

THE ASSESSMENT OF FISCAL EFFORT

Sound fiscal policies in all euro area Member States are a prerequisite for the smooth functioning of EMU. The EU fiscal framework calls for government budgets to be close to balance or in surplus over the medium term and for excessive deficits (above 3% of GDP) to be avoided or, if they have occurred, to be corrected promptly. In this context, the assessment of a country's fiscal policy is based on compliance with nominal deficit targets and on whether the required government action – its fiscal effort – to achieve these targets on a sustainable basis in a given time period has been sufficient.

While not directly measurable, the concept of fiscal effort plays a crucial role in framing a fiscal consolidation path which, taking into account the feedback effects of fiscal consolidation on economic activity in the short term, ensures that public finances are brought back onto a sustainable footing as soon as is reasonably possible. The fiscal effort is intended to measure the effect of government policy on the budget balance and thereby serve as an indicator for which the government can be held accountable.

Traditionally, the fiscal effort has primarily been gauged on the basis of the structural budget balance, which adjusts the headline budget balance for the economic cycle and certain one-off effects. It has, however, long been understood that this is an imperfect measure of government action and the crisis has shown that factors outside the government's control in the short term can have a very significant impact on the structural balance. More recently, the assessment of fiscal effort has come to be supplemented by a more detailed "bottom-up" analysis. This approach is intended to arrive at a more direct quantification of fiscal effort in terms of the impact of individual revenue and spending measures. While detailed bottom-up assessments of revenue and expenditure measures are an important complement to the estimation of the structural balance, owing to measurement difficulties they are also no panacea. Moreover it is important to not lose sight of – and to judge fiscal policy against – actual deficit outturns, as these ultimately determine the accumulation of government debt and fiscal sustainability.

I INTRODUCTION

Sound fiscal policies in all euro area Member States are a prerequisite for the smooth functioning of EMU. When – as happened as a result of the recent economic and financial crisis – government deficits become large, these deficits need to be reduced promptly to limit the resulting increase in government debt, especially if market access is at risk. Fiscal consolidation can, however, have negative short-term effects on economic growth, and this places limits on the deficit reduction that may be appropriate (i.e. achievable) in any given year, which, in turn, implies that consolidation may have to be spread over multiple years. This places the onus on fiscal consolidation strategies and requirements that are well calibrated ex ante (when framing excessive deficit procedure (EDP) recommendations and national budgets) and are followed by a rigorous assessment of their implementation ex post.

Such consolidation strategies contain two key elements: the first is the targeted reduction in the nominal deficit over a predefined period; the second is the fiscal effort the government needs to undertake to achieve its deficit targets, taking into account the feedback effects between fiscal consolidation and economic activity as well as other factors that may affect the link between fiscal effort and deficit reduction. Thus, nominal balances and fiscal effort should play complementary roles, ensuring the overall consistency of the consolidation strategy. Nominal targets for the budget balance are important because they are transparent, ensure accountability and, via their effects

on governments' financing needs, determine the impact on fiscal sustainability.¹ Fiscal effort is intended as a concept that more closely reflects the effect of government action on the budget balance, and hence something that the government can directly influence and be held accountable for. In this sense, the fiscal effort is the instrument that the government can use to achieve its policy objectives, and as such it needs to be consistent with the achievement of the desired nominal fiscal targets. It is, however, not directly measurable and there are numerous alternative ways in which this concept has been – or could be – operationalised.

The putting in place of a fiscal consolidation strategy involves setting out plans for the path of the headline deficit, the tax and spending measures deemed necessary to achieve that deficit, as well as the corresponding structural deficit. Given the interaction between macroeconomic and fiscal developments, it first requires the definition of a macroeconomic scenario consistent with the required fiscal consolidation, based on some initial assumptions for tax and spending plans. On the basis of this scenario, a “fiscal gap” to be filled with tax and spending measures can be calculated by comparing the desired deficit path with that which would result from projecting individual revenue and spending components based on existing legislation. The corresponding path of the structural balance is then determined by the estimated path of potential output and the output gap.²

Traditionally, and in particular in the context of the Stability and Growth Pact (SGP), the assessment of fiscal effort has been based primarily on the evolution of the structural (budget) balance-to-GDP ratio, i.e. the general government balance-to-GDP ratio corrected for the estimated impact of the economic cycle and certain one-off effects. However, changes in the structural balance reflect not only the impact of fiscal policy decisions taken by the government, but also numerous factors outside the government's control, as will be explained in Section 3. Recently there has been a move to base decisions under the EDP more formally on a detailed bottom-up analysis of fiscal policy measures in order to have a better gauge of the budgetary impact of government action.

Against this background, this article raises awareness of the conceptual issues and measurement problems surrounding the assessment of a country's fiscal effort. To provide the appropriate context, Section 2 summarises how the assessment of fiscal effort has evolved over time in the context of the SGP. Section 3 discusses the measurement and interpretation of the structural budget balance, focusing in particular on the factors which can drive a wedge between the evolution of this indicator and the direction and extent of tax and spending decisions. Section 4 discusses the conceptual issues and measurement problems related to more detailed bottom-up measures of fiscal effort. While motivated in part by recent changes to the assessment of effective action in the context of the EDP and highlighting some important issues in this context, this article also takes a broader conceptual perspective regarding the difficulty of measuring fiscal effort. Section 5 concludes.

2 THE EVOLVING ASSESSMENT OF FISCAL EFFORT IN THE CONTEXT OF THE STABILITY AND GROWTH PACT

The way in which a country's fiscal policy has been assessed in the context of the SGP has evolved considerably over time. Important changes were introduced: first, by the SGP reform of 2005, and later by the “six-pack” in 2011 and “two-pack” in 2013.

