

Towards a single operational indicator in the SGP – A look at the properties of the current expenditure benchmark



By Nicholai Benalal, Maximilian Freier, Wim Melyn, Stefan Van Parys and Lukas Reiss¹

JEL codes: C54, E62, E65, F54, F47. Keywords: EMU, euro area, fiscal governance, Stability and Growth Pact.

A key element of the EU fiscal governance framework reform agenda is simplification. A common proposal in this context is to measure consolidation efforts only via an expenditure benchmark, thereby dropping the change in the structural balance as an operational indicator. In a recently published ECB Occasional Paper (Benalal et al. 2022), we investigate the differences between the 'expenditure benchmark' and the 'change in the structural balance'. We show that the expenditure benchmark used in the EU fiscal governance framework has advantages over the change in the structural balance, on account of increased predictability and increased countercyclicality. However, it still has scope for improvement. Most importantly, we argue that taking account of interest payments in the expenditure benchmark would make fiscal policy more supportive of the monetary policy stance.

¹ Nicholai Benalal, Maximilian Freier, both European Central Bank; Wim Melyn, Stefan Van Parys, both National Bank of Belgium; Lukas Reiss, Oesterreichische Nationalbank.

The views expressed are those of the authors and do not necessarily reflect those of the ECB, the NBB or the OeNB.

1. Differences between 'expenditure benchmark' and 'change in the structural balance' have real policy implications

Since its inception in the mid-1990s, the EU fiscal governance framework has evolved into a highly complex surveillance mechanism. One of the complications in the current framework is that fiscal consolidation is measured and evaluated both via an expenditure benchmark (EB) and via the change in the structural balance (dSB)². Policymakers broadly agree that a reformed and simplified EU fiscal governance framework should only rely on an expenditure benchmark.

Table 1

Differences between expenditure benchmark and the change in the structural balance

	Change in the structural balance	Expenditure benchmark
Revenue based fiscal consolidation	Change in estimated structural revenue ratio	Estimated impact of discretionary revenue measures (plus change in EU transfers received).
Underlying real potential growth	Most recent estimate	Spring T-1 projection of 10-year average potential growth (backward and forward looking)
Underlying GDP deflator	Most recent estimate	Spring T-1 projection
Interest expenditure	Included in expenditure aggregate	Excluded from expenditure aggregate
Investment expenditure	Included in expenditure aggregate	Actual investment replaced by four-year average (back- ward looking)
Unemployment expenditure	Cyclical adjustment based on output gap	Cyclical adjustment based on unemployment gap

Source: Own illustration.

While the EB and dSB can be shown to be conceptually equivalent, they are different in the practice of the EU fiscal governance framework. These differences are explained in detail in our paper and summarised in Table 1.

The differences in the calculation of the EB and dSB in the EU fiscal governance framework led to divergent assessments of consolidation efforts in countries. Chart 1 shows the quantitative difference between the two indicators for the euro area aggregate as well as for Germany, Italy and Spain. These three countries are of particular interest not only because of their large share in euro area GDP, but also due to the sizeable differences between the EB and dSB. Calculations show that ex post, in Germany the dSB suggests more fiscal consolidation (or less fiscal expansion) than the EB (dark blue squares). In most years, the opposite was true in Italy and Spain.

² One further complication is that the expenditure benchmark used in the preventive arm of the SGP is different from the one in the corrective arm. The calculations in our paper use the definition from the preventive arm.



Ex post differences between the change in structural balance and the expenditure benchmark

(in percentage points of GDP; a positive sign shows that the dSB suggests more consolidation/less expansion than the EB, a negative sign shows that the dSB suggests less consolidation/more expansion than the EB)

Source: Calculations of Benalal et al (2022) based on European Commission data. Notes: We use real time data from the respective spring T+1 vintages (e.g., spring 2019 data for 2018). Positive values mean that the change in the structural balance has a higher value than the expenditure benchmark, implying that dSB is less restrictive than EB (as a smaller effort is necessary to achieve the same number).

