Irish Fiscal Advisory Council

## Analytical Note No. 7:

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# The EU Expenditure Benchmark: Operational Issues for Ireland in 2016

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## KEY MESSAGES

- If operated effectively, Ireland's new budgetary framework can help guard against policy mistakes such as expenditure growth based on unsustainable revenue streams. While the new rules are consistent with the principles of sound fiscal policy, any complex set of rules can sometimes give rise to anomalies. The operation of one feature of the framework – the expenditure benchmark – is arguably creating such an anomaly at present.

- Under the benchmark, allowable real expenditure growth was set in 2013 based on a 10-year average of potential GDP growth estimates from 2008 to 2017. Ireland's estimated potential GDP growth rates for the crisis years are extremely low such that the averaging formula leads to an estimated potential growth rate that is much lower than current estimates. This means that the expenditure benchmark is far more constraining on the fiscal stance than is required based on an updated estimate of the reference rate and the change in the structural balance rule.

- The most up-to-date EC estimates imply a reference rate for Ireland's underlying potential GDP growth of 1.8 per cent, significantly higher than the 0.6 per cent figure calculated in 2013. As an illustration, this updated reference rate would increase the allowable rate of expenditure growth in 2016 from -0.7 per cent under the current expenditure benchmark to +0.4 per cent.

- In carrying out its assessment of the appropriateness of the Government's fiscal stance in line with its mandate, the Council may exercise the available room for judgement in its assessments with respect to the expenditure benchmark.

- The Council supports a limited departure from the existing expenditure benchmark in 2016 provided three conditions are met. First, tax and spending decisions must ensure that the deficit continues to be reduced at a prudent pace and achieve at least the targeted reduction of 0.5 per cent of GDP in the structural balance. Second, the Government should clearly justify the departure from the existing benchmark, as well as the rationale for any new reference rate used. Third, the Government should underline its commitment to domestic multi-year expenditure ceilings.

- Regardless of whether a relaxation of the expenditure benchmark in 2016 is eventually pursued, there is limited room for discretionary tax cuts in 2016. Tax cuts would further tighten the expenditure benchmark in circumstances where the state faces growing medium-term expenditure pressures.

## 1. INTRODUCTION

An important achievement of Ireland's post-crisis policy making has been the institutionalising of a Medium-Term Budgetary Framework (MTBF). Comprising both national and European elements, the framework sets minimum requirements to guide the deficit back towards balance and support a path to safer debt levels. Respect for the framework should also ensure that there is no repeat of the mistake of allowing expenditure to grow based on what turn out to be unsustainable revenues, as happened in Ireland during the pre-crisis boom.

While a MTBF that incorporates principles of sound fiscal policy should underpin a prudent budgetary strategy, any complex set of rules can sometimes throw up anomalies. One feature of the framework – the expenditure benchmark – is arguably creating such an anomaly at present.

The expenditure benchmark is a key component of the preventive arm of the Stability and Growth Pact (SGP).[1] Under the benchmark, maximum allowable real expenditure growth is set to a 10-year average of estimated potential GDP growth. The value for allowable real expenditure growth in the years 2014 to 2016 was set in 2013.

When potential GDP growth is reasonably stable, the averaging/advance-setting approach should not produce serious distortions. However, the large negative impact that the recession had on Ireland's estimated potential GDP growth rates implies that the averaging formula leads to an estimated 10-year potential growth rate that is much lower than estimates made today for more recent and future years. This leads the expenditure benchmark to require a significantly more demanding deficit-reduction path than would normally be the case under the preventive arm of the pact.

For 2016, the expenditure benchmark limits expenditure growth to just -0.7 per cent in real terms, taking into account the estimated 10-year average potential growth rate and the convergence margin. As an illustration, using the most up-to-date estimates of potential GDP growth and re-centring the average to 2016 would increase the allowable rate of expenditure growth to 0.4 per cent.

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[1] The expenditure benchmark is closely linked to the setting of the Government's own medium-term expenditure ceilings under the Medium-Term Expenditure Framework. Annex 2 of the Government's Medium-Term Budgetary Framework shows the transition from the level of general government expenditure that is permitted under the expenditure benchmark to the Government Expenditure Ceiling (http://www.finance.gov.ie/sites/default/files/140718%20Medium%20Term%20Budgetary%20Framework%20-%20revised.pdf).

Given the importance of prudent fiscal policy to the achievement of sustainable growth and the history of expenditure-related mistakes made in the run-up to the crisis, it is vital that the fiscal stance is set to ensure a prudent path for reduction in actual and structural deficits. However, it is the Council's view than an overly rigid application of the rules could itself impose an inappropriate fiscal policy in the near term and also inadvertently undermine public support for a framework that should serve Ireland well over the longer term. Consequently, there is a case for a limited departure from the current very tight expenditure benchmark in 2016. This is conditional on an appropriately prudent plan for reducing the actual and structural deficit being in place in line with other requirements of the preventive arm.

The underlying principle behind the expenditure benchmark is sound. Increases in government expenditure funded out of unsustainable tax revenues were an important factor contributing to the rapid unravelling of Ireland's public finances from 2008. The expenditure benchmark aims to prevent a repeat of this mistake in future years. At issue in this note is not the existence of the expenditure benchmark rule but rather the anomalous guidance a purely mechanical implementation of the benchmark would provide for Ireland for 2016.