¹ See also the discussion in Section 5 (fiscal developments), *Monthly Bulletin*, ECB, June 2013.

² See also European Commission, “Report on Public Finances in EMU” (Part III), 2013, for a discussion on the relationship between structural indicators and bottom-up measures of fiscal effort.

In the original SGP, adopted in 1997, the role of the structural budget balance in the assessment of fiscal policy was largely limited to the “preventive arm”. In order to create room for manoeuvre with respect to the 3% of GDP reference value for the nominal deficit, Member States were called upon to achieve budgetary positions which were close to balance or in surplus in the medium term (i.e. the so-called medium-term objective). This was generally interpreted as meaning a budget that was close to balance or in surplus in structural terms. Initially, “structural” was equated with the cyclically adjusted balance (the derivation of which is explained in Section 3). However, the tendency of some Member States to resort to temporary or one-off measures to reduce their deficits led to a move to calculate the structural balance as the cyclically adjusted balance net of certain one-off and temporary measures.³ Moreover, having observed a tendency for governments to “backload” adjustment towards the medium-term objective in the early years of EMU, an annual adjustment of the structural balance of 0.5% of GDP came to be set as a benchmark. This was codified in the context of the 2005 SGP reform.

By contrast, under the “corrective arm”, before the 2005 SGP reform the emphasis was on compliance with nominal deficit limits. In line with the provisions of the Maastricht Treaty, a deficit was, and still is, deemed excessive if the nominal deficit-to-GDP ratio exceeds the 3% of GDP reference value, unless the excess is small and temporary and is due to exceptional circumstances. The correction of the excessive deficit should be completed in the year following its identification, except in the event of special circumstances which, however, were not defined. In its original form, therefore, the SGP did not explicitly provide for the possibility of EDP deadline extensions. The EDP was essentially outcome-driven, with a Member State subject to the EDP being held responsible for taking whatever fiscal effort was needed to bring the nominal deficit below 3% of GDP by the established deadline.

The SGP reform of 2005 – triggered by the decision of the ECOFIN Council in November 2003 not to act on the basis of Commission recommendations to step up the EDPs for France and Germany – explicitly introduced more flexibility to take account of economic conditions under the EDP.⁴ It introduced the concept of a benchmark annual change of the structural budget balance-to-GDP ratio of 0.5% into the EDP.⁵ It also provided for the EDP deadline to be extended by one year in case the Member State concerned was deemed to have taken effective action – in the sense that the government was assessed to have taken measures that would have permitted meeting the original deadline if the Commission forecast underlying the original EDP recommendation had fully materialised – but there were “unexpected adverse economic events with major unfavourable consequences for government finances”. Specifically, if the improvement in the budget balance or structural budget balance fell short of what was recommended, then a careful analysis of the reasons for the shortfall would be made.

The build-up of severe macroeconomic, financial and fiscal imbalances within the euro area and the ensuing sovereign debt crisis in several euro area countries led EU governments to respond with six legislative acts to strengthen the EU economic governance framework (commonly

3 See Koen, V. and van den Noord, P., “Fiscal Gimmickry in Europe: One-Off Measures and Creative Accounting”, *OECD Economics Department Working Papers*, No 417, 2005.

4 See also the statement of the ECB’s Governing Council on the ECOFIN Council conclusions regarding the correction of excessive deficits in France and Germany of 25 November 2003 and the statement of the ECB’s Governing Council on the ECOFIN Council’s report on “Improving the implementation of the Stability and Growth Pact” of 21 March 2005.

5 See also European Commission, “Communication on strengthening economic governance and clarifying the implementation of the Stability and Growth Pact”, COM/2004/0581, 3 September 2004; Deroose, S. and van Langedijk, S., “Improving the Stability and Growth Pact: the Commission’s three pillar approach”, *European Economy Occasional Papers*, No 15, February 2005; and Morris, R., Ongena, H. and Schuknecht, L., “The reform and implementation of the Stability and Growth Pact”, *Occasional Paper Series*, No 47, ECB, June 2006.

referred to as the “six-pack”, which entered into force in December 2011 and also reformed the SGP), as well as two additional regulations to further strengthen surveillance of euro area countries (the “two-pack”, which entered into force in May 2013).⁶ With respect to the assessment of a country’s fiscal effort under the SGP, two innovations included in the six-pack are noteworthy.

- First, annual nominal deficit targets for multi-year EDPs were introduced on top of the recommended change in the structural balance. These targets introduce an asymmetry in the sense that compliance with the nominal deficit targets is seen as sufficient for diagnosing effective action, even in cases where the targets in structural terms have not been met.
- Second, under the preventive arm, an additional indicator for the fiscal effort was introduced in the form of the expenditure benchmark. This requires that recommended improvements to the structural balance that are not delivered in the form of discretionary tax increases are achieved via the expenditure side of the budget. In this way, the expenditure benchmark should help to avoid revenue windfalls being spent rather than being used for the required fiscal consolidation. Concretely, the introduction of the benchmark was also motivated by the experience of some countries (especially Ireland and Spain) being able to achieve structural budget surpluses during the pre-crisis boom, even though government spending was growing at an unsustainable rate and the governments had implemented discretionary tax cuts. This had been possible because tax receipts (and the tax-to-GDP ratio) were inflated by the effects of a housing boom.

