ANALYTICAL NOTE 5: FUTURE IMPLICATIONS OF THE DEBT RULE

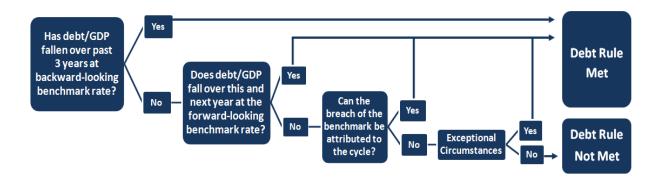
The EU *Stability and Growth Pact* (*SGP*) debt criterion was implemented in late 2011 as part of the EU "six pack" of reforms, while the Debt Rule came into force with the *Fiscal Responsibility Act* in 2012. While the *SGP* has always had a 60 per cent debt ceiling, this was not made operational until the 2011 reforms. The EU *SGP* debt criterion is part of the "corrective arm" of the Pact, alongside the 3 per cent of GDP deficit criterion, and is therefore subject to stricter enforcement mechanisms than rules under the "preventive arm" of the Pact, including the possibility of Excessive Deficit Procedures (EDPs).

The Debt Rule and the *SGP* debt criterion, including the benchmark for convergence towards the debt criterion, are identical. The Debt Rule will apply from the year Ireland's excessive deficit is corrected, although transition arrangements will apply for the first three years. They will apply whether or not the EDP is formally ended ('abrogated'), which would typically occur in the year after the deficit falls below the 3 per cent of GDP limit (see Section 4.3). In Ireland transitional arrangements under the debt rule will apply to end-2018.

OVERVIEW OF THE DEBT RULE

The Debt Rule basically requires that the debt-to-GDP ratio should fall by an average of one-twentieth of the excess between the actual debt ratio and 60 per cent of GDP. This requirement is expressed as a benchmark debt-to-GDP ratio, rather than in terms of the change in the ratio, and is calculated over three years.

There are three conditions under the Debt Rule relating to various different benchmarks. These conditions apply sequentially, implying that the requirement under the debt rule is based on the least demanding of the conditions at any point in time. The rules can be represented using a flowchart:



The backward-looking and forward-looking benchmarks are defined respectively as:

Backward looking benchmark

$$= 60\% + \left(\frac{0.95}{3}\right)(b_{t-1} - 60\%) + \left(\frac{(0.95)^2}{3}\right)(b_{t-2} - 60\%) + \left(\frac{(0.95)^3}{3}\right)(b_{t-3} - 60\%)$$

Forward looking benchmark

$$= 60\% + \left(\frac{0.95}{3}\right)(b_{t+1} - 60\%) + \left(\frac{(0.95)^2}{3}\right)(b_t - 60\%) + \left(\frac{(0.95)^3}{3}\right)(b_{t-1} - 60\%)$$

where *b* is the debt to GDP ratio and the forward-looking benchmark uses forecasts made by the European Commission (EC) on the basis of unchanged policies.

The EC has published a methodology for adjusting the debt-to-GDP ratio to provide a cyclically-adjusted figure that can then be compared with the backward-looking benchmark rather than the headline figure. This adjusted debt-to-GDP ratio corrects both the debt level and GDP for the cycle using the following approximation:

$$\left(\frac{B_t}{Y_t}\right)^{3-years-adjusted} = \left(\frac{B_t + \sum_{j=0}^2 (C_{t-j})}{Y_{t-3} \prod_{h=0}^2 (1 + y_{t-h}^{pot})(1 + p_{t-h})}\right)$$

where B is debt, Y is GDP at current prices, y^{pot} is potential growth, p is the price deflator and C is the cyclical part of the budget balance.

This equation adjusts the debt ratio for the cumulative estimated cyclical component for the current and previous two years, and adjusts GDP for the difference between potential and actual growth over the same period.¹

¹ Given that it is only calculated over a three-year window, it does not necessarily fully adjust for the impact of the cycle. For example, in the fourth year of below potential output, it would only adjust the accumulated level of debt and the level of GDP relative to potential for the cumulated cyclical impact for the three years. It therefore only adjusts partially for the level of the estimated output gap. The approximation does not adjust for interest paid on accumulated cyclical balances.