The note is structured as follows. Section 2 provides a brief overview of the preventive arm of the Stability and Growth Pact with particular attention to the expenditure benchmark. Section 3 then examines the analytics of the relationship between the change in the structural deficit and the expenditure benchmark, showing how certain features in the calculation of the benchmark could make it significantly more demanding in terms of the speed of required deficit reduction than the direct requirements to bring the structural deficit towards balance. This is followed in Section 4 with a quantitative analysis of the expenditure benchmark for Ireland. Finally, Section 5 concludes with a discussion of how the Council intends to apply the scope for judgement that is available in the SGP in its own statutory assessments.

## 2. Background on the Preventive Arm of the Stability and Growth Pact

The SGP includes both a corrective arm – operationalised through the Excessive Deficit Procedure (EDP) – and a preventive arm, which is focused on attaining a structural budget balance over the medium term. Since 2011, Irish budgetary decisions have been subject to the conditions of the EU-IMF Programme and the corrective arm of the EU SGP that required the Government to reduce the deficit to below 3 per cent of GDP by 2015. With the State having exited the EU-IMF programme

and with the 3 per cent ceiling likely to be complied with in 2015, a new phase of fiscal policy surveillance guided by Ireland's new budgetary framework will begin. This new framework is a combination of European-level elements under the reformed SGP and national-level elements that are designed to complement and extend the European rules.

Assuming the process of correcting the excessive deficit is completed in 2015, Ireland's public finances will be assessed under the preventive arm of the SGP and the Treaty on Stability, Co-ordination and Governance in the Economic and Monetary Union (the "Fiscal Compact"). [2,3] The preventive arm aims to ensure that a country follows appropriate fiscal policies, through monitoring and surveillance. The reforms to the SGP in 2011 as part of the so called "Six Pack" of new legislation have increased the level of surveillance at an earlier stage in order to identify any harmful fiscal trends which could lead to a breach of the SGP. The *Fiscal Responsibility Act* 2012 (FRA) gave effect to the budgetary and debt rules contained in the Fiscal Compact.

The preventive arm is focused on achieving a Medium-Term Budgetary Objective (MTO) for the structural budget balance. The structural balance is the surplus or deficit in the government's budget after adjusting for the cyclical position of the economy.

Within the preventive arm, Ireland is currently above its MTO. The country must meet a required minimum adjustment path to the MTO in terms of the annual reduction in its structural deficit.[4] To support these requirements, the preventive arm includes limits on the rate of growth of government spending known as the expenditure benchmark. Box A contains a definition and description of the expenditure benchmark.

The budgetary and debt rules contained in the Fiscal Compact have been given effect in Irish law through the Fiscal Responsibility Act 2012. These rules are consistent with meeting the requirements of the corrective and preventive arms of the SGP. To operationalise compliance with the expenditure benchmark in Ireland's domestic budgetary process, the Ministers and Secretaries (Amendment) Act 2013 put the Government Expenditure Ceiling and the previously administrative

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[2] The Department of Finance has usefully brought the various elements together in its Medium-Term Budgetary Framework (MTBF) document. The document is available at: http://www.finance.gov.ie/sites/default/files/131219%20Medium%20Term%20Budgetary%20Framework%20-%20FINAL%20REV.pdf.

[3] The procedures and policies for implementing the SGP are presented in the EC's "Vade Mecum" available here: http://ec.europa.eu/economy_finance/publications/occasional_paper/2013/pdf/ocp151_en.pdf

[4] As Ireland has a debt ratio of greater than 60 per cent of GDP, under the terms of the SGP, the annual change in the structural balance must be greater than 0.5 percentage points of GDP to comply with the Adjustment Path condition.

Ministerial Expenditure Ceilings on a statutory basis.[5] Multi-annual ceilings for expenditure for each department were introduced to address the shortcomings in the previous approach to expenditure management which focussed excessively on one-year ahead budgeting and frequently resulted in expenditure overruns.

### BOX A: THE EXPENDITURE BENCHMARK

The assessment of progress towards the MTO uses the structural balance as a reference, but also includes an analysis of expenditure growth net of discretionary revenue measures. The expenditure benchmark is an important factor in the overall assessment of compliance with the preventive arm of the Stability and Growth Pact.

It provides guidance on how expenditure should be set to fulfil the adjustment path condition when a country is not at its MTO or on maintaining the structural balance at the MTO once it is attained. In Ireland, the expenditure benchmark informs the setting of the statutory multi-year expenditure ceilings.

### TO CALCULATE THE BENCHMARK

The expenditure benchmark essentially says that annual expenditure growth should not exceed the medium-term rate of potential GDP growth, unless the excess is matched by discretionary revenue measures. If expenditure increases at the ***medium-term reference rate*** of potential GDP, the benchmark aims to ensure that there is no change in the structural budget balance.

Expenditure is measured excluding interest, cyclical unemployment spending and co-financing of EU programmes. Investment costs are smoothed over a four year period.

The reference rate of potential GDP growth is calculated over a 10-year window, incorporating estimates for the past 5 years of data, the current year and forecasts for the next 4 years from the European Commission (EC). This is re-calculated every three years.