Most recently, a further innovation has been introduced with regard to the assessment of effective action for countries under an EDP.⁷ As mentioned above, since the 2005 SGP reform, the change in the structural budget balance has been the core element in the assessment of effective action. If the improvement in the structural balance falls significantly short of the adjustment required under the EDP recommendation, the SGP foresees a “careful analysis of the reasons for the shortfall”. Following the 2011 SGP reform, and in order to codify the “careful analysis”, the Commission presented a methodology which makes adjustments to the change in the structural balance to account for some factors that are outside government control and proposed alternative indicators for the assessment of fiscal effort. In particular, the observed improvement in the structural balance is corrected for revisions to potential output growth and for revenue windfalls/shortfalls, as well as for the effects of other unexpected events, e.g. natural disasters or statistical revisions, which might have occurred since the time of issuing the recommendation. Furthermore, a bottom-up analysis is also applied. This involves adding up the impact of individual revenue measures and estimating the impact of expenditure measures by comparing the outturn for spending (other than specific items outside government control) with the “no policy change” scenario underlying the Commission forecast at the time of the EDP recommendation.⁸ The bottom-up analysis and the corrected structural balance are now the core indicators of the careful analysis to decide whether effective action has been taken or whether the EDP should be stepped up.

To sum up, under the SGP, the structural balance remains a main indicator for the assessment of fiscal effort, intended as a gauge of the impact of government action on the budget balance. But it is

6 See the box entitled “Stronger EU economic governance framework comes into force”, *Monthly Bulletin*, ECB, December 2011, and also the box entitled “The ‘two-pack’ regulations to strengthen economic governance in the euro area”, *Monthly Bulletin*, ECB, April 2013.

7 See the box entitled “Implementation of the excessive deficit procedure under the reinforced Stability and Growth Pact in euro area Member States”, *Monthly Bulletin*, ECB, September 2013.

8 The European Commission describes the “no policy change” assumption as implying the extrapolation of revenue and expenditure trends and the inclusion of measures that are known in sufficient detail at the time of completion of the forecast. While the basic concept is straightforward, its implementation and assessment in practice is less so. For a discussion see European Commission, “Public Finances in EMU – 2008”, Part II, Section 2.3.

now formally complemented by additional indicators which rely, inter alia, on a detailed bottom-up assessment of the impact of revenue and expenditure measures. The next two sections take a more conceptual look at the challenges related to the assessment of fiscal effort, looking in Section 3 at the estimation and interpretation of the structural balance and in Section 4 at the challenges related to more detailed, bottom-up assessments of fiscal effort.

3 THE STRUCTURAL BUDGET BALANCE: METHODOLOGICAL ISSUES AND INTERPRETATION

As noted above, the evolution of the structural budget balance, measured as the change in the cyclically adjusted budget balance net of certain one-off and temporary measures, is commonly used as a measure of fiscal effort, not least in the context of the SGP. Understanding how this indicator is calculated and the factors which may drive its evolution is crucial for an analysis of fiscal policy generally and for the implementation of the SGP in particular.

THE ESTIMATION OF THE STRUCTURAL BUDGET BALANCE

For the purposes of implementing the SGP, a commonly agreed method of cyclical adjustment has been developed and refined by the European Commission, also drawing on work carried out by the OECD.⁹ In this method, the cyclical component of the budget balance is the product of an estimated output gap¹⁰ and an assumed overall sensitivity of the government balance with respect to output.¹¹

The output gap in this context is the difference between actual and potential output as estimated on the basis of a production function. In this respect, potential output is a measure of where the economy would be if all factors of production (i.e. capital and labour) were put to their full use without creating pressure on prices and the rate of inflation.

How the government balance responds to changes in the output gap is summarised in a single, fixed parameter – semi-elasticity. The latter is based on estimates or assumptions for the elasticities of cyclical budget items (taxes, social contributions and unemployment benefits) to macroeconomic aggregates (wages, profits, private consumption and unemployment) and for the elasticity of these macroeconomic aggregates to GDP. These elasticities are usually fairly close to one on average, which implies that the semi-elasticity of the budget balance to GDP is close to the share of cyclical government revenue and spending in GDP. In a typical EU country this is around 0.5; the euro area average is presently 0.52. Thus, for every 1% gap between GDP and its estimated potential, the corresponding cyclical component of the budget balance would be around ½% of GDP.

NON-DISCRETIONARY FACTORS INFLUENCING THE CHANGE IN THE STRUCTURAL BUDGET BALANCE

The year-on-year evolution of the cyclically adjusted (or structural) budget balance-to-GDP ratio is a useful gauge of fiscal effort. However, this indicator only coincides with the action taken by the government if, in the absence of such action, (i) cyclical revenue and spending would behave in accordance with the estimated elasticities, and (ii) non-cyclical revenue and spending would grow

9 Within the ESCB, an alternative method of cyclical adjustment of the budget balance is used. This method is set out in ECB Working Paper No 77. For a more recent discussion, see also the box entitled “The structural balance as an indicator for the underlying fiscal position”, *Monthly Bulletin*, ECB, September 2014.

10 See D’Auria et al., “The production function methodology for calculating potential growth rates and output gaps”, *European Economy – Economic Papers*, No 420, European Commission, July 2010.

11 See European Commission, “New and updated budgetary sensitivities for the EU budgetary surveillance”, September 2005. See also the box entitled “Implementation of the excessive deficit procedure under the reinforced Stability and Growth Pact in euro area Member States”, *Monthly Bulletin*, ECB, September 2013.

in line with potential GDP. The main non-discretionary factors that typically influence the change in the structural balance-to-GDP ratio are as follows.

