



**Irish Fiscal
Advisory Council**

Fiscal Assessment Report

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FOREWORD

The Irish Fiscal Advisory Council was established as part of a wider agenda of reform of Ireland's budgetary architecture as envisaged in the Programme for Government 2011. The Council was initially set up on an administrative basis in July 2011, and was formally established as a statutory body in December 2012 under the *Fiscal Responsibility Act (FRA)*. The Council is a public body funded from the Central Fund. The terms of its funding are set out in the *FRA*.

The mandate of the Irish Fiscal Advisory Council is:

- To endorse, as it considers appropriate, the macroeconomic forecasts prepared by the Department of Finance on which the Budget and Stability Programme Update are based;
- To assess the official forecasts produced by the Department of Finance;
- To assess Government compliance with the Budgetary Rule as set out in the *FRA*;
- To assess whether the fiscal stance of the Government in each Budget and Stability Programme Update is conducive to prudent economic and budgetary management, including with reference to the provisions of the *Stability and Growth Pact*.

The Council submits its *Fiscal Assessment Reports* to the Minister for Finance and within 10 days releases them publicly.

The Council is chaired by Professor John McHale, National University of Ireland, Galway. Other Council members are Mr Sebastian Barnes, Organisation for Economic Co-operation and Development; Professor Alan Barrett, Economic and Social Research Institute; Dr Donal Donovan, University of Limerick (formerly International Monetary Fund staff) and Dr Róisín O'Sullivan, Associate Professor, Smith College, Massachusetts.

The Council would like to acknowledge the help of Rossa White (NTMA), Kieran McQuinn (ESRI) and Ronan Hickey (Central Bank of Ireland) as well as Deirdre Whitaker.

Finally, the Council would like to thank the Council Secretariat - Diarmaid Smyth (Chief Economist and Head of Secretariat), John Howlin, Eddie Casey, Andrew Hannon and Rachel Joyce - for their extensive contributions to the report.

This report was finalised on 11 June 2014. More information on the Irish Fiscal Advisory Council can be found at www.fiscalcouncil.ie

SUMMARY ASSESSMENT

Significant progress has been achieved in resolving Ireland's fiscal crisis, though challenges remain.

Ireland's debt-to-GDP ratio should now be on a declining path, underpinned by nominal GDP growth, record low interest rates and the move to a planned balanced budget between 2013 and 2018. The borrowing capacity of the State has been restored, with secondary-market bond yields falling to low levels. However, fragilities remain, with debt levels likely to remain extremely high and growth prospects uncertain.

The planned €2 billion adjustment for Budget 2015 should be implemented.

The Government should follow through on commitments to implement €2 billion of additional measures in *Budget 2015*. There are three main reasons for this recommendation: (i) to reduce risks to debt sustainability by putting the debt-to-GDP ratio on a firm downward path; (ii) to provide a reasonable probability that the requirement of a deficit of below 3 per cent of GDP is achieved in 2015 to facilitate an exit from the Excessive Deficit Procedure (EDP); and (iii) to protect the hard-won credibility of Ireland's capacity to follow through on adjustment commitments.

While the Council assesses the Government's fiscal stance to be prudent and compliant with the fiscal rules, the commitment to target a balanced budget in structural terms by 2018 has costs.

Two separate fiscal objectives frame the 2014 Stability Programme Update (*SPU 2014*) projections. The first is the requirement to achieve a General Government deficit of less than 3 per cent of GDP in 2015 under the EDP. The second is to meet the Medium-Term Budgetary Objective (MTO) of a balanced budget in structural terms by 2018. This deadline is ambitious and exceeds minimum requirements under the rules. A clear rationale should be provided for this deadline.

While the Government's medium-term fiscal stance is assessed to be within the range of appropriate policies, it implies a stronger drag on demand and even greater pressures on spending than meeting the minimum requirements under the rules. Recognising the trade-off between supporting domestic demand and improving creditworthiness/debt sustainability, there is a case for a less ambitious medium-term fiscal stance that more closely follows these minimum requirements.

Ireland's fiscal framework has been strengthened and the Government has made a strong commitment to respect this new framework.

An important positive legacy of the economic crisis has been the strengthening of Ireland's fiscal framework and Government plans in the *SPU 2014* are consistent with this new framework. Post-2015, the Government is committed to meeting the requirements of the national Budgetary Rule and the requirements of the preventive arm of the *Stability and Growth Pact*. Adhering to the complementary national and European elements of the new fiscal framework should help to smooth future boom-bust cycles, guide Government debt to safer levels, and underpin borrowing capacity during the period when debt will remain unavoidably high.

Medium-term fiscal adjustment plans imply a sustained fall in non-interest Government spending as a share of GDP.

The *SPU 2014* projects Government non-interest spending to fall by approximately 8 percentage points of GDP by 2018, reaching a very low level historically (Figure A). These plans imply considerable pressures on government services, public investment and social payments (Figure B).

The planned spending squeeze raises questions about its viability.

The prolonged tight spending plans will be difficult to achieve given demand pressures and rigidities in certain areas of expenditure. The forthcoming *Comprehensive Review of Expenditure* needs to be used to identify appropriately detailed expenditure plans. This would help to promote informed public debate and enhance the credibility of budgetary projections over the medium term.

The Council has endorsed the macroeconomic forecasts underlying SPU 2014.

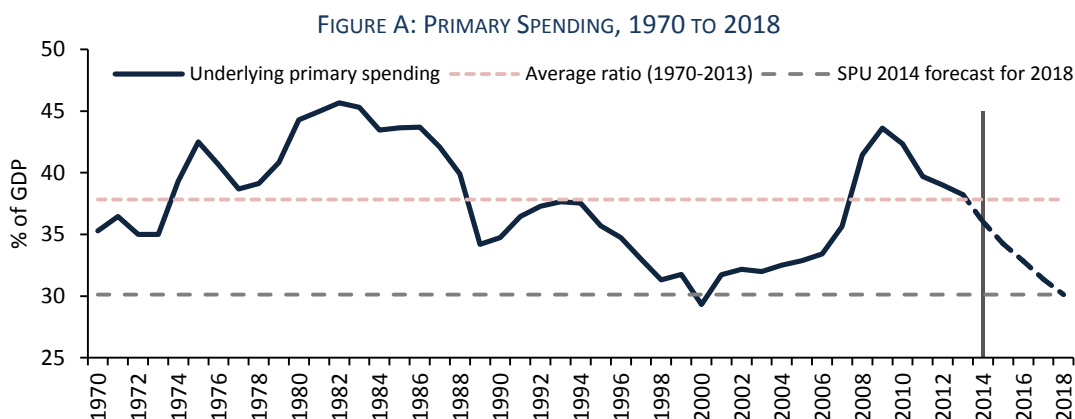
Under the *Fiscal Responsibility Act*, the Council is required to endorse as appropriate the macroeconomic forecasts underlying each Budget and stability programme. The *SPU 2014* forecasts are within an endorseable range, taking into account the methodology and the plausibility of the judgements involved, as well as the uncertainty surrounding any growth forecast. This is the first time the Council has endorsed medium-term projections.

The assumed shift to net-exports-driven growth in *SPU 2014* by 2017 may be difficult to achieve given the subdued productivity growth forecast. The forecast medium-term real GDP growth rate of 3½ per cent also appears to be at the relatively optimistic end of the range.

Budget projections are assessed to be appropriate.

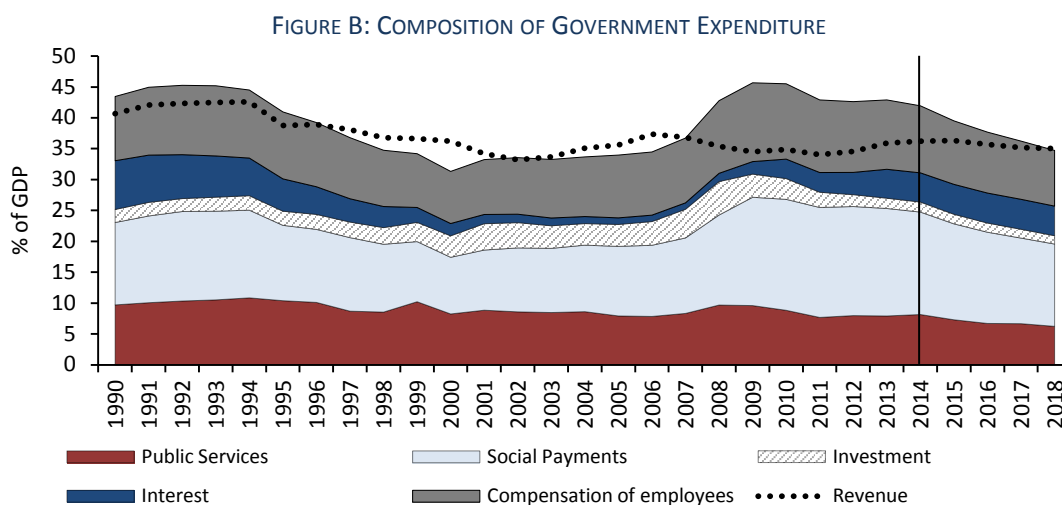
While considered appropriate, the budgetary projections in *SPU 2014* are contingent on the delivery of significant expenditure savings and achieving the projected acceleration in economic growth.

Expenditure control problems in Health appear to be unresolved. Additional risks stem from interest rates, inflation and contingent liabilities.



Source: Internal calculations based on CSO and Department of Finance data.

Note: Underlying primary expenditure excludes exceptional payments to the banking sector.



Source: CSO; *SPU 2014*.

This Assessment Report includes an “Analytical Notes” series for the first time.

The “Analytical Notes” series provide more detail on specific areas related to the Assessment Report. There are five such notes in this report and the topics covered are: House Price Risks; A Sensitivity Analysis of the Department of Finance Approach to Potential Output Estimation under the European Commission (EC) Methodology; Tax Forecasting Error Decomposition; DIRT Forecast Methodology and Future Implications of the Debt Rule.