Differences between the two indicators result mainly from the accounting of revenue windfalls and shortfalls and the measurement of potential output. First, revenue windfalls and shortfalls are defined as changes in revenue which can neither be explained by discretionary measures nor by the expected stylized impact of the economic cycle.³ As the EB measures revenue-based fiscal adjustments via the estimated impact of discretionary measures, such windfalls or shortfalls only impact the dSB. There were revenue windfalls in Germany over almost the entire period observed (partly due to very strong growth in corporate tax revenue), while Italy and Spain mostly had shortfalls (purple bars in chart 1). Second, the most recent estimates of potential output are used for the dSB, while the underlying potential growth used for the EB is smoothed and frozen (fixed ex ante) before the respective fiscal year has started. In Italy and Spain, the potential growth used in the EB tended to be higher than in the dSB, which was both due to downward ex post revisions to the GDP deflator (orange bars) and to differences in real potential (green bars). Again, the opposite is true for Germany. For Germany, interest payments dropped sizeably over the whole horizon (yellow bars), again making the adjustment based on the dSB larger than the EB.⁴

Chart 1

³ The European Commission method assumes that – in the absence of discretionary revenue measures – the revenue ratio stays broadly constant over the business cycle, i.e., that revenue grows in line with GDP. Revenue windfalls resp. shortfalls are deviations from this pattern, which in the past were often due to developments in corporate taxes (e.g., the strong overperformance in Germany in the 2010s) or taxes on property (e.g., the strong overperformance in Spain in the mid-2000s, followed by a strong underperformance).

⁴ Over time, both the differences in the calculation of cyclically adjusted unemployment benefits and the smoothing of investment (esp. for larger countries) play a rather limited role. However, the large investment cuts in Spain up to 2012 and the temporary upward spike in 2015 led to temporary sizeable differences between EB and dSB in that country.

These differences have real policy implications. For Spain, the European Commission (2013) found sizeable revenue shortfalls in its evaluation of Spain's consolidation efforts in 2012 (which would have fallen short substantially when looking only at dSB). For Italy, the European Commission (2015) stressed the sizeable downward revisions of GDP deflators and real potential growth in its analysis of Italy's consolidation requirements under the SGP's debt benchmark in 2014/15. In the case of Germany, the level of the structural balance was assessed to be above the Medium-Term Objective from 2012 onwards, leading to encouragements to take a more expansive fiscal policy stance (e.g., in European Commission, 2017). However, the EB suggested a fiscal loosening of about 0.3 percentage points per year (while the debt ratio was still above 60%, except for 2019), which might have led to different policy recommendations when completely ignoring developments in the structural balance.

2. The expenditure benchmark has significant advantages over the change in the structural balance

In view of the differences between dSB and EB, a parallel use of the indicators risks inconsistent policy messages. But which of the two indicators should be dropped in the context of a simplification of the EU governance framework?

2.1 The expenditure benchmark is more predictable than the change in the structural balance

The expenditure benchmark is more predictable than the change in the structural balance by construction. First, revisions to potential growth only affect the dSB, but not the EB. When assessing the change in the structural balance, the European Commission uses the most recent (ex post) estimate of the change in the output gap, that is, GDP growth respective to potential output. Chart 2 shows that between 2004 and 2018, revisions to real potential growth rates were relatively sizeable (blue bars show the root mean squared error of revisions), implying that the part of fiscal developments attributed to the economic cycle has been revised, too.⁵ The EB avoids such frequent revisions as the potential GDP growth rate used to assess the appropriateness of expenditure growth is fixed ex ante for the EB.

Chart 2



Source: Calculations of Benalal et al (2022) based on European Commission data. Note: The bars and dots show the RMSE resulting from a comparison of the spring t-1 projections with the estimates/releases from spring t+1

⁵ A RMSE of real potential growth rates of one-half of a percentage point (i.e., the approximate RMSE for the countries with the most stable estimates) translates mechanically into a one-quarter of a percentage point revision to the change in the structural budget balance (assuming a budgetary semi-elasticity of about 0.5).

Second, revisions in the GDP deflators further reduce the predictability of the dSB. Chart 2 shows sizeable revisions to the projections of GDP deflators (yellow bars). This contributes to revisions to nominal potential growth (orange dots) being much larger than revisions to real potential growth. This is highly relevant, as underlying potential growth rates rely on the actual deflator in the dSB. Again, this problem is avoided for the case of the EB, where projected deflators are used.