For countries that have not reached their MTOs such as Ireland, an additional ***convergence margin*** is set to lower the growth rate of expenditure below the medium-term rate of potential GDP growth to ensure that the required change in the structural balance is achieved. In addition, the calculation of the expenditure benchmark further requires that any discretionary tax cuts are financed through lower spending or higher non-tax revenues or both.

The convergence margin is subtracted from reference rate of growth rate to give the allowable growth rate of spending. It is set so that the structural budget balance improves by 0.5 per cent of GDP as required under the adjustment path condition of the MTO.[6] The margin is higher if the public sector is smaller because a larger proportional change in

[5] The Government Expenditure Ceiling covers Voted expenditure authorised by the Dáil each year plus appropriations-in-aid and expenditure funded by the Social Insurance Fund and the National Training Fund.

[6] It can be shown that, if revenues grow in line with potential nominal GDP and interest spending is constant as a share of GDP, the 0.5 percentage point adjustment can be achieved by a convergence margin of 50/(primary expenditure as a percentage of GDP).

spending is needed to achieve a given improvement in the budget balance as a share of GDP.

For Ireland, the current expenditure benchmark would require real General Government expenditure to decline by 0.7 per cent in each year from 2014 to 2016. This is based on a reference rate of 0.6 per cent less a convergence margin of 1.4 per cent. The average of the Spring and Autumn EC forecasts for the GDP deflator is used to arrive at the permitted growth in nominal spending under the Expenditure Benchmark.

## 3. Some Analytics of the Expenditure Benchmark and its Relationship to the Change in the Structural Deficit

To get some preliminary insight into the workings of the expenditure benchmark, we begin by examining the case where – as at present – Ireland is required to reduce the structural deficit by at least 0.5 percentage points per year. It is useful to first identify a formula for the growth in structural primary expenditure that would be identical to the required change in the structural balance under the preventive arm. This provides a point of comparison for the actual calculation of the benchmark as set out in the European Commission's Vade Mecum on the Stability and Growth Pact (EC, 2013). We then examine how the actual formula used for the benchmark can introduce anomalies when the growth rate of potential output is highly variable.

Letting $def^*$ represent the structural deficit and $Y^*$ potential GDP, the change is the structural balance rule for a country on the adjustment path to its MTO is written as,

$$(1) \quad d\left(\frac{def^*}{Y^*}\right) < -0.005.$$

Taking the total differential of the structural deficit to potential GDP ratio we obtain:[7]

$$(2) \quad \frac{d(def^*)}{Y^*} - \frac{def^*}{Y^*} g^* < -0.005,$$

[7] All changes are implicitly with respect to a unit of time in annual terms. Time notation is dropped for notational simplicity.

where $g^*$ is the growth rate of potential GDP.

Now using the definition of the structural deficit as the sum of structural primary expenditure ($E^*$) and interest costs ($rB$) less structural revenue ($R^*$), we can rewrite (2) as:

$$(3) \quad \frac{d(E^*)}{Y^*} + \frac{d(rB)}{Y^*} - \frac{d(R^*)}{Y^*} - \frac{E^*}{Y^*}g^* - \frac{rB}{Y^*}g^* + \frac{R^*}{Y^*}g^* < -0.005$$

Rearranging (see Annex 1), we can re-write the required change in the structural balance equation as equation (4) that shows the feasible rate of structural primary expenditure growth:

$$(4) \quad \frac{d(E^*)}{E^*} < g^* - \frac{d\left(\frac{rB}{Y^*}\right)}{\frac{E^*}{Y^*}} + \frac{d\left(\frac{R^*}{Y^*}\right)}{\frac{E^*}{Y^*}} - \frac{0.005}{\frac{E^*}{Y^*}}.$$

Equation (4) shows the growth in structural primary expenditure that is consistent with reducing the structural deficit as a share of GDP by at least 0.5 percentage points annually. The actual expenditure benchmark rule used in the SGP makes a number of adjustments to this basic formula. First, the potential growth rate in the relevant period is replaced by an averaging formula to produce what is termed the "reference medium-term rate" for potential GDP growth. Starting from the current year *t*, the reference medium-term rate in year *t* is replaced by a 10-year moving average of measured and projected growth rates for the years from *t-5 to t+4.* Furthermore, the reference rate is set in advance for a three-year period. The reference rate for Ireland for the period 2014-2016 was set in 2013 and is 0.6 percent. The rate for the period 2017-2019 will be set in 2015 based on then available outturn data and forecasts (see section 4).

Second, the effect of changes in interest costs as a share of potential GDP is excluded through the chosen definition of spending. The reason for this exclusion appears to be that the focus should be on expenditure that is controllable by the government. However, this exclusion means that, all else equal, the expenditure benchmark rule will be looser than the change in the structural balance rule when debt interest costs are rising as a share of potential GDP and tighter when that share is falling.

Third, changes in revenue as a share of potential GDP are only included when those changes result from discretionary tax change measures. Thus, a discretionary income tax increase, for example, would increase the allowable growth in expenditure. On the other hand, a discretionary income tax cut would reduce the allowable growth in this expenditure aggregate. Revenue changes that do not result from discretionary policy changes cannot be used to increase the allowable rate of expenditure growth. This addresses a key motivation for the expenditure benchmark: if revenues increase because of, say, an unsustainable property-price and construction boom, the expenditure benchmark is designed to prevent spending following suit and leading eventually to a costly correction.