1. ASSESSMENT OF THE FISCAL STANCE

KEY MESSAGES

- Significant progress has been achieved in resolving Ireland's fiscal crisis. While debt levels remain extremely high, the debt-to-GDP ratio should now be on a declining path, underpinned by nominal GDP growth, record low interest rates and the move to a planned balanced budget by 2018. Although fragilities remain, the borrowing capacity of the State has been restored, with secondary-market bond yields falling to low levels.
- A positive legacy of the crisis has been the institutionalisation of a fiscal framework with complementary national and European elements. Provided it is observed and supported, the framework should help to smooth future boom-bust cycles. It should also support the reduction of debt to safer levels, and underpin the credibility of the Government's commitment to avoid default during the period that debt levels remain unavoidably high. Ultimately, the test of the fiscal framework will be whether it delivers sustainable, broadly based growth in incomes and employment.
- The *Stability Programme Update 2014 (SPU 2014)* contained a strong commitment to respect the requirements of the new fiscal framework. In the short term, this requires that the necessary adjustments are undertaken so as to exit the Excessive Deficit Procedure (EDP) on schedule. Over the medium term, the framework requires meeting the national Budgetary Rule and the requirements of the preventive arm of the *Stability and Growth Pact (SGP)*.
- The Government should follow through on commitments to implement €2 billion of additional measures in *Budget 2015*. There are three main reasons for this recommendation: (i) to reduce risks to debt sustainability by putting the debt-to-GDP ratio on a firm downward path; (ii) to provide a reasonable probability that the requirement of a deficit of below 3 per cent of GDP is achieved in 2015; and (iii) to protect the hard-won credibility of Ireland's capacity to follow through on adjustment commitments.
- Medium-term fiscal adjustment plans imply a sustained fall in non-interest government spending as a share of GDP. Maintaining tight spending in the areas of government services, public investment and social payments will be difficult given demographic and other demand pressures and rigidities in certain areas of expenditure. In this context, care should be taken not to erode aggregate revenue-raising capacity through tax cuts without offsetting revenue measures.

1.1 INTRODUCTION

The *Fiscal Responsibility Acts 2012 and 2013 (FRA)* requires the Council to assess the Government's fiscal policy stance, with reference to the requirements of the *SGP*. As this is the first assessment report since Ireland exited its programme of international financial assistance, Section 1.2 draws on the analyses of subsequent chapters to take stock of crisis-resolution developments and remaining risks. Section 1.3 then examines the important role played by an effective fiscal framework in guiding appropriate fiscal policy for the Irish economy, and Section 1.4 briefly reviews the European/national fiscal framework that has been put in place. Section 1.5 assesses the fiscal stance set out in *SPU 2014*. Section 1.6 concludes.

1.2 CRISIS-RESOLUTION: STRATEGY, DEVELOPMENTS, AND RISKS

CRISIS-RESOLUTION STRATEGY

The collapse of Ireland's property/credit bubble set in motion a series of vicious feedback effects between the banking sector, the public finances and the real economy (see, IFAC, 2013b, Box D). The crisis reached an acute phase with the loss of creditworthiness of the banking system and the State itself in 2010, raising the spectre of a sovereign default that would have added a further twist to the feedback cycles. The chosen strategy to resolve the crisis included the continued adjustment of an unsustainable public finance position with transitional (and conditional) international financial assistance.¹

The strategy was based on a number of broad premises. First, with the agreement of official funders, the strategy was based on a strong commitment to avoid a sovereign default. While the effects of sovereign defaults are unpredictable and vary with country circumstances, it was believed that defaults are associated with output losses, forced short-term austerity measures due to financing constraints, and more difficult future borrowing conditions.

Second, the strategy was based on the belief that the ambitious planned fiscal adjustment would be both politically and economically feasible. Political feasibility required that the Government would be able to implement what were extremely painful expenditure cuts and revenue increases over an extended period of time. Economic feasibility required that the fiscal measures taken would not contract domestic demand so much that they would be directly self defeating in the sense of actually worsening the public finances. Previous assessment reports have examined the impacts of the adjustments compared to a counterfactual no-adjustment scenario (see, e.g., IFAC, 2013b, Chapter 4).

¹ The public-finance elements of the crisis-resolution strategy were combined with reforms to stabilise the banking sector and structural reforms to improve the economy's growth potential.

Counterfactual simulations based on realistic multiplier and buoyancy assumptions indicate that both the General Government deficit and debt would quickly have reached unsustainable levels.

Third, the strategy depended on the economy having reasonable underlying growth potential. Belief in this potential was based, in part, on Ireland's large export sector and strong base of multinational enterprises. Absent such potential, the required adjustments could have strained the adjustment capacity of the political and social system beyond breaking point.

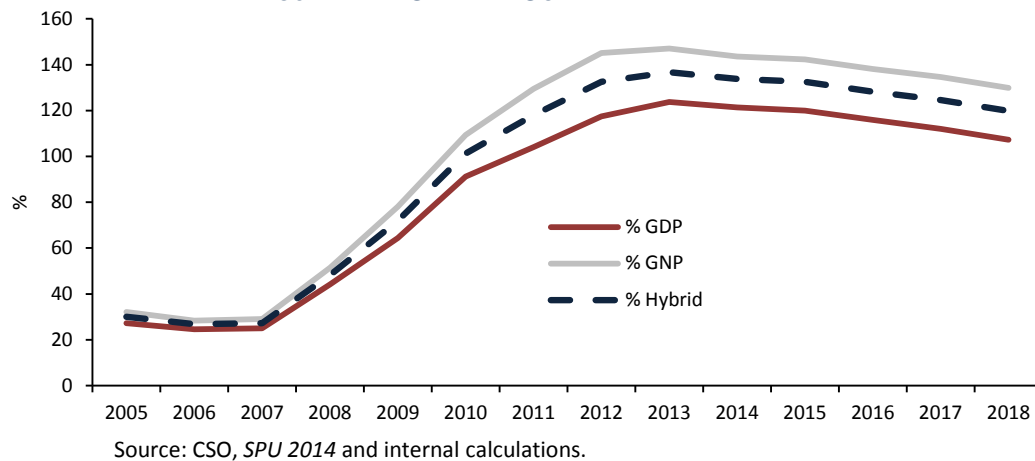
And fourth, the strategy depended on reliable lender-of-last resort support. In particular, concerns that debt restructuring would be imposed as a condition of future support would have undermined investor confidence in the Government's capacity to avoid default. Such fears could easily have become self-fulfilling as the risk premium on Irish debt remained high and official lenders demanded a restructuring given poor prospects for market access. It was, therefore, important that the European Union's crisis-resolution tools were strengthened. Important developments included the instituting of the European Stability Mechanism (ESM) as a permanent fund and also the ECB's introduction of the Outright Monetary Transactions (OMT) programme as part of a commitment to do whatever it takes to preserve the euro.

DEVELOPMENTS IN CRISIS RESOLUTION

While the crisis has been exceptionally difficult for the Irish public, the crisis-resolution strategy has broadly succeeded in its aims. On the fiscal front, the primary deficit has been brought to projected balance this year from a peak of over 9 per cent of GDP in 2009 or nearly €15 billion (excluding banking-support measures). Moreover, the debt-to-GDP ratio is also estimated to have peaked last year at just under 124 per cent of GDP before falling to 107 per cent of GDP by 2018 according to the projections in *SPU 2014*. The projected reduction in the debt ratio is driven by a decline in accumulated cash balances, nominal GDP growth and the assumed movement of the General Government deficit towards balance by 2018. However, the ratio is projected to remain at high levels over the period. This resulting debt-sustainability challenge is revealed even more starkly when alternative measures of fiscal capacity are used (see Figure 1.1). The figure shows the projected evolution of alternative debt to fiscal capacity ratios: GDP (peaking at 124 per cent in 2013), GNP (147 per cent) and the Council's Hybrid (137 per cent) measure of fiscal capacity.²

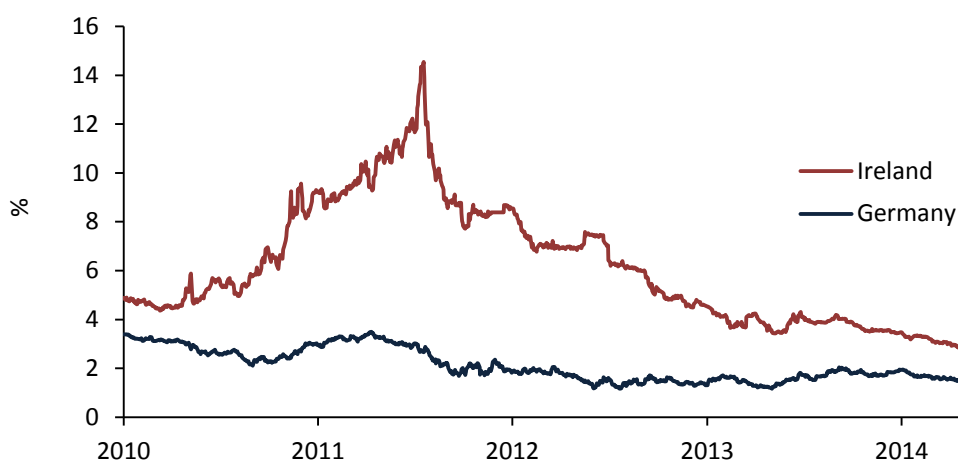
² The hybrid measure of output is an intermediate measure of fiscal capacity between GDP and GNP. It puts differential weight on GNP and the excess of GDP over GNP, defined as: $H = GNP + 0.4(GDP - GNP)$. For details see [IFAC \(2012b\)](#).

FIGURE 1.1: GENERAL GOVERNMENT DEBT

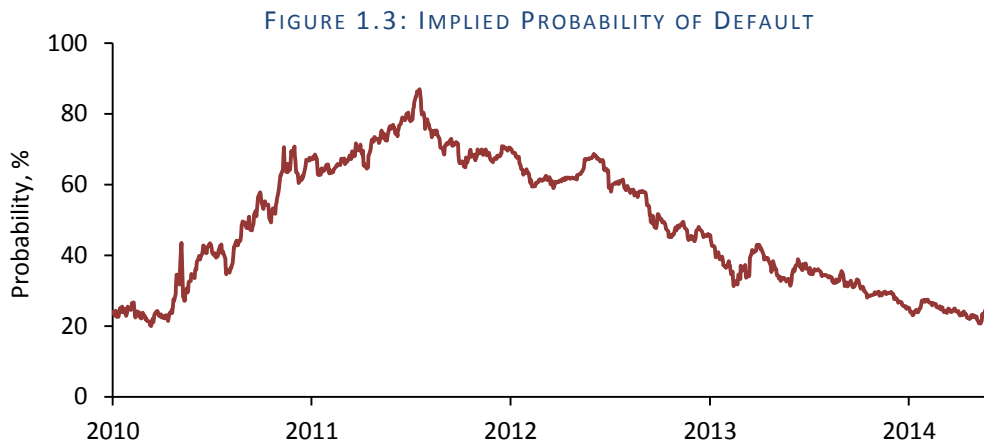


The State has also gone some distance to restoring its market creditworthiness. Figure 1.2 shows the evolution of the 10-year bond yields for Ireland and Germany. From a peak at over 14 per cent in July 2011, Ireland’s 10-year yield has fallen to below 3 per cent. In large part, this is likely to have reflected a general downward trend in euro area yields following the autumn 2012 announcement of the OMT programme combined with a credible commitment to repair the public finances. Figure 1.3 shows a commonly used measure of implied default risk based on the observed yield spread between Irish and German bonds. While significant perceived default risk remains, the market perception of the likelihood of an Irish default has fallen back dramatically since reaching a peak of close to 90 per cent in mid-2011. Furthermore, the five main rating agencies all now rate Irish sovereign debt at investment grade.