First, receipts from taxes and social contributions depend on bases which often evolve somewhat differently from GDP. This implies that, in any given year, the (near unit) elasticity of receipts with respect to GDP assumed in the context of cyclical adjustment is unlikely to hold. An evolution of receipts that is more (less) favourable than the one implied by this elasticity is now commonly referred to as a revenue “windfall” (“shortfall”), although in many cases such developments may be at least partly predictable ex ante and relate to factors which should be part and parcel of the usual business of revenue forecasting. There are many causes of revenue windfalls/shortfalls; a categorisation is provided in the box. In addition, non-tax receipts also fluctuate in relation to GDP. For example, dividend income depends on the profits of public corporations, which are more volatile than GDP.

Box

CATEGORISATION OF NON-DISCRETIONARY FACTORS GIVING RISE TO FLUCTUATIONS IN THE (STRUCTURAL) REVENUE RATIO (REVENUE “WINDFALLS”/“SHORTFALLS”)

The macro composition of GDP fluctuates over time, both on the income side (wage/profit share) and on the expenditure side (domestic/external demand). Wages are taxed more heavily than profits, while exports are tax exempt, so a decline in the wage share and/or export-led growth tends to put downward pressure on the revenue ratio.

The micro composition of GDP components changes over time. For example, a decline in the consumption of highly taxed items such as fuel and tobacco relative to overall consumption will weigh down on the revenue ratio.

Taxes levied on bases which do not form part of GDP. Examples would include financial profits, the transfer of assets and property ownership.

Leads and lags in tax collection, especially in corporation tax where losses are not taxed negatively but can usually be carried forward and offset against future profits for several years.

The size of the undeclared economy in relation to GDP may fluctuate over time. The shadow economy is, in principle, part of GDP but does not generate tax receipts.

More generally, tax liabilities depend on a complex tax code and accounting concepts (e.g. business accounting) which are different from national accounts concepts.

Second, spending on unemployment benefits depends not only on the overall level of unemployment but also on whether unemployed persons qualify for a benefit, which will normally depend on factors such as past social contributions and unemployment duration. Especially during and after significant recession-induced increases in unemployment, average unemployment duration can decline and then increase markedly, leading first to a higher, followed by a lower, “coverage ratio”.

Third, interest payments fluctuate depending on the stock of government debt and the average rate of interest on that debt and so will not tend to grow in line with potential GDP. This can, however, be accounted for by monitoring the evolution of the structural primary balance, i.e. the structural balance net of government interest payments.

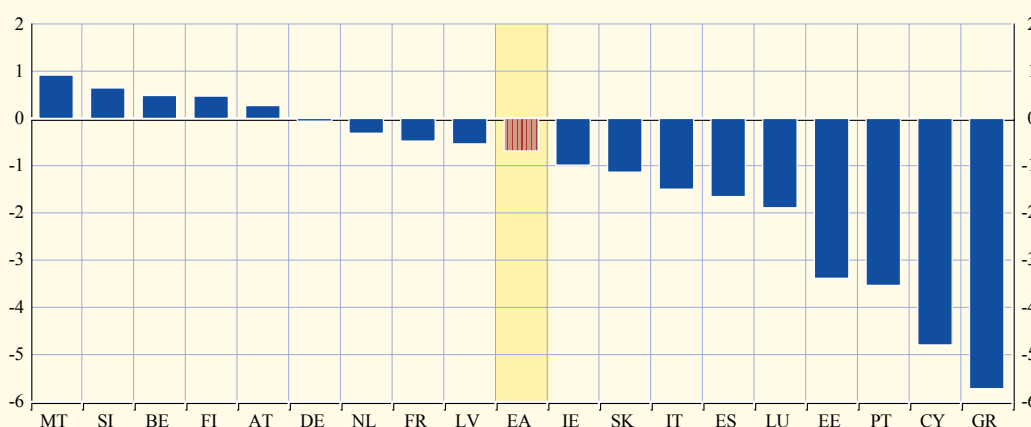
Fourth, there is also no reason why other components of non-cyclical spending would grow in line with potential GDP. Some components of non-cyclical spending have determinants which will put them on an underlying growth path which diverges from that of potential GDP (see also Section 4). The obvious example is spending on pensions and healthcare in the context of an ageing population. Other components of spending (e.g. investment) have no obvious determinant. At the same time, estimates of potential output are prone to revision whenever economic data are revised and/or forecasts turn out to be inaccurate. This typically also leads to a reassessment of the rate of potential GDP growth. Estimates of potential GDP have fallen because of the crisis, resulting in lower – in some countries even negative – estimates of potential GDP growth.¹² Action is then required by the government to curb or reduce spending to make public finances sustainable in view of these changes to medium to long-term growth potential.

Finally, the structural balance-to-GDP ratio has GDP as a denominator, and fluctuations in the denominator affect the ratio. This effect is usually negligible, but it can become relevant when the structural deficit is large and GDP is contracting (or growing) strongly.

Charts 1-3 provide a sense of how some of these factors are likely to have influenced the evolution of the structural balance-to-GDP ratio in euro area Member States during the period of fiscal consolidation from 2010 to 2013. Using estimates of the impact of discretionary tax measures contained in the European Commission's AMECO database, Chart 1 shows the cumulative change in the ratio of structural revenue to potential GDP not explained by discretionary measures.¹³

Chart 1 Changes in the ratio of structural government revenue to potential GDP of euro area Member States not attributed to discretionary measures (2010-13)

(percentage of potential GDP)