Fourth, a number of other adjustments are made to the expenditure aggregate used in the benchmark. Actual investment spending is replaced by a four-year average for the years *t-3* to *t*. And expenditure on EU programmes that is fully matched by EU funds is also excluded.

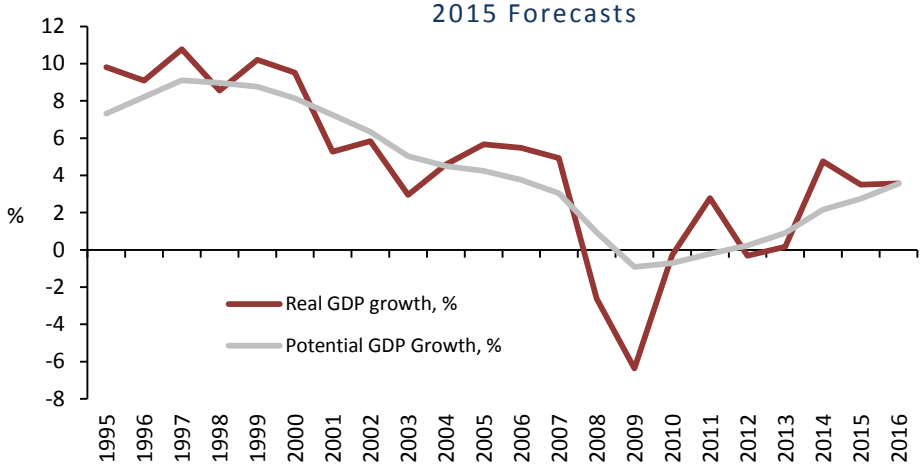
The calculation of the reference medium-term rate under the expenditure benchmark depends on the estimated of growth in potential GDP, which is subject to errors and revisions. The actual formula used for the reference rate should produce reasonable results when potential GDP growth is reasonably stable, so that the 10-year averaging formula and advance setting of the benchmark do not introduce serious distortions.

For the current Irish situation, however, the averaging formula and compounding effects of the advance setting of the benchmark and revisions to potential GDP growth are producing a severe distortion. The reason stems from the deep recession and associated low (and in some years negative) growth in potential GDP over the recession years. The difficulties with calculating reliable estimates of potential GDP in an Irish context as well as the problems with the EC approach have been well documented.[8] The EC methodology produces estimates for potential output that track actual output growth quite closely. As a result, as shown in Figure 1, as actual GDP growth fell sharply during the crisis, the measured estimates of Ireland's potential GDP growth also declined, even turning negative for three years from 2009. As noted above, the reference rate for potential real GDP growth on which the 2014 to 2016 is reference medium-term rate is based is calculated by taking the average potential GDP growth rate from 2008 to 2016 as assessed in 2014. As a result of the very low estimated potential growth for the crisis years, the reference potential output growth rate for 2014 to 2016 is just 0.6 percent. In addition, the potential output estimates have been

[8] See http://www.fiscalcouncil.ie/wp-content/uploads/2014/06/AN_2.pdf , FitzGerald and Bergin (2013) and Suyker (2015) http://www.cpb.nl/en/publication/structural-budget-balance-love-first-sight-turned-sour

revised upwards since they were determined in 2013. The use of the current reference rate calculation means that the expenditure benchmark is far more constraining on the fiscal stance than is required based on an updated estimate of the reference rate and the change in the structural balance rule.

Figure 1: Actual and Potential GDP Growth, EC Winter 2015 Forecasts




*Source:* EC *Winter 2015* forecasts.

To see more clearly how much these distortions could affect the required change in the structural deficit, consider the following equation (see Annex 1 for full derivation) for the implied change in the structural deficit due the imposition of the expenditure benchmark, where $\bar{g}^*$ is the medium-term reference rate embodied for 2014 to 2016 under the expenditure benchmark:

$$(5) \quad d\left(\frac{def^*}{Y^*}\right)^{EB} < (\bar{g}^* - g^*)\frac{E^*}{Y^*} + d\left(\frac{rB}{Y^*}\right) - d\left(\frac{R^*}{Y^*}\right) - 0.005.$$

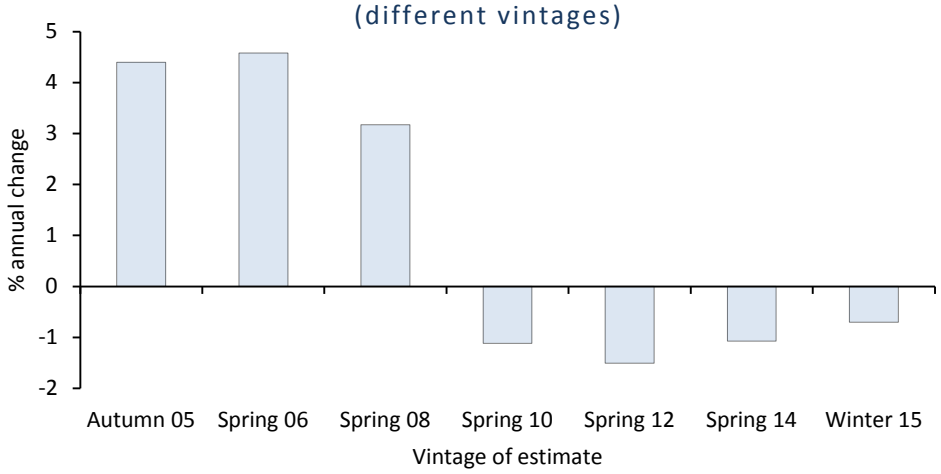
This equation shows the effect that a deviation between the medium-term reference and contemporaneous rates of potential GDP growth can have on the required reduction in the structural deficit. This is illustrated in Section 4 using numerical examples.