FIGURE 1.2: IRISH AND GERMAN 10-YEAR BOND YIELDS



Source: Datastream.
 Note: Based on bid-yields.



Source: Datastream and internal calculations.

Note: Based on 10 year yields.

Rates of economic growth in Ireland have been volatile – in part due to factors relating to its large multinational sector. However, the country is projected to be returning to a period of sustained growth (see Chapter 2). The strong recovery in employment growth since the latter part of 2012 has been a particularly welcome feature of the recovery.

Overall, these developments combined, allowed Ireland to exit its international assistance programme at the end of 2013.

REMAINING RISKS

Notwithstanding these successes, significant risks remain. The risks surrounding growth are discussed in Chapter 2; the knock-on risks in terms of the budgetary aggregates, as well as expenditure pressures, balance sheet and interest rate risks, are discussed in Chapter 3. We therefore only provide a brief preview here.

First, uncertainty still surrounds the prospects for growth. These risks are both domestic and external. On the domestic side, there remains uncertainty about the dynamics of the post-bubble recession and recovery. With balance sheets impaired across the economy, international experience provides cautions about the persistence of weak domestic demand, impaired credit flow and the risk of setbacks. On the external side, the high degree of openness of the Irish economy makes it unusually dependent on demand conditions in export markets. Recent international-agency forecasts have upgraded the prospects for some of Ireland's key export markets. However, international growth prospects are subject to a high degree of uncertainty. Given the importance of nominal GDP growth to the budgetary arithmetic, a particular concern relates to the ability of the Euro Area to avoid a low

inflation/deflation trap, under which the European Central Bank (ECB) is unable to maintain expectations of inflation at their target of “...below, but close to 2 per cent.”³

Second, the extent of non-performing loans in the banking sector remains a fiscal risk. The recent Asset Quality Review (AQR) by the Central Bank has provided some reassurance on the capital positions of the main Irish banks, although a full assessment must await the EU-wide stress tests due in October 2014. Developments on a European banking union have also reduced the risk that the State will be called on to provide capital support beyond what is fiscally sustainable. Concerns relating to ultimate losses by NAMA have receded. However, the limited nature of the banking union, combined with the level of non-performing loans, means that explicit and implicit contingent liabilities associated with the banking sector remain a downside risk.

Third, current low risk premiums on riskier assets such as the sovereign bonds of high-debt countries might not be sustainable. Leading central banks have lowered short-term rates to close to zero levels and also targeted term premiums through quantitative-easing policies. One concern is that policies that lower the return on low-risk assets lead investors to “reach for yield” by purchasing higher risk assets to maintain the overall returns on their portfolios. International investors also appear to have shifted funds from some emerging markets given changes in risk perceptions relative to the Euro Area periphery. To the extent that Ireland and other crisis-affected economies have benefited from such portfolio effects, the normalisation of monetary policies – or a reassessment of relative risks – could lead to higher costs for new borrowing.⁴

Fourth, there is a risk of external policy shocks. One possibility is that a flare-up of a crisis in another Euro Area country leads to a broader reassessment of risk, or to European-level policy responses that reduce the creditworthiness of still-vulnerable member states. Even in the absence of such flare-ups, policy could evolve in ways that raise investor fears of future defaults. The recent German Constitutional Court review of the legal foundations of OMT provides a cautionary example of the potential for setbacks to the institutional and policy developments that have helped reduce fragility within the Euro Area.

³ The recent monetary policy announcements by the ECB (i.e. a 10 basis point reduction in the main refinancing rate, targeted longer-term refinancing operations and negative deposit facility rates) signalled an intensification of efforts to counter such risks.

⁴ This is mitigated by the long average maturity on outstanding debt (see Chapter 3, Section 3.4.3).

1.3 THE VALUE OF AN EFFECTIVE FISCAL FRAMEWORK

One positive legacy of the crisis is a much strengthened fiscal framework comprising complementary European- and national-level elements. The framework has the potential to help Ireland avoid repeating past mistakes by fostering a more sustainable fiscal policy. It should also help reduce the remaining risks to a robust exit from the crisis that are noted above. This section elaborates on some high-level arguments for a strong fiscal framework: taming the boom-bust cycle; moving to safer levels of debt; and enhancing the credibility of Ireland’s fiscal sustainability during the transition to those safer levels.

TAMING THE BOOM-BUST CYCLE

The Irish economy has been susceptible to severe boom-bust cycles throughout much of its post-independence history. This has partly reflected the inherent volatility of a small open economy, especially one with highly mobile capital and labour. However, the volatility has also reflected policy mistakes (see, e.g., Honohan and Walsh, 2002). Such mistakes were apparent in the run up to the most recent crisis, especially in relation to financial regulation. See e.g., Donovan and Murphy (2013), McHale (2012) and Whelan (2013).

Pro-cyclical fiscal policy has contributed to this volatility – a phenomenon not unique to Ireland – even if fiscal policy was not the main force behind the pre-crisis property boom. See e.g., Calmfors and Wren-Lewis (2011) and DeBrun and Kumar (2007). The pro-cyclicality involves an expansionary bias in good times, although the underlying “deficit bias” can be temporarily hidden by unsustainable revenue windfalls (Lane, 2010). The pro-cyclicality then continues in bad times through fiscal contractions, typically forced by the need to ensure debt sustainability and preserve borrowing capacity.

A well-designed fiscal framework should help to tame this tendency towards boom-bust cycles. For example, an expenditure rule that limits the growth in expenditure to the underlying potential growth of the economy places limits on the extent to which windfall revenues are used to fund “permanent” increases in spending or reductions in tax burdens. Of course, fiscal policy has not been the only source of pro-cyclical bias. Excessive credit growth was a more fundamental driver of Ireland’s unsustainable property-driven boom. Even so, in addition to new frameworks for micro- and macro-prudential regulation of credit markets, a fiscal framework that prevents the build up of actual (or hidden) structural deficits should help support a more sustainable growth pattern for the Irish economy.

MOVING TO SAFER DEBT LEVELS

The crisis has left the Irish economy with a legacy of high State debt. From a low of under 25 per cent in the third quarter of 2007, Ireland's debt-to-GDP ratio reached almost 124 per cent in 2013. This increase reflected both the large deficits that opened up as windfall property-related revenues evaporated as the economy contracted and the costs of bailing out the banking system. Such a high debt level leaves the economy vulnerable to shocks that bring debt sustainability and creditworthiness into question.

Ostry *et al.* (2010) identify a country's "fiscal space" as the gap between its current debt-to-GDP ratio and the ratio that leads to unsustainable debt dynamics taking into account such factors as the capacity to run primary surpluses and growth potential. The smaller this gap the greater the risk that adverse shocks will put the economy beyond the critical threshold. Nearness to the threshold also leads investors to demand a risk premium to hold the country's debt and raises the risk of self-fulfilling confidence crises relating to country's chances of avoiding default.

While the process of regaining fiscal space should be phased over time, prudence requires that Ireland pursues a path to a safer debt level. A well-designed fiscal framework should be consistent with delivering the large primary surpluses that need to be run for a number of years to put the debt-to-GDP ratio on a declining path.

CREDIBILITY

Recognising the need for a phased reduction in the debt-to-GDP ratio, it will take time before a reasonably safe level of this ratio is achieved. The credibility underlying the economic and political capacity to make the necessary adjustments will be critical during the transition, and indeed essential to ensure that a phased transition is feasible. This credibility can be underpinned by a commitment to a well-designed fiscal framework, especially one that is widely shared across the political spectrum. Such a framework can help signal the political system's intentions with regard to medium-term debt-reduction goals, and can also raise the political costs of deviating from the planned path as crisis memories fade. While rules can constrain the ability to follow an "optimal" policy at all times, a credible framework can give policymakers more flexibility when temporary shocks cause deviations from the planned path. Moreover, when such shocks occur, a credible framework can give policymakers more flexibility to follow a less pro-cyclical path without damaging confidence in its ultimate capacity to deliver a low and sustainable debt level.

1.4 IRELAND'S FISCAL FRAMEWORK

Ireland's new fiscal framework is designed to help to temper future boom-bust cycles and to guide debt to safer levels, while providing fiscal credibility. It focuses on avoiding excessive deficits/debts, achieving a budget balance in structural terms, and ensuring that expenditures are underpinned by stable revenues.

The framework is a combination of European-level elements under the reformed *Stability and Growth Pact (SGP)* and national-level elements that are designed to complement and extend the European rules. The Department of Finance has usefully brought the various elements together in its *Medium-Term Budgetary Framework (MTBF)* document (Department of Finance, 2013e).

The European elements have been extensively described in previous *Fiscal Assessment Reports* (see also Chapter 4). A detailed description of the workings of the *SGP* is also provided in the European Commission's *Vade Mecum* on the pact (EC, 2013a).

The national components of the fiscal framework are set out in detail in the MTBF. Core components are the Budgetary Rule set out in the *FRA* and the *Medium-Term Expenditure Framework* set out in the *Ministers and Secretaries (Amendment) Act 2013*.⁵ Taken together the rules and enforcement mechanisms are designed to be consistent with the requirements of the preventive arm of the *SGP*. The framework also follows the growing international practice in giving a role to an independent fiscal council in monitoring and assessment. See e.g., DeBrun and Kindra (2014).