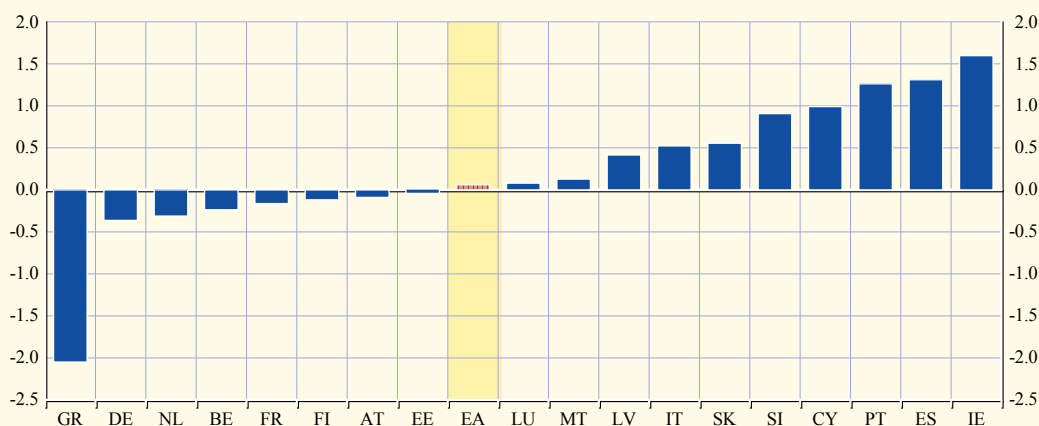
Sources: European Commission and ECB calculations.

12 See the article entitled "Potential output, economic slack and the link to nominal developments since the start of the crisis", *Monthly Bulletin*, ECB, November 2013.

13 It should be noted that estimates of the impact of tax measures are subject to considerable uncertainty for reasons that are reviewed in Section 4.

Chart 2 Changes in the ratio of government interest payments to potential GDP of euro area Member States (2010-13)

(percentage of potential GDP)



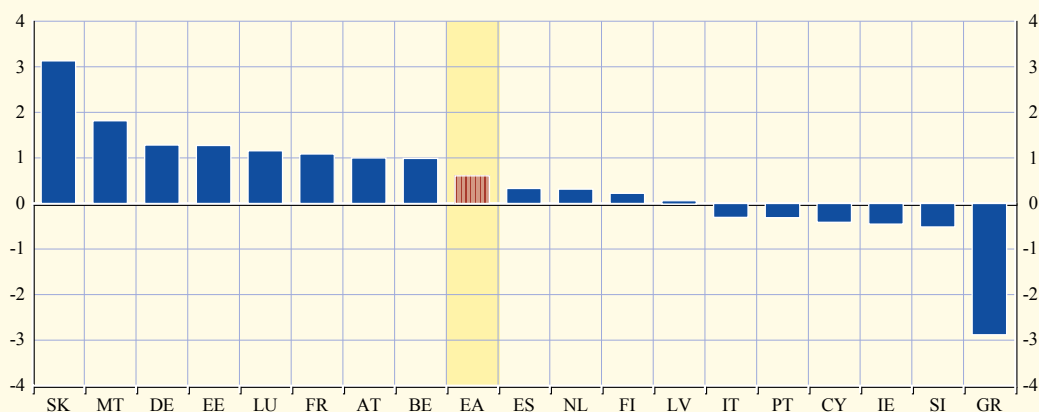
Sources: European Commission and ECB calculations.

Chart 2 reports the change in the ratio of government interest payments to potential GDP over the same period. Chart 3 shows the average rate of potential GDP growth over the period 2010-13 as estimated by the European Commission.

All other things equal, countries towards the right-hand side of each chart will have had to deliver more in terms of tax increases and spending cuts in order to deliver the same improvement in the structural balance-to-GDP ratio than countries towards the left-hand side. In the case of Charts 1 and 2, this additional fiscal effort (in % of GDP) is simply represented by the size of the bar. In the case of differences in potential GDP growth (Chart 3), the additional effort required would correspond to the difference in the rate of potential GDP growth multiplied by the share of non-cyclical government spending in GDP, which is usually around 0.45.

Chart 3 Annual average potential GDP growth of euro area Member States (2010-13)

(annual percentage change)



Sources: European Commission and ECB calculations.

In general, euro area countries affected heavily by the sovereign debt crisis appear towards the right-hand side of the charts. In these countries, after excluding the estimated impact of tax measures, ratios of structural government revenue to potential GDP fell sharply, reflecting, inter alia, the rebalancing of these economies (wage, price and current account adjustments), lower tax receipts from property transactions and from the construction and/or financial sectors, and – probably in some countries – lower tax compliance. Interest payments rose sharply as the stock of government debt increased because of high deficits and the financial support given to the banking sector.¹⁴ Finally, the substantial economic contraction in these countries resulted in particularly large downward revisions to estimates of potential output such that, during the crisis, potential output growth stagnated or even turned negative.

To summarise, the “effort” required of the government in terms of tax increases and spending cuts in order to achieve a given improvement of the structural balance-to-GDP ratio will be larger when (i) there are factors weighing down on the ratio of structural revenue to potential GDP, (ii) the stock of government debt and/or the average interest rate on that debt is rising, and (iii) there are upward pressures on non-cyclical spending and/or potential GDP growth is low or negative.

4 BOTTOM-UP MEASURES OF FISCAL EFFORT

The understanding that the change in the structural budget balance will not always reasonably gauge the discretionary fiscal policy actions undertaken by the government has motivated attempts to measure the fiscal effort using what is sometimes called a bottom-up approach. In this approach, the fiscal effort is computed as the aggregate sum of the estimated budgetary impact of individual government revenue and expenditure measures.¹⁵ Bottom-up estimates of fiscal effort, however, raise their own problems.

