

Box A: Principles-Based Approach to the Budgetary Rule

The Council's mandate includes assessing compliance with Ireland's domestic Budgetary Rule as set out in the *Fiscal Responsibility Act 2012*. The Budgetary Rule requires that the general government budgetary position be in balance or in surplus, or on an appropriate path to meet this condition. In practice, the Budget Rule is deemed to be achieved if the structural balance meets a specified structural balance target, the so-called Medium-Term Objective (MTO), or is on an appropriate path towards it.

Until recently, the Council has followed the European Commission's approach to assessing compliance with the EU fiscal rules as set out in the *Vade Mecum*. However, the Commission's approach has a number of shortcomings: first, calculating structural deficits for Ireland on the basis of output gap estimates produced under the Commonly Agreed Methodology (CAM) is highly problematic. The CAM estimates are excessively procyclical and are often implausible, particularly for Ireland, thus giving rise to estimates of the structural balance that are also implausible. Second, the application of the fiscal rules has a number of aspects that introduce excessive complications with questionable merit, as explained below.

In light of these issues, the Council has decided to follow a "principles-based approach" to assessing compliance with the domestic Budgetary Rule.^{4,5} The Council's new approach is based on the framework of the EU fiscal rules, but implements and interprets some aspects differently to make it simpler and more relevant for Ireland. The differences in the Council's approach, relative to the Commission's approach, are outlined below, along with the reasons for doing so. Table A.1 summarises the Council's principles-based approach, differences with the Council's previous approach, and the Commission's Approach.⁶

Potential Output and the Output Gap

CAM-based estimates of potential output and the output gap have a number of shortcomings, which can lead to implausible results, particularly for small open economies such as Ireland. As far back as December 2003, the Department of Finance has highlighted the unsuitability of CAM-based estimates of the output gap for Ireland (Department of Finance, 2003). The Council has on a number of occasions, also highlighted their shortcomings.⁷

Recognising these shortcomings, the Council and the Department have both developed suites of supply-side models to estimate alternative output gaps. The Department's preferred estimate of the output gap is the mid-point of their suite of GDP-based estimates, and it is these estimates of the supply-side of the economy around which the Government set their fiscal policy. As these supply-side estimates provide a more appropriate representation of the position of the economy in the cycle than the CAM-based estimates, the Council will use these estimates in assessing compliance with the Budgetary Rule.⁸ These GDP-based estimates will be used when calculating the structural balance and the reference rate for the Expenditure Benchmark.

Table A.1: Outline of Principles-Based Approach to the Budgetary Rule

⁴ The Council will continue to assess the Budgetary Rule under the Council's previous approach. However, this assessment will be included as an appendix in the Council's reports.

⁵ The Commission's CAM-based estimates are used for legal compliance with the EU fiscal rules.

⁶ These changes to the Council's approach to the Budgetary Rule have been communicated to the Department of Finance. While the fiscal rules are continuously evolving, any future changes to the Council's approach, and the rationale for changing the Council's approach, will be communicated clearly both to the Department and to the public.

⁷ See, for example, Box E of the November 2017 FAR (IFAC, 2017).

⁸ The *Fiscal Responsibility Act*, which sets out Ireland's domestic Budgetary Rule, does not specify the method by which the output gap is to be calculated in arriving at a structural balance estimate. This is part of the reason why the Department use their own version of the CAM to estimate the output gap.

Criteria	IFAC (New Approach)	IFAC (Old Approach)	European Commission Approach
Potential Output and the Output Gap	The Department's GDP-based estimates of potential output and the output gap.	The Department's CAM-based estimates of potential output and the output gap were used in all previous <i>Fiscal Assessment Reports</i> . For the <i>ex-post</i> Assessment, the European Commission's own CAM-based estimates were used.	The European Commission's own CAM-based estimates of potential output and the output gap.
Reference Rate for Expenditure Benchmark	Based on the Department's latest estimates of GDP-based potential output growth (i.e. not frozen).	Reference rate frozen by the Commission in spring of year $t-1$, for assessment of year t . The same reference rate is used for the <i>ex-post</i> assessment. For later years (e.g. years $t+2$ onwards) IFAC uses the Department's CAM-based estimates of potential output.	Based on the European Commission's CAM-based estimates of potential output, frozen in spring of year $t-1$. No reference rate is set for $t+2$ or later years.
Deflator for Expenditure Benchmark	Based on the Department's latest estimates of the demand-side GDP deflator (i.e. not frozen).	Based on the European Commission's estimates of the GDP deflator, frozen in spring of year $t-1$.	Based on the European Commission's estimates of the GDP deflator, frozen in spring of year $t-1$.
Adjustment Requirement and Convergence Margin	Based on the latest estimates of distance from the MTO in year $t-1$ (i.e. not frozen). No negative convergence margin applied.	Compliance assessed based on the most favourable of the adjustment requirements and convergence margins in the spring or autumn of year $t-1$, or spring of $t+1$ for the <i>ex-post</i> assessment (all based on the Commission's estimates of the output gap). No negative convergence margin applied.	Based on the European Commission's estimates of distance from the MTO that are frozen in either spring or autumn of year $t-1$ (whichever is more favourable). For <i>ex-post</i> assessment, requirements can be unfrozen in spring of year $t+1$ if these are more favourable in terms of compliance. Negative convergence margin allowed.
NAWRU	Assumed constant at 5.5%.	The Department's latest CAM-based estimates of the NAWRU.	The Commission's latest CAM-based estimates of the NAWRU.
Margin of Tolerance	No margin of tolerance.	No margin of tolerance.	0.25% of GDP from the MTO.
Budgetary Semi-Elasticity	0.588	0.522	0.522