A key feature of the *FRA* is that the Government is answerable to the Dáil for failures to meet the Budgetary Rule. Article 6(1) states:

If the Commission addresses a warning to the State under Article 6(2) of the 1997 surveillance and coordination Regulation or if the Government consider that there is a failure to comply with the budgetary rule which constitutes a significant deviation for the purposes of Article 6(3) of that Regulation, the Government shall, within 2 months, prepare and lay before Dáil Éireann a plan specifying what is required to be done for securing compliance with the budgetary rule.

Furthermore, if the Government does not accept the Fiscal Council's assessment of compliance with the Budgetary Rule – including compliance with any correction plan put in place to meet the rule – the Minister shall, within 2 months of being given a copy of the Council's assessment, provide a statement to the Dáil on the reasons for why it has not been accepted.

⁵ The Budgetary Rule is discussed in detail in Chapter 4. See IFAC (2013b, Chapter 2) for a discussion of the *Medium-Term Expenditure Framework*.

Consistency between the national and European frameworks allows the two sets of formal rules and enforcement procedures to reinforce each other: the monitoring, peer pressure and financial-sanction procedures of the *SGP* helps give credibility to the national rules; the monitoring and enforcement procedures of the national rules – including roles for both the Oireachtas and the Fiscal Advisory Council – provide a degree of domestic oversight and ownership of the overall rules framework.

One weakness of the European Rules framework involves the harmonised methodology for estimation and measurement of the structural budget balance. This measurement is based on the measures of the output gap, discussed in Chapter 2, which are in turn based on measures of potential output using a harmonised production-function framework. This method may lead to quite pro-cyclical measures of potential GDP, with potential GDP following actual GDP quite closely. This tends to limit the size of measured output gaps and, therefore, leads to relatively small differences between the actual and structural deficit. In a downturn, this relatively close correspondence constrains the countercyclical scope of fiscal policy. Moreover, in a period of unsustainable growth (say driven by an unsustainable property boom financed by international capital inflows), the harmonised method may fail to signal the true size of the underlying imbalances in the public finances.⁶

It is doubtful that the harmonised methodology provides an adequate signal of the cyclical position of the Irish economy. It is probably better viewed as an attempt to temper the potential pro-cyclicality of the rules, while also ensuring that member states' budget deficits remain low; and, where deficits do open up, are closed in a reasonably fast time frame. It is important that alternative measures of the potential output of the Irish economy are developed to better identify the cyclical position of the economy and inform decisions about the appropriate policy stance. The development of credible alternative measures could also help inform the debate about improvements to the harmonised methodology. It is important to recognise, however, that applications of the *SGP* rules are based on the Commission's use of the harmonised methodology even if the Government has significant disagreements with the structural-balance measurements it produces.

⁶ One potential problem with the harmonised method is that it can miss the impact of low-frequency "financial cycles" (see Borio *et al*, 2013). The upswing of a financial cycle is associated with high property-price growth and unusual credit expansion financed by capital inflows and an associated current account deficit. However, given a strong supply response – in Ireland's case facilitated by large net inward migration – this upswing can be associated with relatively muted overall inflationary pressure. To the extent the harmonised methodology relies on signs of inflationary pressure to signal a positive output gap, the unsustainable nature of the output expansion may be missed. Similarly, following a downturn in the financial cycle, a too-negative view of underlying potential may emerge. Thus, conventional measures of the output gap and structural balance need to be augmented by measures that take better account of the implications of low-frequency financial cycles (see Bergin and FitzGerald (2014) for a recent analysis using the ESRI's *HERMES* model).

Overall, while the fiscal framework is not without flaws and needs to be augmented by robust domestic analysis, the complementary European and national elements provide a valuable structure to guide Irish fiscal policy. Rather than being viewed as something imposed on Ireland, or even simply an act of shared sovereignty with other Euro Area members to make monetary union work, it should be seen as a framework that is in the national interest to the extent it underpins sustainable growth in Irish incomes and employment.

1.5 EVALUATION OF THE FISCAL STANCE

As in previous reports, in assessing the fiscal stance the Council recognises the trade off between ensuring borrowing capacity/debt sustainability and the direct output costs of fiscal adjustment measures. Owing to the precarious financial position of the State, in earlier reports the Council recommended the need for a margin of safety to ensure that fiscal targets were met given investor doubts about Ireland's adjustment and growth capacity and the likely costs of default. With improvements in the fiscal position and creditworthiness, it should now be sufficient to meet the requirements of the fiscal framework. This requires that the EDP targets are met in the short term, and the national Budgetary Rule and preventive arm of the *SGP* are respected over the medium term.

The Government's fiscal stance was set out in the *SPU 2014* (Department of Finance, 2014, p. 1)

[T]he Government recognises that sustainable public finances are a necessary condition for economic recovery. The immediate fiscal policy objective, therefore, remains the correction of the excessive deficit by next year. Thereafter, fiscal policy will be set in line with the requirement to move towards Ireland's medium-term budgetary objective, which is for a balanced budget in structural terms.

It is worth highlighting the institutional reforms that have taken place in the fiscal area in recent years. The establishment of the Irish Fiscal Advisory Council (IFAC) on a statutory basis, the placing of fiscal rules on a higher legal basis, and improvements to the budgetary process, all represent important enhancements to fiscal policy formulation and help further underpin confidence in the evolution of the public finances in Ireland. On foot of these developments, Ireland is now fully compliant with all of the fiscal governance reforms that have been initiated in recent years.

The statement adds (p.3):

[T]he Government's firm commitment to correct the excessive deficit by 2015 remains the cornerstone of near-term fiscal policy. On present estimates, this should be achieved with the previously announced policy of a package of tax and expenditure measures of €2.0 billion. However, the actual consolidation effort required to meet the deficit objective will be based on the most up-to-date economic and fiscal data on Budget day. The specific measures will be announced in the Budget in October 2014, and will take on board the conclusions of the Comprehensive Review of Expenditure (CRE) and other ongoing reviews.

The Council welcomes the clear statement of intent to meet the requirements under Ireland's fiscal framework. It assesses that a budgetary policy to bring the projected deficit in line with the EDP limit of a deficit below 3 per cent of GDP in 2015, and then to follow the adjustment-path requirements of the preventive arm of the *SGP* and the national Budgetary Rule, meets the requirement set down in the *FRA*. This requirement is that "... the fiscal stance for the year or years concerned is, in the opinion of the Fiscal Council, conducive to prudent economic and budgetary management".

Under current projections, the stated policy should put the debt-to-GDP ratio on a firm downward path and support the credibility gains that have underpinned the restoration of the State's market creditworthiness.

The Council recommends that the previously planned measures of €2 billion should be followed through on in *Budget 2015*.

There are three main reasons for this recommendation. First, while significant progress has been made in repairing Ireland's public finances, the gap between General Government expenditure and revenue is still projected to be close to €8 billion in 2014. Slowing the pace of deficit and debt reduction would leave the public finances more exposed to shocks that create unsustainable debt dynamics.

Second, even with the encouraging recent fiscal performance (see Chapter 3), the *SPU 2014*'s central projections indicate no margin of safety around the EDP deficit ceiling for 2015. Recognising the high level of uncertainty surrounding the level and composition of growth (see Chapter 2), reducing the planned adjustments would increase the probability of missing the target and put the EDP exit in jeopardy.⁷

Third, the dramatic reduction in the risk premium on Irish debt has reflected, amongst other factors, the increasing credibility of Ireland's capacity to make necessary fiscal adjustments. While the relatively small reduction in planned consolidation in *Budget 2014* does not appear to have harmed Ireland's credibility, a second year of scaled-back adjustment effort – especially one closely following the ending of Ireland's programme of official assistance – could raise doubts about the political capacity to make necessary adjustments outside of a formal external programme.

⁷ As discussed in Chapter 4, a failure to meet the nominal deficit target would lead to an evaluation of "effective action" in relation to structural budgetary adjustment. Failure to meet both the nominal target and a judgement of non-effective action could lead to the imposition of financial sanctions under the *SGP*. At this stage, there is uncertainty as to whether Ireland would be judged to have met the requirement for effective action given the divergent signals from "top-down" assessments of changes in the structural balance and "bottom-up" assessments based on adjustment measures undertaken. The risk of a negative judgement would increase if adjustments are reduced below the committed level of €2 billion, which would follow the reduction in previously committed adjustments of €0.6 billion in *Budget 2014*.

With a successful EDP exit, the post-2015 fiscal stance should follow the requirements of the preventive arm of the *SGP* and the national Budgetary Rule. For a high-debt country, the minimum annual adjustment of the structural balance for a country not at its Medium-Term Objective (MTO) has been identified as greater than 0.5 per cent of GDP. However, as discussed in Chapter 4, a more ambitious adjustment path for the structural balance is set out in *SPU 2014*, which leads the MTO of a structural balance being reached in 2018. With a credible commitment to the new fiscal framework, it should not be necessary to overachieve on the minimum adjustment path. Where targets are set in excess of the minimum requirements, a clear rationale should be provided.

A further reason that care should be exercised in setting targets for the post-EDP period relates to the significant medium-term expenditure challenges Ireland faces. Under current growth projections, the most difficult phase of the fiscal adjustment should be complete in 2015. However, under the EU Expenditure Benchmark, real expenditure growth must be kept below the growth rate of real potential GDP along the adjustment path to a structural budget balance (unless there are offsetting adjustments on the revenue side).⁸

Ireland is therefore facing a relatively restrictive fiscal stance until a structural budget balance is achieved – currently projected for 2018. As discussed in detail in Chapter 3, the combination of underlying spending pressures and rigidities in certain spending areas will make expenditure control challenging over the next number of years. In this context, it will also be important not to erode aggregate revenue-raising capacity through tax cuts without offsetting revenue measures. The forthcoming *Comprehensive Review of Expenditure* needs to be used to identify appropriately detailed expenditure plans. This would help to promote informed public debate and enhance the credibility of budgetary projections over the medium term.

⁸ Under the Expenditure Benchmark, higher real expenditure growth than the reference rate for potential output growth adjusted for a “convergence margin” to ensure convergence to the MTO would have to be financed by additional revenue-raising measures.

1.6 CONCLUDING COMMENTS

Given the precarious financial position of the Irish State in recent years, the progress in stabilising the public finances and restoring borrowing capacity at affordable interest rates has been significant. One positive legacy of the crisis has been the instituting of a strong fiscal framework combining European and national elements. This framework should help to smooth future boom-bust cycles, guide debt to safer levels, and underpin the credibility of the State's ability to avoid default during the period that debt levels remain high and the international environment volatile. But for the framework to be an effective bulwark against instability, it is important that it has broad public understanding and support.