Third, the predictability of the EB is also supported by relying on discretionary revenue measures for measuring revenue-based adjustments.⁶ The dSB relies on the change in the structural revenue ratio, which can be affected by unexplained over- or underperformances in tax revenue. For example, in most of the occasions of large revenue windfalls in Germany and of revenue shortfalls in Spain and Italy, at least the extent of this phenomenon has come unexpected.

2.2 The expenditure benchmark is more countercyclical than the change in the structural balance

We find that the EB is more countercyclical than the dSB. A first indication can be found in Chart 1. For the euro area, this chart shows that the dSB was more stringent, measuring less consolidation/more expansion than the EB for 2012 and 2013, when real GDP stagnated, and the output gap turned more negative. This implies that countries should have consolidated more according to the dSB than when their fiscal performance had been assessed with the EB. Vice versa, dSB was less stringent, measuring more consolidation/less fiscal expansion than EB for 2016 to 2018, a time when real GDP grew above its estimated trend.

Chart 3 confirms this observation. The different definitions of both underlying potential growth⁷ and revenuebased fiscal adjustments tend to make the dSB less countercyclical than the EB. In economically bad times (as indicated by a decrease in the output gap; x-axis in chart 3), there tend to be more revenue shortfalls (Chart 3a) and the real potential growth rates used in dSB tend to be lower than the ones in EB (e.g., in Spain in 2012; Chart 3b). On average, a one percentage point smaller change in the output gap (i.e., GDP growth one percentage point lower for given potential growth) is associated with dSB decreasing by almost 0.3pp for a given EB.⁸

⁶ However, some discretionary revenue measures, like changes to the tax base (e.g., closing loopholes in corporate taxation) or measures against tax fraud are very difficult to quantify, even ex post. This makes increased transparency in reporting these measures very important, e.g., one could consider publishing a breakdown in a database. Our paper also lays down some measurement problems in the current EB, most of which might be attenuated by deducting elements of non-tax revenue (especially "sales") from the expenditure aggregate and by accounting for the impact of non-indexation of tax brackets.

⁷ This is particularly due to the freezing of spring T-1 projections for the EB as there is a tendency of macroeconomic projections to be smoother than reality (i.e., the tendency of T+1 and T+2 projections to overpredict GDP growth in recessions and underpredict it in booms).

⁸ Assuming a budgetary semi-elasticity of around one-half, the slopes in Charts 3a and 3b translate a 1 pp lower change in the output gap into a decrease in dSB by $0.134 + 1/2 * 0.297 \sim 0.28$ pp compared to EB.

Chart 3

Relative procyclicality of revenue windfalls and potential growth estimates in dSB



Source: Calculations of Benalal et al (2022) based on European Commission data. Notes: The y-axis in Chart 3a (revenue windfalls) shows the difference between the change in structural revenue and discretionary measures (also accounting for EU transfers). The y-axis in Chart 3b shows the difference between the potential growth used for measuring fiscal adjustments in the dSB (i.e., potential growth in T as at spring T+1) and that of the EB (i.e., the ten-year average of potential growth as at spring T-1). The two slope coefficients are significant at the 1% level. Due to the very high volatility of their GDP growth rates (and therefore of their output gaps), we exclude the seven euro area countries that joined EMU after 2001, plus Ireland and Luxemburg. For the cyclicality of potential growth, we look at data from 2004 to 2018; for revenue windfalls (due to data availability issues) from 2010 to 2018. The cycle is measured using the change in the output gap based on the spring 2021 estimates of the European Commission

3. There is a strong case for including interest payments in the fiscal adjustment indicator

During the 2010s governments' interest payments dropped substantially (as indicated by chart 1), also spurred by monetary policy actions. Monetary policy reacted with determination to persistently low inflation. This contributed to a strong decline in overall interest payments between 2013 and 2018 in the euro area. Interest expenditures of governments fell by about 0.1 to 0.2 percentage points per year from 2013 to 2018.⁹

Interest payments were excluded from the EB on account of the argument that they fall outside the control of governments in the short term (European Commission, 2012). However, there are good arguments for including interest payments. First, structurally lower interest rates imply the debt-to-GDP ratio can be stabilised at a lower primary budget balance, leaving more room for increases in primary expenditure (or cuts in revenue). Second, one of the main transmission channels of monetary policy is that lower interest rates induce the non-financial sectors to increase spending. A similar mechanism holds for the government sector. Lower interest payments loosen the government budget constraint. A more expansionary fiscal policy can then complement the monetary impulse.

