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Box E: QB 3 – September 2023

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Government Debt Sustainability Analysis – An Update

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Recent developments in Irish public debt

Having experienced a Covid-19 related increase in 2020, the Irish general government debt ratio has resumed its downward path in recent years. The ratio fell to 82.3 per cent of modified national income (GNI*) in 2022, a 13-year low, and is projected to decline further over the projection horizon (see Figure 1).[1] The 25 percentage point fall in the ratio over the past two years has been driven by exceptionally strong nominal GNI* growth and a sharp improvement in the primary balance. Nominal GNI* growth averaged 16 per cent per annum in 2021 and 2022 against the backdrop of high inflation. When compared to an effective interest rate of just 1.5 per cent, this resulted in extremely favourable debt dynamics. The general government primary balance (the budget balance excluding expenditure on debt interest payments) moved from a large pandemic related deficit of 7.3 per cent in 2020 to a surplus of 4.1 per cent last year, supported by much larger than expected inflows of corporation tax receipts. In nominal terms, gross public debt was €225bn last year, just over €20bn higher than its pre-pandemic level. This primarily reflects the large primary deficits recorded in 2020 and 2021 when the Government introduced significant measures to limit the impact of the pandemic on households, businesses and the broader economy.

The extent of the reduction in the debt ratio in Ireland since end-2020 is particularly notable when compared to that in the euro area as a whole for the same period (see Figure 2). The euro area debt ratio declined by 6 percentage points since end-2020. The much smaller decline relative to Ireland reflects weaker nominal growth in the euro area (average 8 per cent per annum) and the persistence of primary deficits since the emergence of Covid-19. As a result, the Irish debt ratio has now fallen below the euro area average for the first time in over a decade, but it remains high relative to many other countries in the region (see Figure 3) and compared to its pre financial crisis position.

[1] We have extended the Quarterly Bulletin's projection horizon to t+3 for the purpose of this Box. For 2026 we have incorporated the Government's latest projections for nominal GNI*, interest rates and the deficit-debt adjustment to facilitate the extension. We assume the primary balance remains unchanged at its 2025 ratio.

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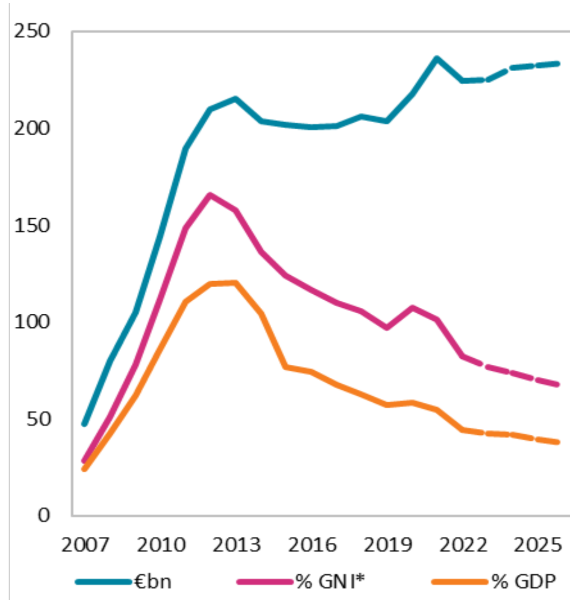
Public debt ratios projected to continue downward trend in coming years

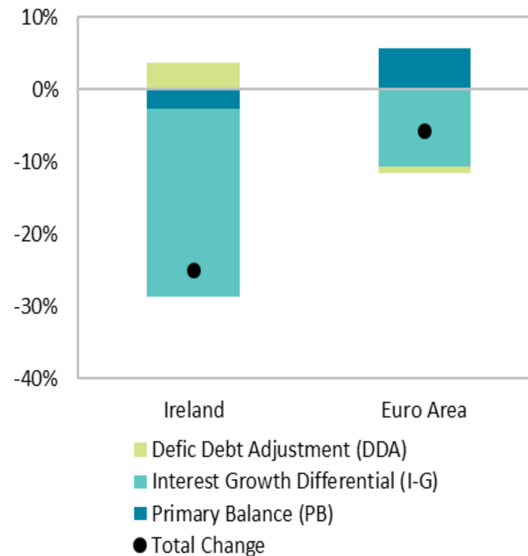
Figure 1: Developments in Gross Irish GG Debt