First, and as discussed in more detail below, such an analysis relies predominantly on governments’ own estimates of the budgetary impact of measures, which are hard to verify. This creates an important incentive problem, especially if these estimates come to play an important role in the EU fiscal surveillance framework where an assessment of lack of fiscal effort can lead to financial sanctions.

Second, from a practical point of view, it needs to be recalled that general government is made up of hundreds, if not thousands, of entities. Keeping track of all of the decisions affecting government revenue and, even more so, spending is therefore just not feasible for the fiscal policy analyst.

Third, from a conceptual perspective, the implementation of a bottom-up approach requires first defining what a “measure” is. This is not straightforward. It requires, in particular, the identification of an unchanged policy baseline, which would track the evolution of both revenue and expenditure

¹⁴ The decline for Greece is due to the debt restructuring which took place in March 2012 as well as the modalities of EU/IMF financial assistance.

¹⁵ This approach has been used also in the economic literature on the macroeconomic effects of fiscal policy. See Romer, C. and Romer, D., “The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks”, *American Economic Review*, Vol. 100, 2010; Agnello, L. and Cimadomo, J., “Discretionary fiscal policies over the cycle: new evidence based on the ESCB disaggregated approach”, *International Journal of Central Banking*, Vol. 8, No 2, June 2012, pp. 43-85; Devries et al., “A New Action-based Dataset of Fiscal Consolidation”, *IMF Working Paper WP/11/128*, 2011; Guajardo et al., “Expansionary Austerity: New International Evidence”, *IMF Working Paper WP/11/158*, 2011; and Attinasi, M.G. and Klemm, A., “The growth impact of discretionary fiscal policy measures”, *Working Paper Series*, No 1697, ECB, July 2014.

in the absence of government action. In this regard, however, different components of government revenue and spending have different characteristics and cannot be considered in the same way.

There is an important difference between, on the one hand, most government revenues (especially taxes and social contributions) and most social benefits, and, on the other hand, other categories of government spending. In general, taxes, social contributions and social benefits have “determinants” (tax bases, benefit entitlements) which, given present legislation, will determine the relevant receipts and expenditures. In this context, what constitutes a “measure” is relatively clear from a conceptual point of view: it is any change to the legislation that determines tax liabilities and benefit entitlements. Regarding spending, some components of the budget, such as interest payments and contributions to international organisations, are more or less fully outside the control of government. These can reasonably be excluded from any bottom-up analysis. For other government spending categories, it is conceptually more difficult to identify an unchanged policy baseline because the overall level of spending depends to a much greater extent on budget decisions and is relatively disconnected from the evolution of the economy. This, together with the practical impossibility of compiling complete information on spending decisions, means that for most components of government spending, the only practical way forward is to compare spending outturns with an appropriate benchmark.

As already mentioned in Section 2, the SGP now incorporates elements of a bottom-up analysis both in the preventive arm (expenditure benchmark) and as part of the careful analysis performed in the context of the corrective arm. In the case of the careful analysis, the budgetary impact of revenue measures is based on the assessment of the impact of each specific policy measure. In the case of spending, the approaches followed in the preventive and corrective arms diverge. In the preventive arm, under the expenditure benchmark, spending outturns (other than specific items outside the control of government) are compared with the medium-term rate of potential GDP growth defined over a period of ten years (the previous five years, the current year and a projection four years ahead). In the corrective arm, the impact of spending measures is estimated by comparing spending outturns against the “no policy change” spending forecast contained in the scenario underlying the Commission forecast at the time of the EDP recommendation.

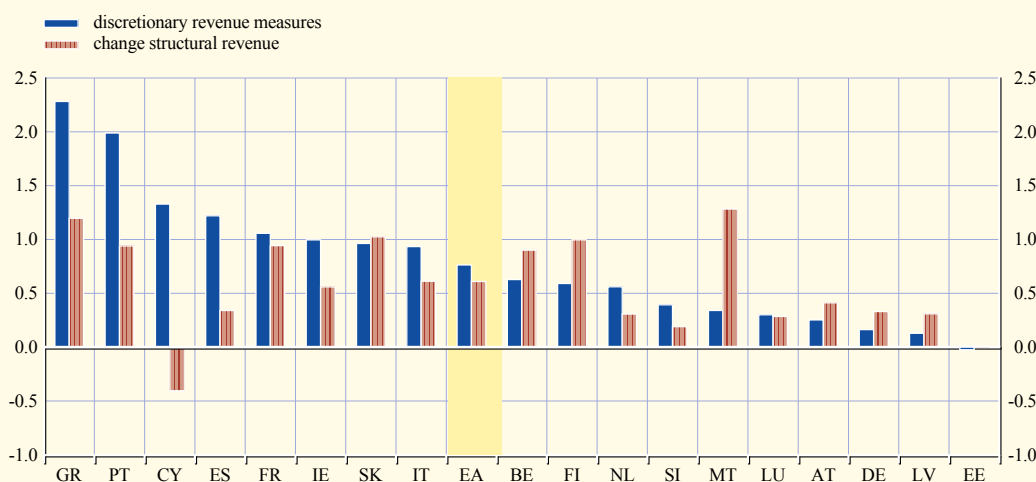
The following sub-sections discuss in more detail the challenges surrounding the assessment of fiscal effort based on (i) estimates of the impact of revenue measures, and (ii) the benchmarking of expenditure.