## 4. A Quantitative Analysis of the Expenditure Benchmark

As discussed in Section 3, the calculation of the reference rate is based on a 10 year annual average growth in potential output, estimated using the European methodology. These estimates of potential growth are quite volatile and subject to revision up to three times a year by the EC. Figure 2 below shows how EC estimates of potential growth for 2010 were revised from 2005 to 2015. The

estimates for other crisis years display a similar pattern of revision. It follows that allowed government expenditure growth under the benchmark would vary significantly depending on whether the more recent later (lower) estimates of potential growth or contemporaneous figures were used.

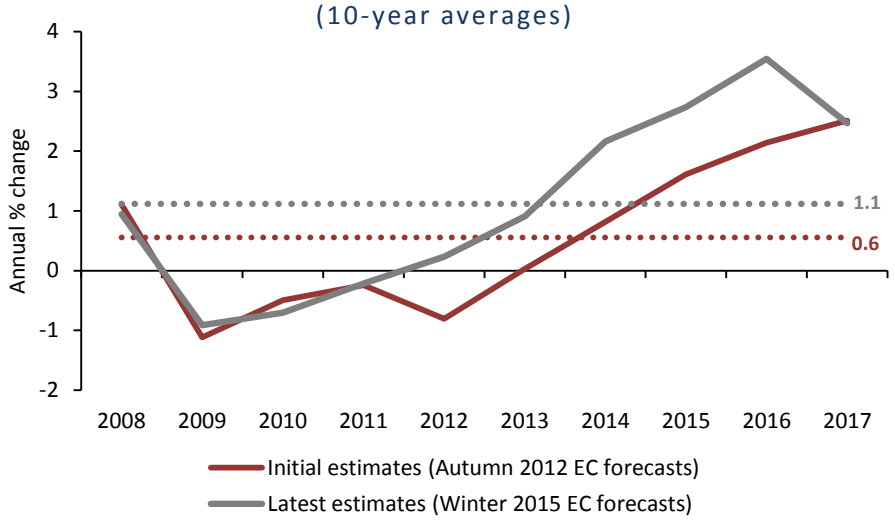
Figure 2: Estimates of 2010 Potential output growth (different vintages)




*Source:* EC CIRCA website.

The current reference rate applying to Irish expenditure growth is based on forecasts of potential output from the EC's *Autumn 2012* forecasts. The ten-year average covers the period from 2008 to 2017. Since then, there have been changes to data, forecasts and methodology. Updating the estimation of this reference rate for the latest forecasts from their *Winter 2015* publication, while maintaining the same 10 year period in the calculation, would increase the implied reference rate to apply in 2016 from 0.6 percent to 1.1 percent as shown in Figure 3. Using the revised reference rate of 1.1 per cent would see the expenditure benchmark for 2016 increase from the current -0.7 per cent to -0.3 per cent (Table 1 and Figure 3).

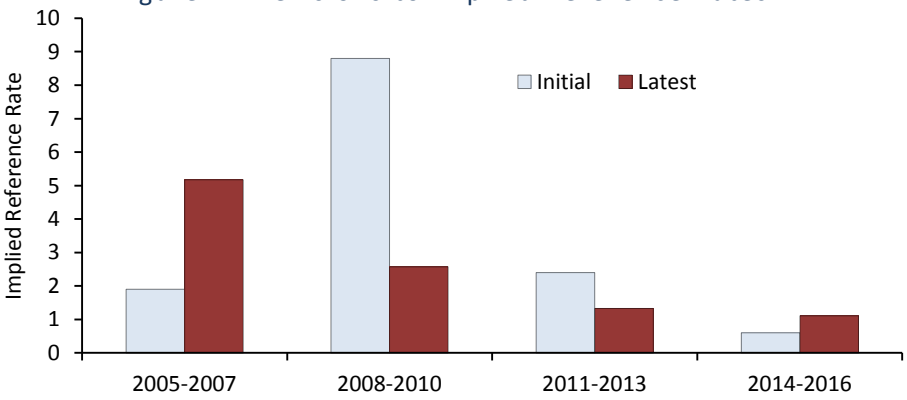
Figure 3: Reference Rate Estimates
(10-year averages)




*Sources:* IFAC calculations based on data from CIRCA website.

To examine these effects over a longer period, a hypothetical reference rate for the period 2008 to 2010 can be estimated by calculating the average annual growth in potential output for the ten years from 2002 and 2011 using the EC's forecasts published in autumn 2006.[9] Figure 4 compares these 'initial' reference rate estimates with estimates based on the latest *Winter 2015* forecasts.