Source: CSO, CBI Projections

Decline in public debt significantly higher in Ireland than the Euro area in 2021-22

Figure 2: Factors driving change in GG Debt since the end of 2020



Source: Eurostat, CBI Calculations

Deterministic Debt Sustainability Analysis

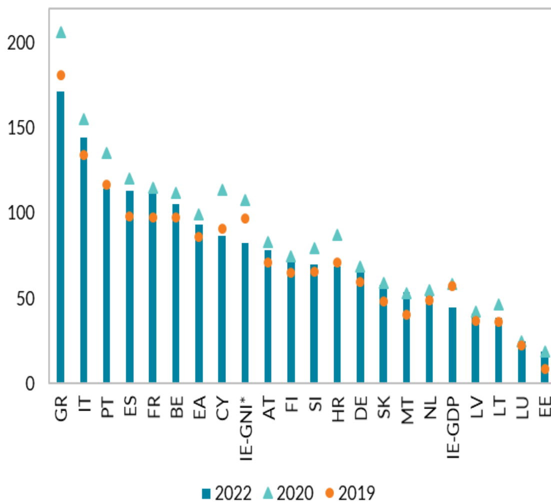
The baseline projection for general government gross debt in Ireland– which sees debt as a percentage of GNI* decline to 67 per cent in 2026 – is underpinned by relatively positive assumptions about the factors that determine changes in the debt ratio. Given the high level of uncertainty that still surrounds the domestic and global outlooks, it is prudent to assess how this baseline could be affected by less favourable paths for these key assumptions. Accordingly, we produce scenarios that illustrate the sensitivity of the debt-to-GNI* ratio to more adverse outcomes for economic growth, interest rates and the primary balance than in the baseline forecasts.[2] With the exception of the 'combination'

[2] The growth shock is calculated as one standard deviation of nominal GNI*'s long term average growth rate. This shock is applied to 2024 and 2025 and results in GNI* contracting in each year. The interest rate shock sees the marginal interest rate increase by 2 percentage points in each year from 2024 onwards. There are two primary balance shocks. The first, a €10.6bn primary balance shock, is consistent with the Central Bank's estimate of excessive corporation tax receipts in 2024. The actual shock could, of course, by driven by a number of factors including higher than planned government spending and unexpected tax cuts. The second is a €5.3bn primary balance shock which is consistent with half of the Central Bank's estimate of excessive corporation tax receipts. A combination shock is also included which combines the negative impacts of the growth, interest rate and €10.6bn primary balance shocks.

shock these scenarios are independent, only affecting the variable in question. The adverse shocks have a mixed impact on the gross debt ratio (see Figure 4). In the case of the interest rate shock, the projected impact on the debt ratio is marginal, reflecting the very low average interest rate on the outstanding debt stock coupled with the low projected Exchequer borrowing requirements. In the case of the combination shock, by comparison, the impact is significant, with the ratio 20 percentage points higher than in the baseline. Between these two bounds, the growth shock and €10.6bn primary balance shock would see the debt ratio not falling from its current high level over the medium term. One caveat here relates to the very high level of cash balances currently held by the National Treasury Management Agency. These amounted to €27.5bn (10.1 per cent of GNI*) at end July, and further increases are anticipated by the Government in the coming years.[3] As a result the net debt ratio was lower at 68 per cent of GNI* last year, considerably lower than the 82 per cent of GNI* gross debt ratio.