As this argument is symmetric, i.e., fiscal space would be reduced by restrictive monetary policy (resp. higher interest rates), the inclusion of interest payments would make monetary policy more effective without endangering fiscal sustainability.

⁹ This shows that despite the long average maturity of public debt in most euro area Member States, the series of unconventional measures undertaken by the Eurosystem starting in mid-2012 impacted the change in interest payments both quickly and relatively strongly.

References

Benalal, Nicholai & Freier, Maximilian & Melyn, Wim & Van Parys, Stefan & Reiss, Lukas (2022), <u>Towards a single</u> <u>fiscal performance indicator</u>, Occasional Paper Series 288, European Central Bank.

European Commission (2012), Public Finances in EMU 2012, European Economy 4/2012, Brussels.

European Commission (2013), Analysis by the Commission services of the budgetary situation in Spain following the adoption of the COUNCIL RECOMMENDATION to Spain of 10 July 2012 with a view to bringing an end to the situation of an excessive government deficit. Accompanying the document Recommendation for a COUNCIL RECOMMENDATION with a view to bringing an end to the situation of an excessive government deficit in Spain, Commission staff working document, Brussels, May.

European Commission (2015), REPORT FROM THE COMMISSION. Italy. Report prepared in accordance with Article 126(3) of the Treaty, Brussels, February.

European Commission (2017), Country Report Germany 2017 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances, SWD(2017) 71, Brussels, February.

About the authors

Nicholai Benalal is Senior Lead Economist in the Fiscal Policies Division of the European Central Bank. He has worked in a number of different positions in DG Economics since joining the ECB in 2002. He holds a Master of Economics from the Stockholm School of Economics.

Maximilian Freier is Senior Economist in the Fiscal Policies Division of the European Central Bank. He has filled several positions at the bank, including as Secretary of the ESCB Working Group in Public Finance. He holds degrees in Economics and Political Science from the University of Munich as well as a PhD from the London School of Economic and Political Science.

Wim Melyn is Economist in the public finance unit of the Economics and Research Department of the National Bank of Belgium. He has worked also in the units on international economy and national accounts and business cycle. He holds a degree in Economics and a Master of Arts in Economics from the University of Leuven.

Stefan Van Parys is leading the public finance unit of the Economics and Research Department of the National Bank of Belgium. He has been working as assisting academic staff at Ghent University, as consultant at the World Bank, as guest teacher in public economics at the KU Leuven, and as advisor to the Minister of Finance. Stefan holds a PhD from Ghent University.

Lukas Reiss is Senior Expert for fiscal policies at the Oesterreichische Nationalbank (OeNB). He has been working at the OeNB's Economic Analysis Division since 2007, interrupted by stays at the ECB's Fiscal Policies Division and the Austrian Parliamentary Budget Office. He holds a doctoral degree from the Vienna University of Economics and Business.

SUERF Publications

Find more SUERF Policy Notes and Policy Briefs at www.suerf.org/policynotes

SUERF The European Money and Finance Forum

SUERF is a network association of central bankers and regulators, academics, and practitioners in the financial sector. The focus of the association is on the analysis, discussion and understanding of financial markets and institutions, the monetary economy, the conduct of regulation, supervision and monetary policy. SUERF's events and publications provide a unique European network for the analysis and discussion of these and related issues. SUERF Policy Notes focus on current financial, monetary or economic issues, designed for policy makers and financial practitioners, authored by renowned experts.

The views expressed are those of the author(s) and not necessarily those of the institution(s) the author(s) is/are affiliated with.

All rights reserved.

Editorial Board: Natacha Valla, Chair Ernest Gnan Frank Lierman David T. Llewellyn Donato Masciandaro

SUERF Secretariat c/o OeNB Otto-Wagner-Platz 3 A-1090 Vienna, Austria Phone: +43-1-40420-7206 www.suerf.org • suerf@oenb.at