Reference Rate and the Deflator used for the Expenditure Benchmark⁹

The Council's previous approach to setting the reference rate and the deflator used for assessing the Expenditure Benchmark closely followed the approach taken by the Commission. The Commission's approach uses reference rates and deflators that are frozen based on the Commission's estimates in spring of year $t-1$. The Commission's freezing

⁹ The reference rate for any year, t is calculated as an average of the estimated potential output growth rates from year $t-6$ to year $t+3$.

approach to setting the reference rate and the deflator is inconsistent with the Commission's approach to freezing the adjustment requirement and the convergence margin; while the reference rate and the deflator are frozen based on estimates in spring of year $t-1$ and cannot be updated, the adjustment requirement and convergence margin can be reset in autumn of year $t-1$, or in spring of year $t+1$. For example, these may be reset in cases where later estimates of the output gap prove more favourable in terms of compliance. In practice, this adds additional layers of complexity and means that a number of different vintages of potential output are required in order to assess compliance with the Expenditure Benchmark. Furthermore, estimates of potential output are often subject to end-point bias, and using estimates that are based on information from a number of years prior to the present day will exacerbate this problem. Additionally, more up-to-date estimates are closer to the true parameter values than previous estimates.

With these issues in mind, the Council has decided to simplify its approach to assessing compliance with the Expenditure Benchmark. It will use the Department's latest available GDP-based estimates of potential output when assessing compliance. While latest estimates provide a more accurate picture of where the economy is in the cycle, these estimates may be different to the estimates available at the time policy is set. As a result—in the event that the latest estimates show non-compliance with the Expenditure Benchmark—the Council will determine to what degree, if any, the non-compliance is as a result of changes in estimates between the time policy was set and the latest available estimates.

Adjustment Requirement and Convergence Margin

The Commission's freezing approach (which uses different vintages of potential output being used to freeze reference rates and adjustment requirements) is inconsistent and adds complexity to the assessment of the Budgetary Rule. In light of this, the Council will use the latest estimates of the distance of the structural balance from the MTO in year $t-1$ for estimating the adjustment requirements and the convergence margins for year t . The Council will not apply a negative convergence margin once the MTO has been overachieved in year $t-1$.¹⁰

NAWRU

The natural rate of unemployment or "NAWRU" is used as a key input for the CAM-based estimates of potential output.¹¹ It is also used in determining the level of government expenditure on unemployment benefits that can be attributed to the cyclical conditions (that is, more cyclical-unemployment expenditure is estimated as unemployment rates rise relative to their natural rate). This amount is deducted from the measure of spending assessed in the Expenditure Benchmark in calculating underlying spending levels not attributed to the cycle.

However, there are a number of issues with the CAM-based estimates of the NAWRU. Ideally, the estimated natural rate of unemployment would be relatively stable overtime, and one would not expect to see large fluctuations in the estimates of the natural rate from year to year. This is not the case with the CAM-based estimates of the NAWRU, as can be seen in Figure A.1. NAWRU estimates produced using the CAM track the actual unemployment rates very closely and both are evidently cyclical. These estimates are implausible. For instance, in 2012, the actual unemployment rate was 15.5 per cent, while the Commission and the Department estimated the NAWRU at 13.2 per cent. These estimates would imply that, if the

¹⁰ The Commission calculates allowed net spending growth rate limits that are compatible with Member States returning to their MTO, on the basis of the initial distance from the MTO, but regulations do not envisage any specific negative convergence margin.

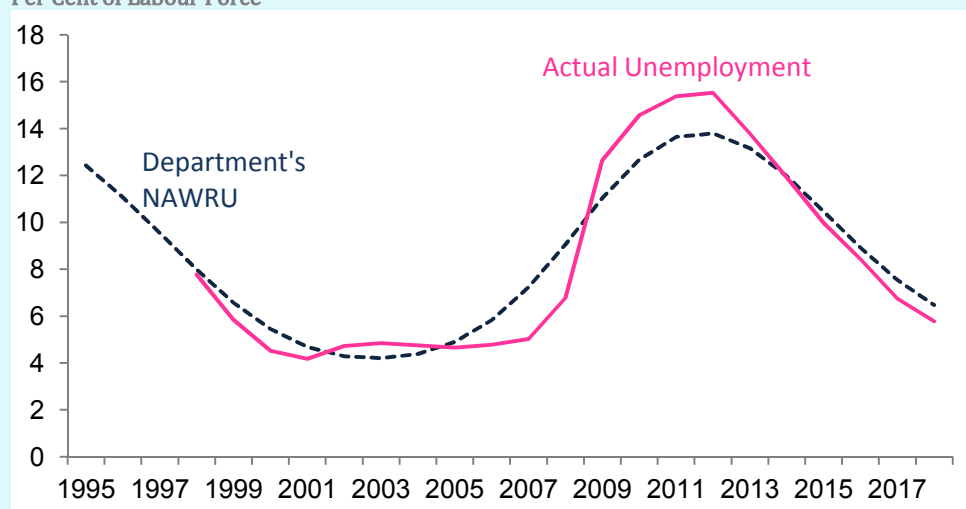
¹¹ NAWRU is an acronym for "non-accelerating wage rate of unemployment". Previously, the Commission had estimated a non-accelerating wage rate of unemployment for Ireland by empirically estimating the relationship between changes in wages growth and unemployment. However, the Commission have recently begun estimating the "NAWRU" for Ireland by using a HP filter to detrend the unemployment rate. As estimation no longer takes into account wage dynamics, this "NAWRU" can no longer be truly considered as a non-accelerating wage rate of unemployment, and is simply a trend unemployment rate.