4.1 ESTIMATING THE IMPACT OF REVENUE MEASURES

It is increasingly common for governments to provide estimates of the impact of (planned) revenue measures when presenting the draft budget. Recently, the European Commission published data for the period 2010-13 on discretionary revenue measures as compiled by country analysts. As already noted in Section 3, the estimated impact of discretionary revenue measures can differ significantly from the change in the ratio of structural revenue to potential GDP. To illustrate this point, Chart 4 compares the discretionary revenue measures with the change in the structural revenue ratio. For the period 2011-13, the two measures point towards a positive effort in almost all countries, with a limited discrepancy between the two measures for the euro area as a whole (0.2 percentage point of potential GDP). In some countries, however, the change in the structural revenue ratio did not fully reflect the amount of discretionary revenue measures taken by the governments (Greece, Portugal, Cyprus, Spain, Ireland, Italy and the Netherlands), whereas the opposite was true for other countries (Latvia,

Chart 4 Discretionary revenue measures versus change in the structural revenue ratio

(average for 2011-13; as a percentage of potential GDP)



Sources: European Commission and ECB calculations.

Note: Countries are sorted on the basis of the average size of discretionary revenue measures.

Germany, Austria, Malta, Finland and Belgium), as the change in the structural revenue ratio signalled a larger fiscal effort than implied by the discretionary revenue measures.

As noted above, for most government revenues (and for social benefits) the concept of a “measure” is, in principle, relatively straightforward. Nonetheless, deriving estimates of the impact of revenue measures still raises numerous methodological questions and practical problems. Chief among them are the following.

First, the capacity to make estimates of the impact of revenue measures rests almost exclusively within the government units or departments concerned, such as the finance ministry, tax administration or social security department. This is where the relevant expertise is acquired and the necessary micro data collected. Except in the case of relatively straightforward changes to the most important tax rates and allowances, it will generally be very challenging – if not impossible – for outside analysts to construct accurate, independent estimates of the impact of such measures. There is therefore usually little choice but to rely on official government estimates.

Second, even though there may be fewer decisions affecting revenue (and fewer government entities that can take such decisions) than affecting expenditure, revenue measures can be very numerous and diverse and putting together a complete and consistent picture is always difficult. This is especially the case for countries where regional and/or local governments have significant revenue-raising powers.

Third, especially when the purpose is to gauge the impact of a particular measure in a given year, the accounting concept matters. The time of recording of tax receipts may be on an accrual basis (when the liability was generated), on a declared liability basis (when the tax return is presented) or on a cash basis (when tax is paid). The accounting concept used for budgeting purposes, and hence usually the basis on which official estimates of the impact of measures is based, usually differs from the way in which receipts are recorded in national accounts.

Fourth, measures have not only direct, but also indirect, effects. The direct effect is the impact on revenues all other things equal (e.g. the difference between applying the old and new tax code to a given tax return). Indirect effects concern both the narrow behavioural response which affects the variable (e.g. tax base) concerned and the broader impact on the economy. Whether and to what extent indirect effects are included in official estimates of the impact of revenue measures will depend on domestic budgeting practices.

Fifth, in most countries, estimates of the impact of revenue measures provided in budget documentation are presented *ex ante*. It is much less common for these estimates to then be revisited *ex post*.

4.2 BENCHMARKING EXPENDITURE

As noted above, on the expenditure side, and with the exception of entitlement spending, the concept of a “measure” is generally more problematic. For large swathes of government spending, the borderline between what is “automatic”, “neutral” or “unchanged policy”, on the one hand, and a “measure”, on the other hand, is ill-defined and ultimately subjective. In the context of the “careful analysis”, the use of the European Commission’s “no policy change” forecast when the EDP recommendation was delivered raises an obvious issue in terms of the nature – and cross-country comparability – of this particular scenario.¹⁶ For instance, if, in a country, spending has been growing robustly and the no policy change forecast projects this forward, then a mere normalisation of spending growth would be counted as fiscal effort. If, in another country, spending has been constrained in the recent past and this is projected forward as a no policy change scenario, then a continuation of this spending constraint would not be measured as fiscal effort.

Given the conceptual blurredness of what constitutes a measure for most types of spending, as well as the practical difficulty posed by the fact that spending decisions are dispersed across a multitude of entities, the only practical way to assess spending policy is to compare spending outturns against an appropriate benchmark.¹⁷ To this end, there is no obviously superior benchmark. The choice of benchmark may be influenced by the policy question that one has in mind, i.e. the intention or purpose behind the measurement of fiscal effort. Beyond this, a benchmark should ideally be exogenous to other fiscal policy changes (both on the spending side and the revenue side) and be easily replicable and understandable.

Two kinds of benchmark may be identified. The first, which is mostly relevant from a budgeting point of view, is the one that keeps spending constant.¹⁸ If this is done in nominal terms, however, this ignores the upward pressure on spending emanating from inflation. Moreover, a fiscal policy which would keep spending constant in nominal terms would generally be very restrictive. For this reason, a price index would probably be a more reasonable benchmark, so that neutral spending policy is defined as spending that is constant in real terms.

The second kind of benchmark is one which charts a path for spending which, all other things equal, is compatible with a given fiscal objective. The obvious benchmark here is nominal potential or trend

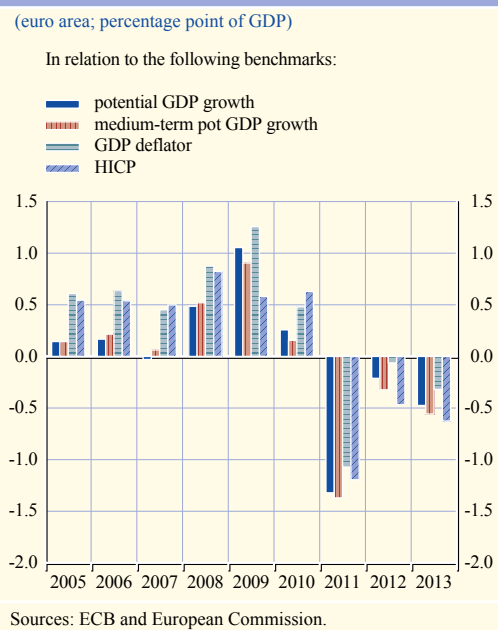
16 Limited information is available regarding the bottom-up methodology currently applied by the European Commission in its assessment of fiscal effort under the corrective arm.