In assessing the constraints imposed by the new fiscal framework, the constraints that are also imposed by debt markets on fiscal policies should not be forgotten. As experienced by Ireland in 2010, debt markets can be even more demanding in terms of the fiscal policies viewed as consistent with access to funding to cover deficits and rollover debts. A credible commitment to a framework that ensures debt sustainability can, therefore, expand rather than narrow the room for fiscal manoeuvre.

In the short term, implementing the framework requires following through on adjustment commitments to ensure the scheduled exit from the EDP. Over the medium term, meeting the requirements of the national Budgetary Rule and the preventive arm of the *Stability and Growth Pact* should underpin the reduction in debt levels and secure the State's borrowing capacity at affordable interest rates, while reducing the fiscal drag on growth. Given the costs involved, care should be taken in pursuing an adjustment path that is more ambitious than required under the rules.

There is no denying that meeting the requirements of the framework will be demanding. This is especially evident in the pressures for expenditure restraint at a time of demographically related spending pressures and other demands. Any reduction in aggregate revenue-raising capacity would need to be carefully considered in this context. Ultimately, the test of the fiscal framework will be whether it delivers sustainable, broadly based growth in incomes and employment.

2. ASSESSMENT AND ENDORSEMENT OF MACROECONOMIC FORECASTS

KEY MESSAGES

- The Council endorsed the *SPU 2014* macroeconomic forecasts to 2018. Given the uncertainties and judgemental elements involved, it was satisfied that these forecasts were within an endorsable range.
- Aggregate GDP forecasts appear plausible for the short term (2014-2015). However, the composition of growth forecasts in *SPU 2014* implies somewhat stronger domestic demand relative to Benchmark projections prepared by the Council's Secretariat.
- The *SPU 2014*'s rise in medium-term (2016-2018) real GDP growth to 3½ per cent appears at the relatively optimistic end of the range. While attainable, this would require, among other things, continued strong trends in labour inputs. The assumed shift to net-exports-driven growth by 2017 may be difficult to achieve given the subdued productivity growth forecast. The latter is particularly difficult to predict given likely compositional shifts in sectoral employment.
- Macroeconomic risks remain large and tilted to the downside. The overall balance of risks is not addressed in the *SPU 2014* and should be incorporated in future publications. Significant risks include the on-going impact of weakened private sector balance sheets and fragile external growth prospects. Medium-term uncertainties concern the ability to realise further competitiveness gains and the possibility of extended long-term unemployment becoming ingrained.
- The Council verified the correct application of the common European Commission (EC) methodology to estimate trend supply-side variables. However, the Department of Finance should develop a set of approaches that provide a fuller picture of the economy's cyclical position and of potential output in the medium term, although the fiscal rules will continue to be evaluated based on the EC methodology.

2.1 INTRODUCTION

The Council has a mandate to assess and, since July 2013, to endorse the official macroeconomic forecasts produced by the Department of Finance published in the *Stability Programme Update* and in the *Budget*.

Section 2.2 discusses the *SPU 2014* forecasts and puts these in context relative to forecasts of other agencies, while Section 2.3 provides an assessment of the uncertainty and risks surrounding the economic outlook. Section 2.4 outlines the Council's approach to endorsement. Section 2.5 concludes by outlining the endorsement process as it applied to the *Draft SPU 2014* projections.⁹ Finally, two Analytical Notes provide further background to this Chapter covering the topics of: (1) House Price Risks; and (2) A Sensitivity Analysis of the Department of Finance Approach to Potential Output Estimation under the EC methodology.

2.2 AN ASSESSMENT OF THE FORECASTS IN *SPU 2014*

2.2.1 MACROECONOMIC FORECASTS IN *SPU 2014*

SHORT-TERM FORECASTS, 2014-2015

The *SPU 2014* forecasts an acceleration in economic activity over this year and next, with real GDP growth averaging 2.4 per cent *per annum*. The pick-up in activity is driven by a solid recovery in domestic demand, while the contribution from net exports only gradually recovers as a result of a drag on goods exports from patent expiries and relatively faster growth in imports volumes.¹⁰

The *SPU 2014* forecasts for 2014 and 2015 are broadly in line with those in *Budget 2014* and similar to those a year ago. This suggests that the earlier pattern of systematic downward revisions to growth forecasts across official forecasting agencies may have moderated. It may also support greater confidence that current forecasts are not overestimating growth (see Figure 2.1). A similar pattern can be observed outside of Ireland and notably in the Euro Area as discussed below.

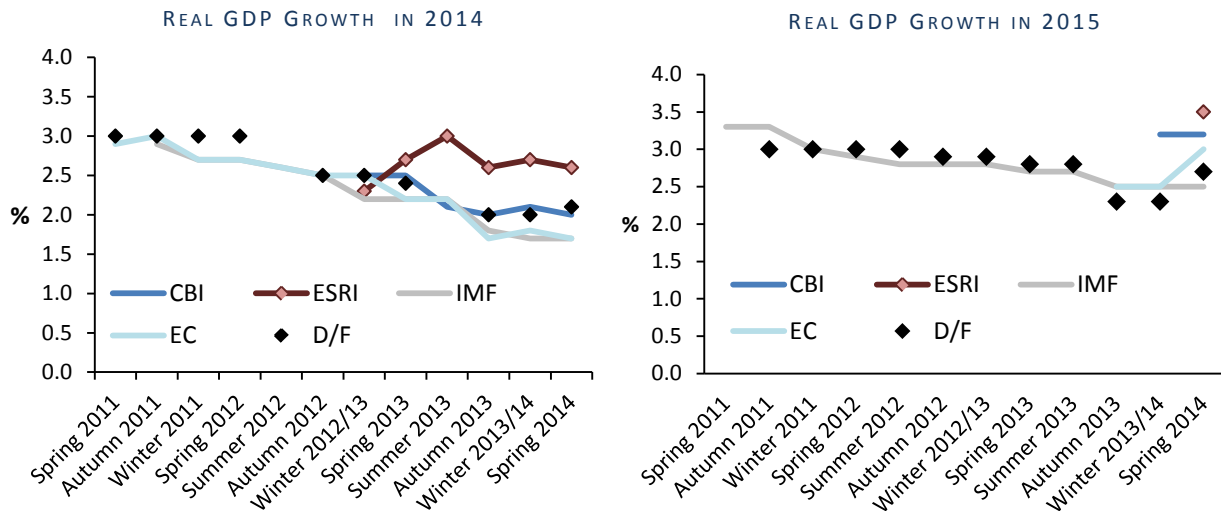
Personal consumption expenditure growth is set to rebound in 2014 (see Table 2.1 for a summary of forecasts) having contracted in 2013. It is then due to grow at a more moderate pace, driven by rising employment. The savings rate is expected to fall gradually, but nevertheless remain elevated given high levels of household debt. Despite growth in employment, only a slow recovery in both

⁹ Note: the forecasts in the final *SPU 2014* document were unchanged from those in the draft publication endorsed by the Council.

¹⁰ See Enright and Dalton (2013), "*The Impact of the Patent Cliff on Pharma-Chem Output in Ireland*," available from: <http://www.finance.gov.ie/viewdoc.asp?DocID=7850&CatID=45&StartDate=1+January+2013>

earnings and disposable incomes is expected. There is unusual uncertainty about the current momentum in consumer spending because of the divergence between relatively strong retail sales figures and weaker national accounts data for the end of 2013.¹¹

FIGURE 2.1: COMPARATIVE REAL GDP FORECAST VINTAGES (% CHANGE YEAR-ON-YEAR)



Sources: Department of Finance (D/F); European Commission; International Monetary Fund (IMF); Central Bank of Ireland and the Economic and Social Research Institute (ESRI).

The *SPU 2014* forecasts for consumption are strong relative to the Benchmark projections (Appendix Table A.1) and other agency projections.¹² There is also little evidence of income data that could support the outlook. Notwithstanding this, retail sales volume growth for 2014 has been positive thus far. Calendar year growth rates seem sufficient to meet the *SPU 2014* forecast of 2 per cent consumption growth with little additional increase in seasonally-adjusted volumes. Spending on durable items is an encouraging sign of improved confidence.¹³ While car sales in 2013 were distorted by one-off factors, strong sales in early 2014 provide further support for improved consumption relative to 2013.

Investment spending is expected to continue strengthening in the near term. A resumption in aircraft purchases should boost investment very significantly, but these are directly offset by goods

¹¹ Over one-half of overall consumer spending is covered by retail sales data. Other spending, such as on utilities, could account for the divergence. Another possible explanation for this is that consumer spending relates to spending by Irish residents. As such, expenditure in the State by tourists and other visitors is deducted in aggregate to obtain total expenditure by Irish residents. This may also have induced a divergence with the retail sales data, either actual or due to measurement error.

¹² Benchmark projections form a key part of the endorsement process and are explained in detail in Section 2.4.

¹³ This is supported by ESRI/KBC consumer sentiment indicators which had returned to levels close to their long-term average and the highest in nearly seven years at the time of writing.

imports, with no net impact on GDP growth. Excluding aircraft, underlying investment is still expected to build on the recovery that began in 2013, driven by increased spending on machinery and equipment and rising levels of housing-related investment. Overall investment (including aircraft) is expected to reach levels equivalent to 14.1 per cent of GDP by 2015. However, investment remains far below its long-run share of GDP of above 20 per cent and has considerable scope to increase further. As investment projects are likely to have been deferred in recent years due to high levels of uncertainty, signs of stabilisation should support increased investment growth in the short term.

TABLE 2.1: *SPU 2014* MACROECONOMIC FORECASTS (TO 2015)

| % change unless otherwise stated | 2012 | 2013 | 2014 | 2015 |
|----------------------------------|-------|-------|-------|-------|
| Real GDP | 0.2 | -0.3 | 2.1 | 2.7 |
| Real GNP | 1.8 | 3.4 | 2.7 | 2.3 |
| Consumption | -0.3 | -1.1 | 2.0 | 1.6 |
| Investment | -1.0 | 4.2 | 15.4 | 12.4 |
| Government | -3.7 | -0.5 | -0.9 | -1.6 |
| Exports | 1.6 | 0.2 | 2.1 | 3.2 |
| Imports | 0.0 | 1.0 | 3.2 | 3.4 |
| Current Account (% of GDP) | 4.4 | 6.6 | 5.8 | 5.2 |
| Employment | -0.6 | 2.4 | 2.2 | 2.0 |
| Unemployment Rate | 14.7 | 13.1 | 11.5 | 10.5 |
| Inflation (HICP) | 2.0 | 0.5 | 0.5 | 0.9 |
| Nominal GDP (€ billions) | 163.9 | 164.0 | 168.4 | 174.5 |

Sources: CSO and Department of Finance (*SPU 2014*).

