the fiscal policy stance according to the structural budget balance more in line with the assessment on the basis of the expenditure benchmark. See European Commission (2013c)
<sup>21</sup> This method can lead to a very different assessment of fiscal policy: in 2014, fiscal policy in the Netherlands was not restrictive based on the structural budget balance, (table 2.1). Based on the ex ante approach, fiscal policy was clearly restrictive with an ex ante impact of 2 % of GDP.

<sup>&</sup>lt;sup>23</sup> European Commission (2013c).

<sup>&</sup>lt;sup>24</sup> IMF (2011) and DeVries et al. (2011).

 $<sup>^{25}</sup>$  See also ECB (2014).

monitoring and assessment could focus on the actual (additional) policy effort vis-à-vis the required effort. Such an approach needs a proper baseline of already agreed policy measures.

The European Commission recently applied this approach to the Netherlands. In 2013, in the preface to the recommendations for the Netherlands, the Commission and the European Council used this ex ante definition of fiscal effects when it mentioned a target for an additional discretionary fiscal effort in 2014 of 1% of GDP (6 billion euros). <sup>26</sup> The Dutch authorities have wide experience with this approach internally. It is applied in coalition agreements and in supplemental policy packages.

#### Establish some explicit room for judgement

In case of an operational goal expressed in terms of a change in the structural budget balance, there needs to be some room for judgement in the interpretation of the outcomes of the structural balance. Although measurement problems of the widely used structural budget balance approach are repeatedly acknowledged in background documents of the European Commission, <sup>27</sup> they do not show up explicitly in practice in either the fiscal policy assessments of the Commission or in the policy recommendations of the European Council. The measurement errors in the indicator should be taken into account especially in the case of strong and difficult fiscal policy recommendations. The recommendations for the Netherlands in 2014 provide a case in point. The recommendation to "reinforce the budgetary measures in light of the emerging gap of 0.5% of GDP based on the Commission 2014 spring forecast" is an example of taking "too much at face value" the estimate for the 2014 structural balance. As shown in the previous analysis, discretionary fiscal policy measures in the Netherlands of 2% of GDP do not show up in the structural balance estimate for 2014 as a result of a large revision in potential growth and the output gap estimate. The need for some room for judgement would be less pressing if the operational goal would be the required consolidation effort expressed in billion of euros.

### 5 Conclusions

The structural budget balance plays a central role in the preventive arm of the Stability and Growth Pact and a more moderate role in the corrective arm. The role of this indicator has even increased due to recent reforms (6-pack, 2-pack and Fiscal Compact), although it remains to be seen how this will work out in practice. In our view, given the measurement errors, a case can be made for improving the structural balance forecast by reducing revisions of potential output estimates— and therefore revisions in the structural budget balance. This could be done by shifting to stricter filters in the cyclical adjustment of actual series or by shifting to an approach using underlying indicators to estimate structural unemployment and trend total factor productivity. As a commendable side effect, this would bring European Commission estimates closer to the estimates of the OECD and the IMF, reducing confusion on the policy effort of member states. Furthermore, it would be helpful in the future to formulate recommendations for a country in terms of ex ante consolidation

<sup>&</sup>lt;sup>26</sup> Council of the European Union (2013).

<sup>&</sup>lt;sup>27</sup> See, for instance, Princen et al. (2013).

measures.<sup>28</sup> Monitoring and assessment could then focus on the actual additional policy effort vis-à-vis the required effort— instead of the actual estimate of the change in the structural budget balance vis-à-vis the initial estimate of the change in the structural budget balance. Alternatively, there should at least be some explicit room for judgement in the interpretation of the outcomes of the structural balance.

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