Figure 4: Revisions to Implied Reference Rates



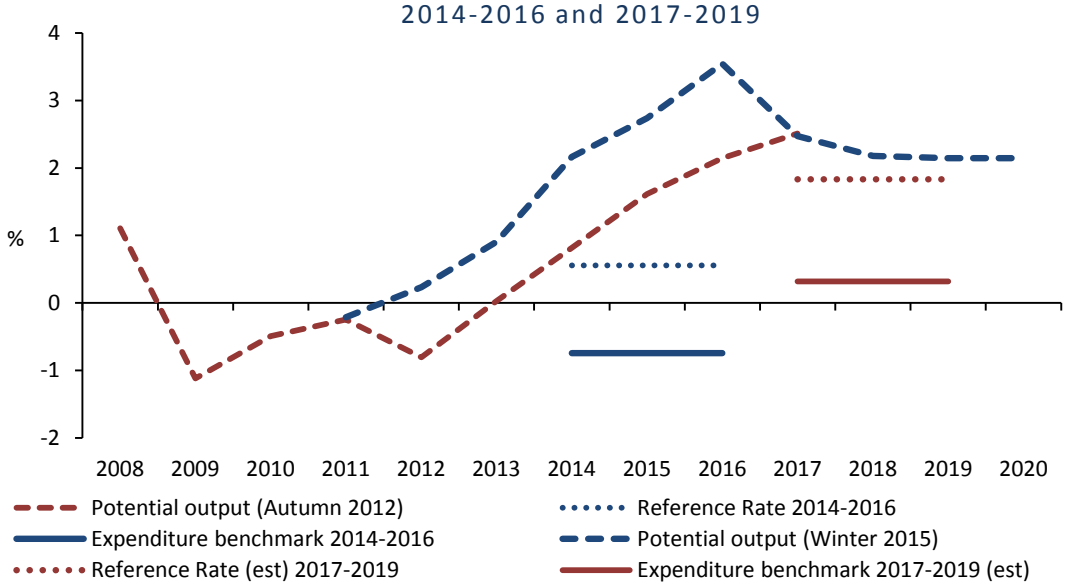

*Sources:* IFAC calculations based on data from CIRCA website.

Due to the revisions to potential growth estimates, there are substantial divergences between the initial reference rates and the most recent estimates, for example for the 2008 to 2010 period the reference rate would have been set at 8.8 percent per annum, whereas the latest figures would put the reference rate for this period at 2.6 percent.

[9] Vintages of EC potential output estimates are available on the CIRCA website.

The expenditure benchmark for the period 2017-2019 is due to be set following the Autumn 2015 EC forecasts, which will be published later this year. The allowable rate of spending growth under the new expenditure benchmark will be set based on the new reference rate which will be the average potential growth rate from 2011 to 2020. An illustrative estimate can be calculated based on the latest available EC forecasts: the implied reference rate is 1.8 per cent (Figure 5 - dotted red line), which together with the convergence margin of 1.5 percentage points would constrain spending growth to 0.3 percent in real terms (solid red line). [10] As a result, expenditure growth would change abruptly from the -0.7 per cent permitted growth in 2016 under the current expenditure benchmark to an estimated +0.3 per cent in 2017 (Figure 5).[11]

Figure 5: Expenditure Benchmark Estimates 2014-2016 and 2017-2019




*Sources:* IFAC calculations based on EC Autumn 2012 and Winter 2015 Forecasts.

The current expenditure benchmark was calculated using a 10-year average of potential growth centred on 2013. An estimate of the expenditure benchmark based on an alternative 10-year window centred on 2016 can be calculated and is shown in the bottom row of Table 1. Centring the 10-year average window around 2016 means that the crisis years of 2008 to 2010 drop out of the calculation of the reference potential growth rate. As a result, allowable expenditure growth in

[10] The convergence margin is calculated based on the EC's forecast of primary expenditure as a share of GDP. This adjustment to the expenditure benchmark is not applied when the structural balance reaches MTO; 2018 based on the structural balance forecasts published in *Budget 2015*.

[11] Once Ireland reaches its MTO, the convergence margin will no longer apply and the reference rate will be the sole determinant of the expenditure benchmark.

2016 would be 0.4 per cent, one percentage point higher than allowed under the current benchmark.

Table 1: Expenditure Benchmark Estimates using Alternative Forecast Vintages and 10 year Windows[12]

| Vintage and Range | Measure | 2016 |
|---|---|---|
| Original Expenditure Benchmark, centred on 2013<br><br>Autumn 2012 EC forecasts, 10 year avg. 2008-2017 | Reference Rate | 0.6 |
| | Expenditure Benchmark: real | -0.7 |
| | Implied nominal growth | -0.1 |
| | Change in structural balance | 0.9 |
| Updated Vintage Expenditure Benchmark, centred on 2013<br><br>Winter 2015 EC forecasts, 10 year avg. 2008-2017 | Reference Rate | 1.1 |
| | Expenditure Benchmark: real | -0.3 |
| | Implied nominal growth | 0.3 |
| | Change in structural balance | 0.7 |
| Updated Vintage and Range Expenditure Benchmark, centred on 2016<br><br>Winter 2015 EC forecasts, 10 year avg. 2011-2020 | Reference Rate | 1.8 |
| | Expenditure Benchmark: real | 0.4 |
| | Implied nominal growth | 1.0 |
| | Change in structural balance | 0.5 |

*Notes: Calculations based on equation 5 in Section 3 using data from EC Winter 2015 forecasts. Implied nominal expenditure growth under the expenditure benchmark is calculated using the EC forecasts for the GDP deflator.*

Based on the approach of centring the 10-year window on 2016 and using the most recent vintage of EC forecasts to produce a reference rate of 1.8 per cent and an expenditure benchmark of 0.4 per cent,[13] it is possible to calculate the implied reduction in the structural deficit. As shown in Table 1, this would be 0.5 per cent in 2016. This is less stringent than the 0.9 per cent improvement in the structural balance implied by the existing expenditure benchmark in 2016.