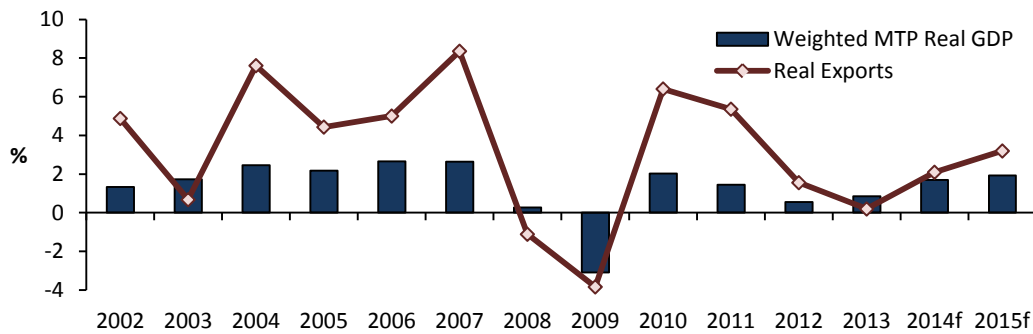
The *SPU 2014* forecasts for investment growth are strong, but remain plausible in the context of past experience and trends. The Benchmark projections also assumed solid growth in underlying investment. However, such improvements in investment performance will require a reasonably functioning credit system. The overhang of property-related debt is also likely to continue to weigh on credit availability and investment spending.

The *SPU 2014* projects **exports** to increase in the coming years, rising by 2.1 per cent and 3.2 per cent in 2014 and 2015 respectively. This reflects the anticipated recovery in export markets: weighted average real GDP growth rates in Ireland's major trading partners are expected to double this year, rising at 1.7 per cent in the EC forecasts (see Figure 2.2).¹⁴ However, the *SPU 2014*

¹⁴ Weights are taken from latest available full-year CSO trade data for both goods and services exports and cover just over 80 per cent of total export markets. Real GDP growth rates are from EC Spring 2014 forecasts.

projects continued weaknesses arising from the pharma-chem sector which will offset the positive influence of recovering external demand. Services exports, which now account for more than one-half of all export volumes, are expected to mirror the more benign external environment.

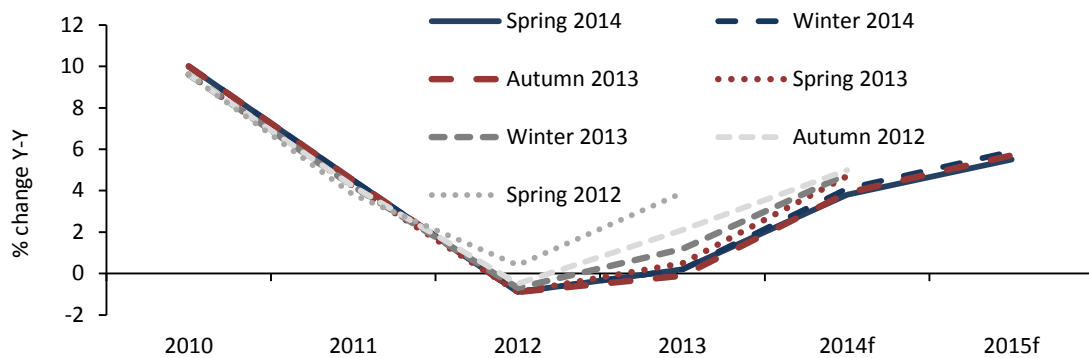
FIGURE 2.2: IRISH REAL EXPORTS AND WEIGHTED REAL GDP OF MAJOR TRADING PARTNERS (MTPs) (% CHANGE YEAR-ON-YEAR)



Sources: CSO; EC; Eurostat; SPU 2014 and internal calculations.

Euro Area forecasts have been subject to a pattern of downward revisions in recent years. As the Euro Area represents around one-third of the overall market for goods and services exports from Ireland, this has had significant implications for Irish export forecasts. However, this pattern seems to have run its course for now (Figure 2.3).

FIGURE 2.3: EURO AREA: IMPORTS, EC FORECAST VINTAGES (% CHANGE YEAR-ON-YEAR)

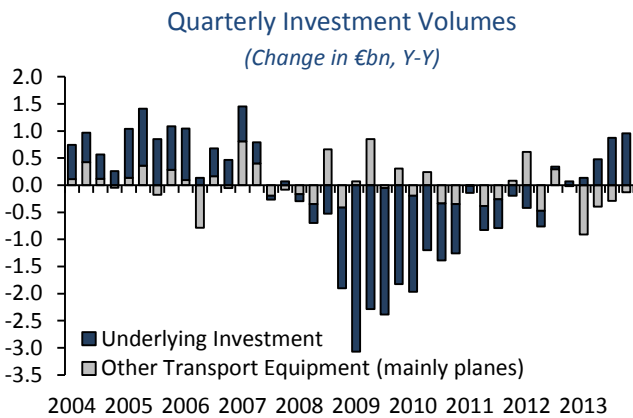


Source: EC Forecasts, different vintages.

The Benchmark projections and other forecasters anticipate much stronger growth in both exports of goods and services than the SPU 2014 forecasts. However, these differences largely relate to diverging views on developments in the pharma-chem sector that are subject to considerable levels of uncertainty given that they are driven largely by firm- and product-specific factors. Given this, an unusually wide range of forecasts on the trade side can be regarded as plausible.

FIGURE 2.4: KEY DEVELOPMENTS RELATING TO SHORT-TERM FORECASTS

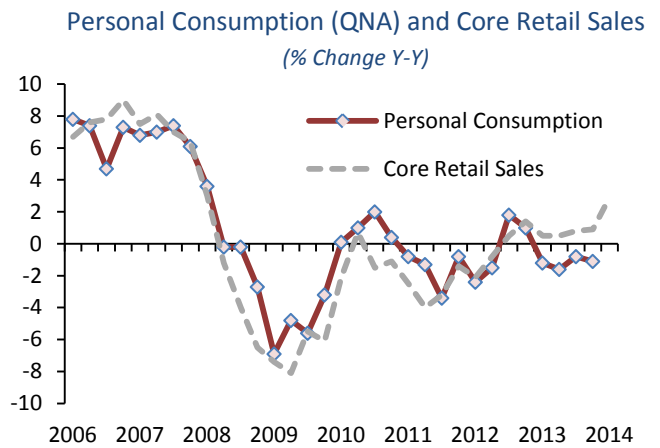
Domestic demand should be supported by underlying investment in the near-term...



Source: CSO.

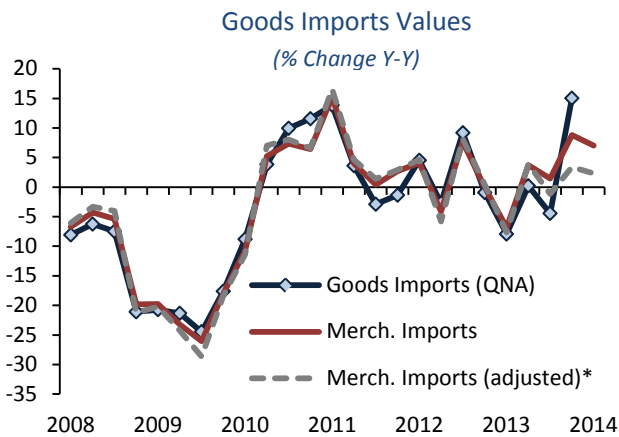
Note: Underlying investment is total investment excluding 'other transport equipment'.

...and core retail sales have recently indicated stronger consumer spending than actual outturns



Source: CSO.

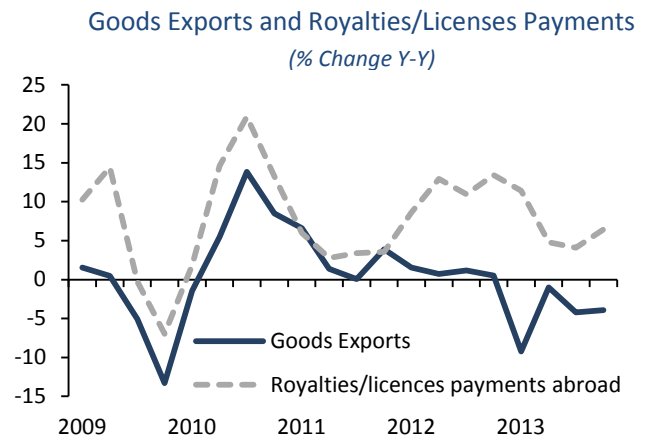
Strong goods imports weighed on Q4 GDP, but related to very specific industrial activities



Source: CSO.

* Excludes machinery specialised for particular industries; general industrial machinery & parts, n.e.s.; misc. manufactured articles; professional, scientific & controlling apparatus.

Royalties/licenses imports have remained strong even as goods exports wane



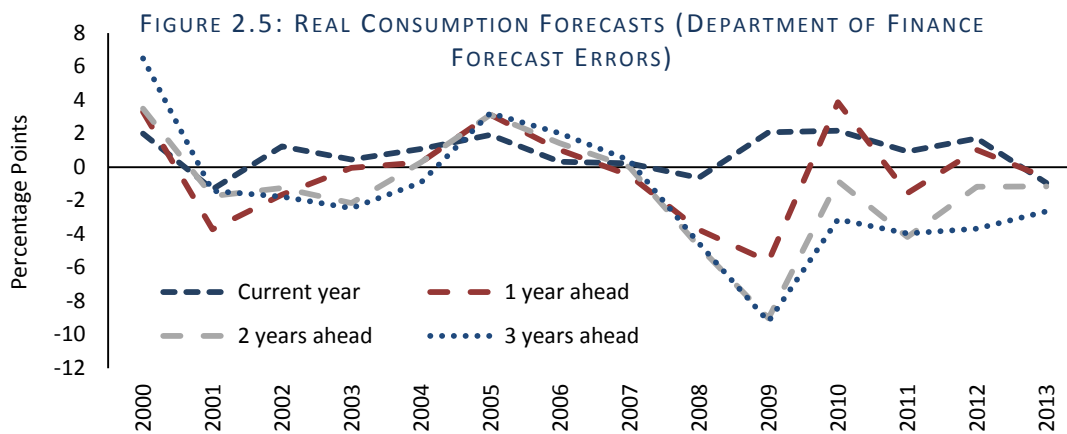
Source: CSO.