For countries such as Ireland, with a debt ratio greater than 60 per cent of GDP and in an EDP on 8 November 2011, the Debt Rule and criteria will still apply but there will be transition arrangements for the three years following EDP exit. Over these years, countries are assessed on whether they are making sufficient progress towards compliance with the debt criteria. For Ireland, these arrangements apply from 2016 to 2018 if the EDP deficit target is met in 2015, as planned in the *SPU 2014*. Over this period, the structural balance would be required to improve in equal steps so that the Debt Rule is met at the end of the transition period.

IMPLICATIONS FOR FISCAL POLICY FROM 2016

It appears likely that compliance with the debt criteria will not be the binding constraint on fiscal policy following EDP exit. This is because a higher budget balance is being assumed in *SPU 2014*, which implies a faster reduction in the structural budget balance than the minimum required under the adjustment path to the MTO.

While transitional arrangements will be in place until end-2018, the projections in Table N.1 show that the debt rules would nonetheless be met from 2016 as the debt ratio would be below the forward-looking debt benchmark, i.e., the benchmark for 2016 requires a debt-to-GDP ratio of less than 112 per cent in 2018 and the forecast ratio is 107.3 per cent. From 2017, both the actual and cyclically adjusted debt ratios comply with the backward looking benchmark.

TABLE N.1: DEBT-TO-GDP RATIOS AND BENCHMARKS

	2013	2014	2015	2016	2017	2018
Debt/GDP ratio	123.7	121.4	120.0	115.9	112.0	107.3
Cyclically-adjusted ratio	125.4	120.6	119.5	116.8	112.8	107.5
Backward-looking Benchmark				115.7	113.3	110.4
Forward-looking Benchmark				112.0		

Note: Bold denotes debt measures and benchmarks that would ensure compliance with the debt rules. Calculations are based on data from *SPU 2014*. (For the forward-looking benchmark a constant structural budget balance is assumed from 2016. The forward looking benchmark in 2016 should be compared to the forecast debt to GDP ratio in 2018.)

² The adjustment over this three year period is the least demanding after taking account of the effect of the cycle and the forward looking rule, while still ensuring the debt rule is complied with by the end of the transition arrangements.

³ See Annex 6 of EC (2013c).

⁴ These projections are based on the medium-term scenario published in the *SPU 2014*.

In essence, the level of the structural budget balance achieved by 2015 is sufficient to comply with all the requirements of the debt rule. However, given that the margin between the forecast debt-to-GDP ratio and the backward-looking benchmark in 2018 is only 3 percentage points, there is a risk that further measures may be required to ensure compliance from 2018.

There are two main risks:

Debt dynamics could be worse than expected, notably through lower growth of GDP that would reduce the pace at which the debt-to-GDP ratio is falling. In principle, cyclical weakness in GDP should be addressed through the cyclically-adjusted ratio.⁶

The debt-to-GDP ratio could increase due to stock-flow adjustments. The immediate impact would be to make the backward-looking benchmark more binding, as the debt ratio would be higher but the benchmark (which is based on the average debt ratio over the past three years) would increase by a lower amount.

$$\Delta \left(\frac{D}{Y}\right)_{Debt\;Rule} = -0.05 \left(\frac{D}{Y} - 60\right) = 3 - 0.05 \left(\frac{D}{Y}\right)$$

The budget balance, growth and the debt level determine the change in debt.

$$\Delta\left(\frac{D}{Y}\right) = Def - g\left(\frac{D}{Y}\right),$$

where 'Def' is the deficit as a share of GDP and 'g' is the nominal growth rate.

For a given requirement on the budget balance, lower growth reduces the pace of debt reduction and makes it more likely that the Debt Rule is binding. In addition, the 3 per cent EU requirement applies to the headline deficit that will tend to increase when growth is weak. The required pace of debt reduction under the Debt Rule is such that it is equivalent to a 3 per cent deficit requirement when nominal growth is 5 per cent.

⁵ The Debt Rule is more likely to become binding relative to a rule based on the budget balance (Budgetary Rule or EU 3 per cent deficit rule) in a scenario where nominal GDP growth is low. This can be seen using a simplified version of the debt rule, where the debt to GDP ratio must be reduced by one-twentieth of the gap between the starting debt to GDP ratio and 60 per cent.

⁶ See IFAC (2013b) for a more detailed discussion of the sensitivity of debt dynamics to growth and interest rate shocks.