## 5. Conclusion

The Council identifies a number of specific technical problems with how Ireland's current expenditure benchmark is operationalised for 2016. These include:

1. Under the benchmark, allowable real expenditure growth is based on a 10-year average of outturns and forecasts of potential GDP growth. The 10-year average period (2008 to 2017) used to calculate the current expenditure benchmark includes the crisis years, a period in which estimates of potential output using the European methodology are extremely low.

[12] It is assumed that the same convergence margin of 1.4 per cent applies in all cases.

[13] This is equivalent to the calculation of the expenditure benchmark for 2017 to 2019.

When the expenditure benchmark is calculated for the 2017 to 2019 period, the reference rate is likely to increase significantly from the current 0.6 per cent.

2. The calculation of the expenditure benchmark is based on potential output growth, estimates of which are subject to large revisions. The original calculation of the expenditure benchmark for the years 2014 to 2016 was carried out in 2013. Since then, the underlying estimates of Ireland's potential growth have been revised substantially;

The implication of these technical problems for the operation of the expenditure benchmark for Ireland in the current circumstances is that, although the underlying principle of the rule is sound, the expenditure benchmark as currently specified for 2016 is too restrictive. The problems with how the benchmark is operationalised in an Irish context calls for caution in adhering to an overly rigid interpretation of the rule. As a result, there is a case for a limited departure from the current very tight benchmark in 2016.

The preventive arm of the SGP allows for judgement to be exercised in assessing compliance with the expenditure benchmark provided an appropriate adjustment in the structural balance is being pursued.[14, 15]

Under its mandate, the Council is required to assess the appropriateness of the Government's fiscal stance with reference to the requirements of the SGP. It is also required to assess compliance with

[14] The Specifications on the implementation of the Stability and Growth Pact or ("Code of Conduct"), agreed by the European Council of Finance Ministers, states (p.6)

"Member States that have not yet reached their MTO should take steps to achieve it over the cycle. Their adjustment effort should be higher in good times; it could be more limited in bad times. In order to reach their MTO, Member States of the euro area or of ERM-II should pursue an annual adjustment in cyclically adjusted terms, net of one-off and other temporary measures, of 0.5 of a percentage point of GDP as a benchmark. In parallel, the growth rate of expenditure net of discretionary revenue measures in relation to the reference medium-term rate of potential GDP growth should be expected to yield an annual improvement in the government balance in cyclically adjusted terms net of one-offs and other temporary measures of 0.5 of a percentage point of GDP. The reasons for differences between the results yielded by the two benchmarks should be carefully assessed."

[15] The European Commission's manual on the implementation of the SGP (the so-called "Vade Mecum") states (p.32):

"The overall ex ante assessment of the SCPs [Stability and Convergence Programmes] uses the structural balance as a reference and include an analysis of compliance with the expenditure benchmark. It acts as an assessment of the overall compliance of the Member State with the requirement of the preventive arm.

This assessment concludes that the Member State is compliant with the preventive arm if the assessment of compliance with both the change in the structural balance and the expenditure benchmark are positive. In the case where only one of these two conditions is met, judgement will be exercised."

[15] Under the Fiscal Responsibility Act (2012, 2013), the Council is required to assess that the fiscal stance is conducive to prudent economic and budgetary management, with reference to the rules of the SGP.

the Budgetary Rule of the Fiscal Responsibility Act 2012. Provided certain conditions are met, the Council may exercise the available room for judgement in its assessments with respect to the expenditure benchmark.

More specifically, the Council supports a limited departure from the existing expenditure benchmark in 2016 provided three conditions are met. First, tax and spending decisions must ensure that the deficit continues to be reduced at a prudent pace and achieve at least the targeted reduction of 0.5 per cent of GDP in the structural balance. Second, the Government should clearly justify the departure from the existing benchmark, as well as the rationale for any new reference rate used. Third, the Government should underline its commitment to domestic multi-year expenditure ceilings. This should be based on a well-articulated medium-term fiscal plan in the forthcoming *Stability Programme Update*.

Regardless of whether a relaxation of the expenditure benchmark in 2016 is eventually pursued, two points that have been emphasised in the Council's *Fiscal Assessment Reports* in relation to the impact of discretionary tax cuts are worth highlighting. First, in the context of the expenditure benchmark, discretionary tax cuts reduce the allowable growth in expenditure. To the extent that the current expenditure benchmark is deemed to be excessively constraining, the impact of discretionary tax cuts which have the effect of further tightening the expenditure benchmark needs to be considered. Second, the Council has emphasised that the state faces growing medium-term expenditure pressures in areas such as health, education and pensions. Given the likely need to fund higher expenditure in these areas in the coming years, this also argues against an erosion of the government's revenue raising capacity.