actual unemployment rate fell below 13.2 per cent, then wages should grow at an increasing rate. However, this would not have been expected to happen, given the actual degree of slack in the labour market at the time.

As a result, the Council has decided to use a constant NAWRU to estimate the cyclical component of unemployment. In the absence of more plausible estimates of the natural rate of unemployment, the Council will use the rate that the Department's forecasts tend to converge to over the medium-term as a proxy for the natural rate of unemployment. This is in the region of 5.5 per cent. Note that this approach does not have to be precise about the actual *level* of the natural rate. Seeing as the measure focuses on changes in cyclical unemployment expenditure, what matters is how actual unemployment changes relative to any constant level (e.g., the assumed natural level, if constant, will tend to lead to similar estimates of cyclical unemployment costs regardless of the level chosen).

Figure A.1: Procyclicality of the NAWRU

Per Cent of Labour Force



Sources: CSO; Department of Finance; and AMECO database.

Note: The Department's estimates of the NAWRU are based on the Commission's current methodology for estimating the NAWRU for Ireland, which uses a HP filter.

Margin of Tolerance

The Council does not consider a margin of tolerance when assessing whether the structural balance is at the MTO. It is important that the fiscal rules are complied with, although any assessment should take into account the degree of non-compliance and the reasons why it occurred. The Commission apply a margin of tolerance—essentially, a degree of flexibility or a margin of error— of 0.25 percentage points of GDP from the MTO when assessing whether the MTO has been met or not.¹² The Council will continue to not apply the margin of tolerance in assessing whether the MTO has been achieved.

Budgetary Semi-Elasticity

The budgetary semi-elasticity is used in calculating the structural balance. Formally the structural balance, SB_t , at time t , is:

$$SB_t = GGB_t - one_offs_t - \varepsilon * OG_t$$

where GGB_t is the general government balance as a percentage of GDP, one_offs_t are temporary or one-off items as a percentage of GDP, which affect the general government balance in a given year, OG_t is the output gap, and ε is the budgetary semi-elasticity. In

¹² An example of this would be that if the MTO were -0.5 per cent, then the margin of tolerance would allow a Member State to run a structural deficit of 0.74 per cent while still meeting its MTO.

essence, the budgetary semi-elasticity is a measure of how responsive the budget balance is to a change in the cyclical position of the economy. The budgetary semi-elasticity was previously estimated by the Commission, and is currently set at 0.522. However, the budgetary semi-elasticity is estimated based on the Commission's CAM-based estimates of potential output. In order to be consistent with the choice of potential output used by the Council, the Council has re-estimated the budgetary semi-elasticity based on the Department's GDP-based estimates of potential output. The new budgetary semi-elasticity that the Council will use is 0.588.¹³

Principles-based approach in practice

In practice, this principles-based approach will mean that the Budgetary Rule will be assessed on more appropriate estimates of the underlying cyclical position of the economy. However, there are trade-offs. When using the latest estimates to evaluate compliance with the Budgetary Rule, there is a trade-off between simplicity in the rules and fairness in assessing compliance with the rules. The latest estimates of potential output and the output gap may not be the same as the estimates that were available at the time at which policy was set. This may mean that, in hindsight, policy may have been set inappropriately in relation to the position of the economy in the cycle. However, based on estimates at the time policy was set, this inappropriate stance may not have been evident. In light of this trade-off, the Council has opted for simplicity. In the event that the latest estimates show non-compliance with the Budgetary Rule, the Council will make a determination as to what degree, if any, the non-compliance is due to changes in the estimates between when policy is set and the latest estimates.

It is likely that there will, on occasion, be differences between the Council's principles-based assessment of the compliance with the Budget Rule and the Commission's assessment of compliance with the EU rules, despite the fact that they are based on the same underlying framework for fiscal policy. While any divergence would not be ideal, the Council's principles-based approach should offer a simpler and less distorted framework for assessing fiscal policy. The EU framework will likely continue to play an important role given the possibility of sanctions for non-compliance in the Stability and Growth Pact.

¹³ See Carroll, K. (2019) for details on the estimation of the budgetary semi-elasticity.