Turning to **imports**, services imports are likely to be boosted by the strong growth in imports of royalties/licenses payments (Figure 2.4). First, the recent declines in pharma-chem exports have not corresponded with a fall in imports of royalties.¹⁵ Second, a recent trend increase in royalties

¹⁵ Instead, associated revenue losses appear to have materialised in the form of reduced profit outflows, with GNP showing a corresponding boost. See 'Box A: What is driving GNP?' in the Central Bank of Ireland Quarterly Bulletin 1, January 2014 for a more nuanced discussion of developments in GNP and net factor incomes of late. The relationship between royalty/licenses payments and the pharma-chem sector is explored further in FitzGerald (2013c).

and licenses payments – primarily accounted for by multinationals in the Information, Communication and Technology (ICT) sector – is expected to continue.¹⁶

Moreover, goods imports were exceptionally strong in the final quarter of 2013. Monthly merchandise trade data suggests that a large portion of this related to imports of specialised machinery and equipment in very specific activities. Excluding these components, goods imports rose by approximately 3½ per cent year-on-year in value terms in the final quarter compared to a headline rise of 15 per cent. While the specific import components mentioned here may be one-off in terms of the level of imports and the data may be revised, it is critical that the Department’s forecasts for 2014 and 2015 imply reasonable quarterly profiles of imports that take account of these effects.



Sources: Department of Finance; CSO and internal calculations.

Note: Negative errors indicate forecasts were unduly optimistic in this case.

A key question in terms of the recovery is the balance between domestic and external demand. The Benchmark projections suggest similar GDP growth rates to the *SPU 2014* forecasts, but with greater contributions from net exports in 2014-15.¹⁷ This could be significant from a fiscal perspective, given the tax-rich nature of domestic demand. Moreover, there has been a consistent pattern of domestic demand being overestimated in Department of Finance projections since the

¹⁶ By paying royalties to affiliated companies abroad, multinationals may reduce their profits and tax liabilities in Ireland (see Duffy *et al.* (2014) for further details).

¹⁷ The Benchmark projections forecast an average annual contribution to growth from net exports of 0.9 percentage points in 2014 and 2015 with a domestic demand contribution of about 1.4 per cent. The comparable Department of Finance figures were 0.0 per cent and 2.4 per cent, respectively.

financial crisis began. Forecasts, at various horizons, tended to overestimate consumption growth for 2013 (Figure 2.5).¹⁸

Real GNP growth rates are being boosted significantly by lower net factor outflows. Falling profits due to weaker export activity amid patent expiries and reduced interest payments abroad by the financial sector are helping to drive down outflows. The divergent growth rates of GNP and GDP are expected to narrow over the near term, however, as the impact of recent patent expiries abates. Moreover, the recent pattern of ‘redomiciled PLCs’ locating in Ireland and artificially inflating the current account balance appears to have run its course for now.¹⁹ The recent trend improvement in the current account surplus is largely unaffected by these factors though the scale of the corresponding ‘redomiciled PLCs’ impact remains close to 5 per cent of GNP (Duffy *et al.*, 2014).

The *SPU 2014* forecasts a continuation of the very positive **employment** dynamics witnessed in 2013. Employment is expected to grow by close to 2 per cent in 2014 and 2015, with the unemployment rate falling to 10.5 per cent in 2015 (from a peak of 15.1 per cent in early 2012). Seasonally adjusted employment growth slowed between the last quarter of 2013 and the first quarter of 2014, although it is not clear whether this deceleration will be sustained. Survey indicators continue to point to expansions in employment, while Live Register figures also suggest that 2 per cent employment growth should be achievable this year. Even if employment stayed at current levels, a strong base means that annual growth of some 1.2 per cent would still be likely for 2014. Continued robust employment growth may, however, require a considerable broadening across sectors. The bulk of non-Agriculture jobs created in 2013 came from the sectors of Accommodation and Food Services together with Professional, Scientific and Technical Services.²⁰ However, an uptick in building and construction investment is expected, alongside a tailing off of job losses in Financial Services and the broader Public sector.

¹⁸ This is consistent with the uncertain nature of household deleveraging and its impact on consumption, a feature typifying post-crisis balance sheet recessions (see Koo (2009) and Box D of the previous Assessment Report (IFAC, 2013b) for a discussion of these dynamics).

¹⁹ Redomiciled PLCs are firms with major investments internationally that have established legal presences in Ireland. While large profits are paid to them in Ireland, they pay out only some of these as dividends to shareholders abroad. As FitzGerald (2013a) notes, this results in recorded inflows into the economy generated by these firms being much larger than the recorded outflows. This has the effect of raising the current account surplus and the level of nominal GNP.

²⁰ The CSO has recently emphasised the employment sensitivity of the Agriculture, Forestry and Fishing sector, in particular, to sample changes over time. The 2011 *Census of Population* led to updated household samples for official labour market data to ensure that these remain representative. The new sample was introduced incrementally from Q4 2012 to Q4 2013. This change led to some variability in estimates, particularly at more detailed levels, though aggregate employment estimates are judged to be more robust as these are determined prior to sectoral allocations.

The combination of real GDP and employment growth means that economy-wide productivity advances in the short run may be subdued. Weaknesses in the pharma-chem sector are likely to imply that employment gains will outpace aggregate output growth in 2014. This effect is expected to reverse as prospects for the pharma-chem sector in Ireland ameliorate.

The *SPU 2014* forecasts nominal GDP rising to roughly €174.5 billion by 2015. From June 2014, however, the national accounts will be presented on a new statistical basis – ESA 2010. This will result in a series of changes to the treatment and classification of certain aggregates. This does not signify any modifications in the underlying dynamics of the economy as it is essentially a measurement issue, yet level changes may be significant. At the time of writing, early indications are that the impact will be to revise upwards the level of nominal GDP by as much as €4 billion or €5 billion (approximately 2½ - 3 per cent of GDP). This mainly reflects a change in the treatment of R&D spending.²¹

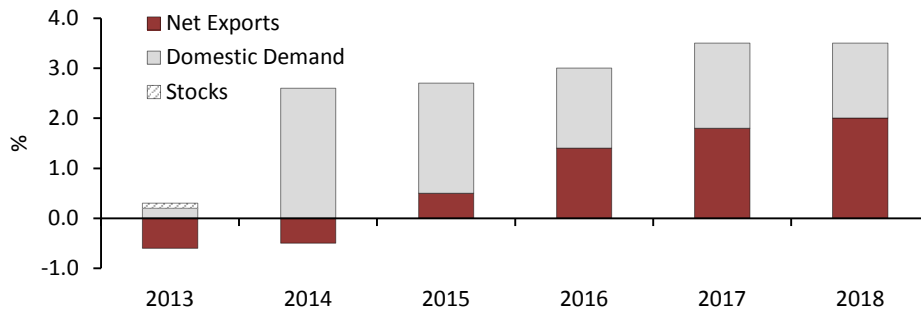
MEDIUM-TERM FORECASTS, 2016-2018

The *SPU 2014* medium-term projections show actual GDP growth rates rising to 3½ per cent in 2017 and 2018. In contrast to the short term, demand-side forecasts for later years imply net exports-driven growth, with domestic demand becoming less important (Figure 2.6).

The *SPU 2014* forecasts for potential growth also show annual rates increasing up to 3½ per cent by 2018, alongside an output gap that closes in 2017 (see Figure 2.7). The medium-term projections for potential output are prepared using the common methodology agreed between the EC and Member States. The projected contributions to potential output growth resulting from the EC method are shown in Figure 2.8. Roughly half of the growth in potential output – 1.7 percentage points per year – is anticipated to come from growth in labour inputs, with relatively low contributions by historical standards from capital accumulation and Total Factor Productivity (TFP). If continued, the labour market trends projected in *SPU 2014* would imply structural unemployment rates soon reaching very low levels. Analytical Note 2 provides an overview of the common methodology and a sensitivity analysis of the assumptions used in the application of the methodology in the *SPU 2014*.

²¹ The current statistical basis is ESA 1995. for more details on ESA 1995 and ESA 2010 see: http://epp.eurostat.ec.europa.eu/portal/page/portal/esa_2010/documents/2_1_Major_methodological_differences_ESA95_ESA2010.pdf. Additional details are available from [Eurostat](http://eurostat.ec.europa.eu). It is worth noting that regular data revisions unrelated to the change to the ESA 2010 basis could, of course, increase or reduce these impacts.

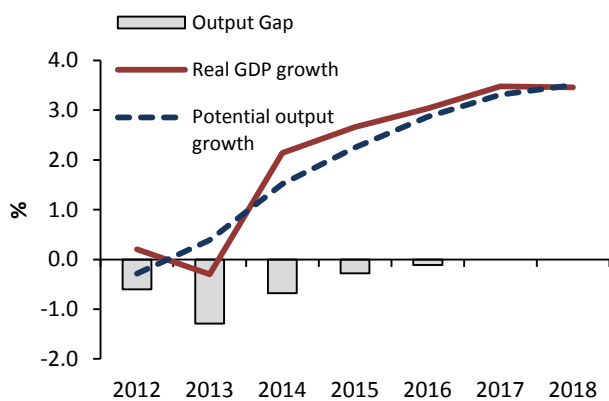
FIGURE 2.6 DOMESTIC DEMAND AND NET EXPORTS FORECASTS TO 2018



Source: SPU 2014.