Irish GNI* debt ratio still amongst highest in the Euro area

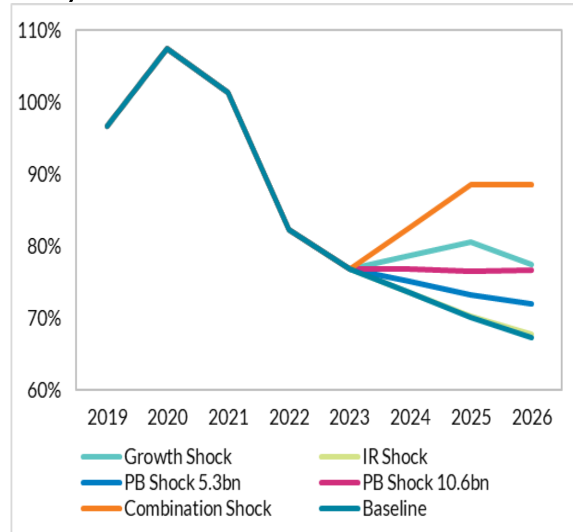
Figure 3: GG Debt Ratios in the Euro area



Source: Eurostat, CSO
Note: Percentage of GDP unless stated

Negative shocks would see debt ratio persist at high levels over the medium term

Figure 4: Deterministic Debt Sustainability Analysis



Source: CBI Calculations
Note: PB = primary balance, IR = interest rate

Stochastic Debt Sustainability Analysis

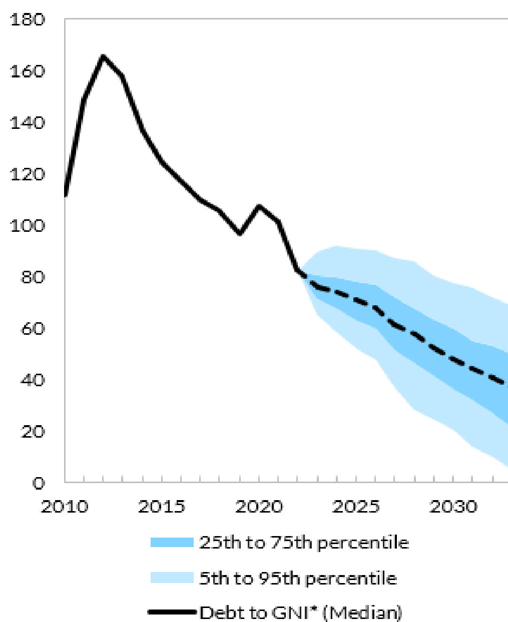
The results presented above are sensitive to the specific shock scenarios that are used. A stochastic debt sustainability analysis (DSA) is an alternative methodology that includes a wide range of feasible

[3] See Government of Ireland, 'Stability Programme Update', April 2023.

scenarios by allowing for uncertainty in the path of GNI* growth, the effective interest rate, and the primary balance. By creating a large number of potential paths for these key variables, central debt forecasts can be produced along with potential outcomes in the upper and lower tails of the distribution. Essentially, the model produces a distribution of possible outcomes rather than a single point estimate.[4] It also allows us to assess debt sustainability over a longer period (out to t+10 in this exercise). Results suggests that, given the baseline forecast, the most likely outcome is for debt to decline to around 40 per cent of GNI* by 2033, with the debt ratio falling even in the most adverse scenarios (see Figure 5a). This favourable result is partly driven by the large surpluses projected in the baseline forecast.

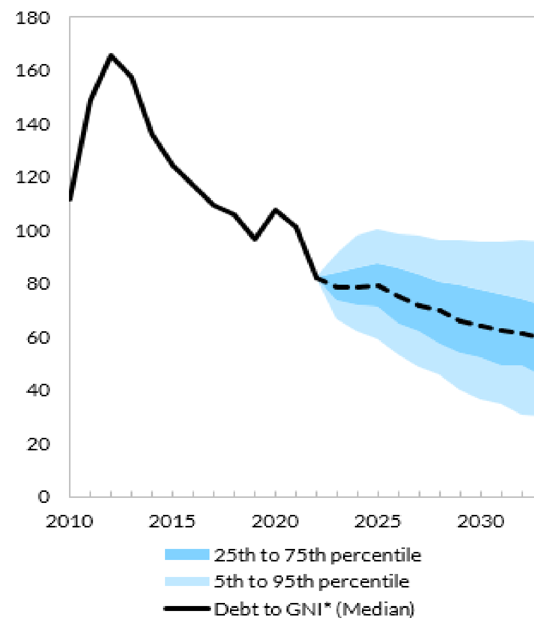
The most adverse scenarios see the debt ratio rising from current levels