17 Spending totals ultimately depend on day-to-day decisions taken by different government departments as well as by sub-national (regional and local) governments.

18 In this case, the “question” being asked is: given a forecast for pre-determined revenue (e.g. tax receipts) and spending (e.g. interest payments and social benefits), what is the size of spending cuts necessary to deliver a given budget deficit/surplus?

GDP growth. As already explained in Section 3, a path of spending in line with the growth of potential GDP leaves the structural balance-to-GDP ratio unaffected and is “neutral” from this perspective. It is also consistent with the share of spending in GDP being kept broadly constant in the medium term. The downside is that estimates of potential GDP growth tend to be pro-cyclical. A major shock to the economy or revision to the economic outlook often gives rise to a reassessment of the level of potential GDP and potential GDP growth. The same rate of spending growth will be assessed differently across countries (and over time) owing to differences in (and revisions to) the estimated rate of potential GDP growth. This is desirable if the purpose is to assess spending policy against what is viewed as sustainable in view of the changed estimate of potential GDP growth, but from a budgeting perspective it does not gauge the amount of spending cuts needed to deliver this path.

Chart 5 Euro area expenditure measures quantified in relation to different benchmarks



More generally, the implications of using different benchmarks and the way these should then be used in the assessment of fiscal policy should be clearly understood. Under normal circumstances, when an economy is growing steadily and real potential GDP is growing, a price index per se will normally be a stricter benchmark than nominal potential GDP growth. Except in cases where there is a need for fiscal consolidation or a desire to reduce the size of government in relation to the rest of the economy, it is normal and appropriate for government spending to grow in real terms. This relationship may, however, be reversed during times of crisis, when potential GDP growth may become negative. Chart 5 shows the implications of the choice of different benchmarks for the assessment of spending policy for the euro area as a whole. Before the crisis, i.e. in 2005-07, spending growth was essentially neutral when assessed against potential GDP growth as a benchmark. Nevertheless, spending was growing in real terms (i.e. by more than the price indices). In 2012-13, however, because of the effect of the crisis on potential GDP growth and a very subdued evolution of the GDP deflator, potential GDP growth became a stricter benchmark than HICP, implying that greater spending cuts were needed to deliver a given fiscal effort.

5 CONCLUSION

The fiscal effort is intended to measure the effect of government action on the budget balance and thereby serve as an indicator for which the government can be held accountable. The fiscal effort represents the means with which the government can achieve its policy objectives and needs to be consistent with the achievement of the desired nominal deficits. The fiscal effort is, however, not directly measurable and there are numerous alternative ways in which this concept has been – or could be – operationalised.

The change in the structural budget balance is a useful gauge of fiscal effort. But it does not always reflect reasonably closely the impact of tax and spending decisions taken by governments. Recently, greater emphasis has been placed on assessments of fiscal effort which seek to identify the impact of individual tax and spending measures. Such “bottom-up” assessments are, in principle, an important complement to estimates of the change in the structural balance. However, their use raises significant conceptual issues and practical challenges. If these assessments are to gain prominence in EU fiscal surveillance, it is important to enhance transparency in relation to methods, concepts, data and information.

In this context, there is an important distinction to be made between most government revenues and social benefits, for which the idea of what constitutes a “measure” is at least conceptually clear, and most other spending, for which an unchanged policy baseline is conceptually difficult to identify. In the former case, a “measure-by-measure” approach may be feasible; in the latter case, the only reasonable approach would appear to be to compare outturns against a relevant benchmark.

Regarding the impact of individual revenue measures, it would be important for Member States’ stability programmes and budget documentation to set out clearly the estimated impact of each significant measure and explain the nature of these estimates in terms of the assumptions, accounting concepts and data used. These estimates should be subject to scrutiny and revised *ex post*. Efforts should be made to systematically publish relevant information that would allow for independent scrutiny. Independent fiscal councils could be given a role in vetting official estimates.

In the case of spending, the choice and nature of the benchmark also needs to be clear and transparent. In this respect, a “no policy change” benchmark is ill-defined and subjective, thus compromising the fairness of evaluation across countries. More appropriate benchmarks would be an inflation index (to capture the effect of spending growing in real terms) or – as at present in the context of the preventive arm of the SGP – nominal potential GDP growth (to capture the growth rate of spending compatible with a stable structural balance).

The appropriateness of fiscal policies will also always need to be judged against results obtained over the medium term, as it is nominal deficit outturns which determine the accumulation of government debt and which ultimately matter for fiscal sustainability. Greater fiscal consolidation needs, resulting from a higher (structural) deficit, a rebalancing economy, low potential growth or an ageing population generally require a greater year-on-year fiscal effort to put or keep public finances on a sound footing. Different approaches to measuring fiscal effort will give rise to differences in the amount of such effort needed to deliver the required adjustment. Even if a recommended fiscal effort is delivered, it may turn out to be insufficient to deliver the desired improvement in the nominal deficit because the assumptions and/or forecasts on which the required effort was calculated turn out to be wrong. In this case, a larger than previously planned fiscal effort will be needed in subsequent years to ensure that the nominal deficit eventually falls to the desired level.