In its upcoming *Fiscal Assessment Report* (June), the Council will provide its assessment of the appropriateness of the medium-term fiscal stance that will be set out by the Government in the forthcoming *Stability Programme Update* (April). The European Commission will also provide its ex ante assessment of the *Stability Programme Update* in June.

# ANNEX 1: DERIVATION OF THE EXPENDITURE BENCHMARK

## 1. RELATIONSHIP BETWEEN THE EXPENDITURE BENCHMARK AND THE CHANGE IN THE STRUCTURAL BALANCE

Letting $def^*$ represent the (real) structural deficit and $Y^*$ (real) potential GDP, the change is the structural balance rule for a country on the adjustment path to its MTO is written as,

$$(A1) \quad d\left(\frac{def^*}{Y^*}\right) < -0.005.$$

Taking the total differential of the structural deficit to potential GDP ratio we obtain:[16]

$$(A2) \quad \frac{d(def^*)}{Y^*} - \frac{def^*}{Y^*}g^* < -0.005,$$

where $g^*$ is the growth rate of potential GDP.

Now using the definition of the structural deficit as the sum of structural primary expenditure ($E^*$) and interest costs ($rB$) less structural revenue ($R^*$), we can rewrite (A2) as:

$$(A3) \quad \frac{d(E^*)}{Y^*} + \frac{d(rB)}{Y^*} - \frac{d(R^*)}{Y^*} - \frac{E^*}{Y^*}g^* - \frac{rB}{Y^*}g^* + \frac{R^*}{Y^*}g^* < -0.005$$

Noting that,

$$(A4) \quad d\left(\frac{R^*}{Y^*}\right) = \frac{d(R^*)}{Y^*} - \frac{R^*}{Y^*}g^*, \qquad \text{and}$$

$$(A5) \quad d\left(\frac{rB^*}{Y^*}\right) = \frac{d(rB^*)}{Y^*} - \frac{rB}{Y^*}g^*,$$

we can rewrite (A3) as:

$$(A6) \quad \frac{d(E^*)}{Y^*} - \frac{E^*}{Y^*}g^* + d\left(\frac{rB^*}{Y^*}\right) - d\left(\frac{R^*}{Y^*}\right) < -0.005.$$

We next divide both sides of (A6) by structural primary expenditure as a share of potential GDP:

[16] All changes are implicitly with respect to a unit of time in annual terms. Time notation is dropped for notational simplicity.

$$\text{(A7)} \quad \frac{\frac{d(E^*)}{Y^*}}{\frac{E^*}{Y^*}} - g^* + \frac{d\left(\frac{rB^*}{Y^*}\right)}{\frac{E^*}{Y^*}} - \frac{d\left(\frac{R^*}{Y^*}\right)}{\frac{E^*}{Y^*}} < \frac{-0.005}{\frac{E^*}{Y^*}}.$$

Following some cancellation and rearrangement, we can finally re-write the required change in the structural balance equation as an equation that shows the feasible rate of structural primary expenditure growth:

$$\text{(A8)} \quad \frac{d(E^*)}{E^*} < g^* - \frac{d\left(\frac{rB}{Y^*}\right)}{\frac{E^*}{Y^*}} + \frac{d\left(\frac{R^*}{Y^*}\right)}{\frac{E^*}{Y^*}} - \frac{0.005}{\frac{E^*}{Y^*}}.$$

## 2. Calculation of the Reference Rate and the Change in the Structural Deficit

To see more clearly how the issue around the calculation of the reference rate could affect the required change in the structural deficit, note first that the formula for the expenditure benchmark used by the European Commission can be written as:[17]

$$\text{(A9)} \quad \frac{d(E^*)}{E^*} < \bar{g}^* - \frac{0.005}{\frac{E^*}{Y^*}},$$

where $\bar{g}^*$ is the medium-term reference rate for the growth of potential GDP and the second term is the convergence margin. As shown above, under certain conditions, the convergence margin would ensure that expenditure growth is consistent with the structural deficit falling at the required rate of greater than 0.5 percentage points per year.[18]

Equation (A9) can usefully be re-arranged as:

$$\text{(A10)} \quad \frac{d(E^*)}{Y^*} < \bar{g}^* \frac{E^*}{Y^*} - 0.005.$$

Next note that the change in the structural deficit can be written as:

$$\text{(A11)} \quad d\left(\frac{def^*}{Y^*}\right) = \frac{d(E^*)}{Y^*} - \frac{E^*}{Y^*} g^* + d\left(\frac{rB}{Y^*}\right) - d\left(\frac{R^*}{Y^*}\right)$$

[17] Here we ignore the averaging formula for investment and expenditure on EU programme. These elements will be taken into account in the quantitative analysis in Section 4.

[18] Until Ireland reaches its MTO of structural balance, a convergence margin of -1.4 percentage points is applied. This is calculated as -0.005 divided by 0.3, where 0.3 is the share of primary structural expenditure.

Substituting (A10) into (A11) yields an equation for the implied change in the structural deficit due to the imposition of the expenditure benchmark:

$$(\text{A12}) \quad d\left(\frac{def^*}{Y^*}\right)^{EB} < (\bar{g}^* - g^*)\frac{E^*}{Y^*} + d\left(\frac{rB}{Y^*}\right) - d\left(\frac{R^*}{Y^*}\right) - 0.005.$$