Figure 5a: Baseline stochastic DSA



Source: CBI Calculations

Figure 5b: €10.6bn primary balance shock stochastic DSA



Source: CBI Calculations

Figure 5b shows the results of the DSA if, before the shocks are generated by the model, we assume an adverse outturn for the primary balance. In this case, the baseline projection is adjusted so that the full amount of estimated excess CT revenue (around €11 billion) is permanently lost in 2024. The stochastic DSA procedure is then applied to this projection. The result is a much less favourable

[4] See Conefrey et al. Managing the Public Finances in Uncertain Times for more information on the stochastic DSA.

outlook for the debt-to-GNI* ratio. The median outcome implies a 20 percentage point decline in the debt ratio over the next ten years (compared to a 40 percentage point reduction in the baseline), with adverse scenarios seeing the debt ratio rise by 20 percentage points, to around 100 percent of GNI*.

Economic Governance Reform in the EU

The key objectives of the European Commission's proposed new economic governance rules are (i) to strengthen debt sustainability and (ii) promote sustainable and inclusive growth in the region.[5] Under the proposals, a Member State with a debt ratio above 60 per cent of GDP would have to prepare a multiannual adjustment plan to ensure the debt trajectory is placed on a plausibly downward path by the end of the adjustment period. To simplify the rules, and increase transparency, a single operational indicator – net primary expenditure[6] – would serve as the basis for setting this adjustment path. Within the framework there would be a more prominent role for debt sustainability analysis, both in underpinning the Commission's 'technical guidance' to countries at an early stage and in assessing the plausibility of Member State's adjustment paths. One continued complication in the Irish case is the use of GDP as the denominator for debt ratios in the new rules. Given the impact that the multinational sector has had in inflating the value of GDP in Ireland it is highly unsuitable for this purpose as it considerably understates the debt burden. The Irish debt-to-GDP ratio was one of the lowest in the euro area last year, almost 40 percentage points lower than the more appropriate GNI* ratio (see Figure 3). If the revised rules as currently proposed by the EC were applied for 2023, they would not impose any material binding requirements on Ireland as the debt-to-GDP ratio is below 60 per cent and the headline budgetary position is in surplus. The rules if applied at present would simply require that the budget deficit is kept below 3 per cent of GDP and debt maintained below 60 per cent. The use of GDP severely undermines the guidance that the revised governance framework will have for Irish fiscal policy.

Summary

While baseline Irish fiscal projections are favourable over the medium term – anticipating continued large surpluses and a declining debt ratio - the outlook for the public finances also faces a number of challenges and risks. Discussed in more detail in Conefrey et al (2023)[7], these include concerns over the sustainability of corporation tax receipts, along with the fiscal impact of ageing and climate transition costs. Fiscal policy also faces the challenge of maintaining an appropriate fiscal stance at a time when the economy is already growing at full capacity and inflationary pressures are elevated. In

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[5] See 'Commission proposes new economic governance rules fit for the future'.

[6] This is expenditure net of discretionary revenue measures and excluding interest expenditure, cyclical unemployment expenditure and expenditure on Union programmes that is fully matched by revenue from Union funds.

[7] See Conefrey et al, 'Managing the Public Finances in a Full Employment Economy', Central Bank of Ireland Quarterly Bulletin 2, June 2023.

terms of general government debt, while the ratio has recorded a significant improvement in recent years – driven by very strong economic activity – it remains high relative to many other countries in the euro area and vulnerable to unfavourable developments in growth and the primary balance. This is particularly important in the current environment where sovereign interest rates are increasing once again and market participants may place more focus on differentiations in debt burdens across countries. Accordingly, public debt reduction should remain a key priority for Government fiscal policy in the coming years.