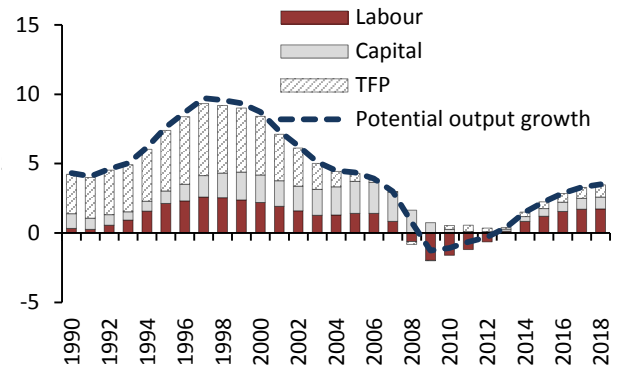
In a post-crisis environment, there is unavoidably high uncertainty about the medium-term prospects for the economy and the ultimate drivers of growth. The Government’s medium-term economic strategy document set ambitious goals for economic growth for the period until 2020 (Department of Finance, 2013d). However, neither the strategy document nor the *SPU 2014* provide sufficient diagnostic analysis of the main obstacles to, and opportunities for growth.²² Such diagnostic analysis is an essential complement to the common EC methodology in both projecting medium-term prospects and identifying policy priorities to ensure an effective supply response.

FIGURE 2.7: SPU 2014
GROWTH DECOMPOSITION



Source: SPU 2014.

FIGURE 2.8: SPU 2014
DECOMPOSITION OF POTENTIAL OUTPUT



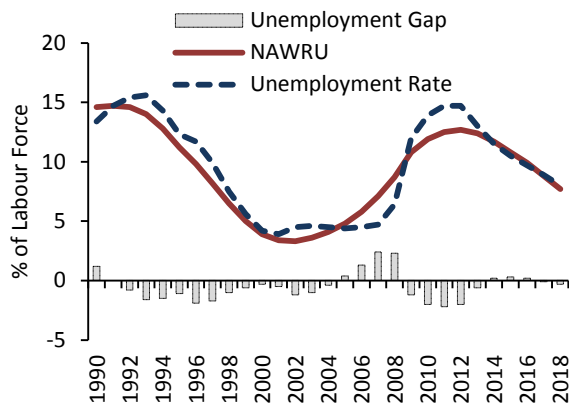
Source: SPU 2014 and internal calculations.

²² More detailed analysis is provided in the Action Plan for Jobs 2014 (Department of Jobs, Enterprise and Innovation, 2014), Construction 2020 (Department of the Taoiseach, 2014), and Pathways to Work 2013 (Update March 2014) (Department of Social Protection, 2014).

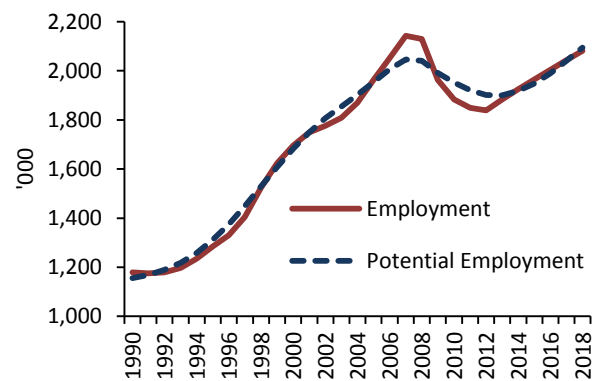
The following is a selective review of a number of the uncertainties surrounding the supply potential of the economy as they relate to labour input growth, capital accumulation and productivity performance. Each of these areas requires detailed analysis that goes beyond what is possible with the common methodology:

Labour input growth: the unemployment rate rose from a pre-crisis level of 4.7 per cent in 2007 to an annual peak of 14.7 per cent in 2012, before falling back to 13.1 per cent in 2013.²³ Using the EC methodology, the *SPU 2014* estimates that the structural unemployment rate (or NAWRU²⁴) was close to the actual rate in 2013 at 12.4 per cent. The *SPU 2014* projects very similar paths for the actual and structural rate out to 2018 (Figure 2.9). Moreover, it notes the Government’s goal of achieving “full employment” by 2020, which is taken to be an unemployment rate of between 5 and 6 per cent. However, significant uncertainties surround the likely evolution of the structural unemployment rate over the next number of years.²⁵

FIGURE 2.9: COMPONENTS OF POTENTIAL LABOUR SUPPLY



Source: *SPU 2014*; internal calculations based on EC methodology.



Source: Internal calculations based on Department of Finance data and EC methodology.

A second source of source of labour-input uncertainty relates to migration, including the return patterns of those who emigrated during the crisis.²⁶ The openness of the Irish labour market can lead it to behave more like a regional economy than a typical national economy. Regional

²³ Seasonally adjusted annual average. Note that at end-2013, the unemployment rate for those without a job for a period exceeding two years was approximately 5½ per cent.

²⁴ Non-Accelerating Wage Rate of Unemployment.

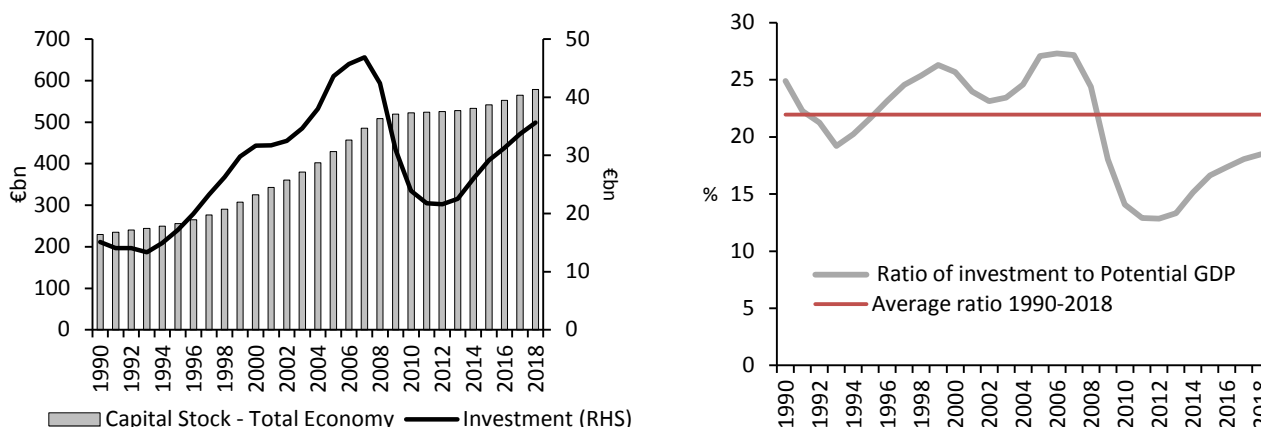
²⁵ Uncertainties surround the “scarring” effects of periods of long-term unemployment; the effects of the changed composition of labour demand; and the effectiveness of labour activation measures.

²⁶ One possible obstacle to a strong migration response is affordable housing availability. Demand-driven increases in non-traded goods prices – notably housing – can choke off positive dynamics. Although the recently released construction sector strategy (Department of the Taoiseach, 2014) sets out plans to improve the supply response, for now the extent to which the housing market will constrain the labour supply response is poorly understood.

economies can display periods of self-reinforcing growth, as inward migration supports scale economies and incomes, thus attracting further inward flows.

Capital accumulation: the Department’s forecasts show an increase in the capital stock over the forecast period, although the ratio of investment to potential output remains below its historical average (Figure 2.10 and Analytical Note 2). The *SPU 2014* indicates potential upside opportunities, though sustainable increases over the medium term would need to be underpinned by favourable developments relating to the cost of capital, credit availability and asset prices.²⁷ It is debatable whether these factors will be supportive of future investment in some sectors, particularly in light of present fragilities in the domestic financial sector and weaknesses in company balance sheets. While some recovery is likely, investment rates may be lower than the historical average given changes in the composition of output towards services and lower than usual construction activity.

FIGURE 2.10: COMPONENTS OF CAPITAL ACCUMULATION²⁸



Source: Department of Finance and internal calculations based on EC methodology.

Source: Department of Finance and internal calculations.

Total factor productivity and labour productivity: the *SPU 2014* projects a shift over time to net exports as the driver of medium-term growth. This will require the strong performance of Ireland’s internationally traded sectors – not least those dominated by multinational firms. The good record of foreign-direct investment through the crisis is an encouraging sign that this growth will materialise.²⁹ However, this requires that Ireland remains competitive in the market for new direct

²⁷ Lydon and Scally (2014) caution that these factors are key to an investment recovery.

²⁸ Analytical Note 2 discusses the main approach to potential output estimation under the EC methodology.

²⁹ Ireland’s inward foreign direct investment flows were more than six times the Euro Area annual average from 2009 to 2012 and the second highest among member states, when weighted as a share of GDP.

investment – a difficult requirement if growth proves to be relatively employment-rich and productivity gains subdued as the *SPU 2014* suggests.³⁰

Supporting Ireland’s attractiveness as a destination for investment, cost-competitiveness indicators have strengthened in recent years, underpinned by improvements in aggregate labour productivity.³¹ However, as reviewed in Box A, roughly half of the aggregate productivity improvement between 2007 and 2012 has resulted from crisis-related shifts in employment away from relatively low productivity sectors.

Over the medium term, overall economy-wide productivity growth will be affected by how the sectoral composition of employment evolves. As seen in 2013, a domestic-demand driven recovery in total employment could be associated with employment shifts toward sectors with relatively low productivity. Consequently, this could mean a relatively weak aggregate productivity performance. Further detailed analysis of within- and between-sector productivity trends would provide a useful complement to projections based on the common methodology.

BOX A: SECTORAL PRODUCTIVITY AND CHANGES IN THE COMPOSITION OF EMPLOYMENT

Growth in labour productivity is the main driver of improvements in living standards over the long term. Economy-wide labour productivity growth can be usefully decomposed into two broad components. The first is sector-level productivity growth weighted by the sector shares in total output. At the sectoral level, productivity growth is driven by improved efficiency and capital deepening (i.e., increases in capital per worker). The second is shifts in the sectoral composition of employment. Shifts in the composition of employment towards relatively high productivity sectors will tend to increase aggregate labour productivity.

We can approximate these two effects using the following equation³²:

$$\frac{d\rho}{\rho} = \sum_{i=1}^m \frac{Y_i}{Y} \frac{d\rho_i}{\rho_i} + \sum_{i=1}^m \frac{\rho_i}{\rho} ds_i$$

where ρ is productivity measured by output per employee, Y is output, and s is a sector’s share of employment. An individual sector is indexed by i and the total number of sectors is

³⁰ Compensation per employee is expected to be growing at a rate of 2.2 per cent annually by 2018. The transition from a domestic recovery to an export-led one from 2017 is expected to imply lower average GNP growth rates (of around 2.7 per cent) as foreign-owned multinationals increase their factor outflows from unusually low levels.

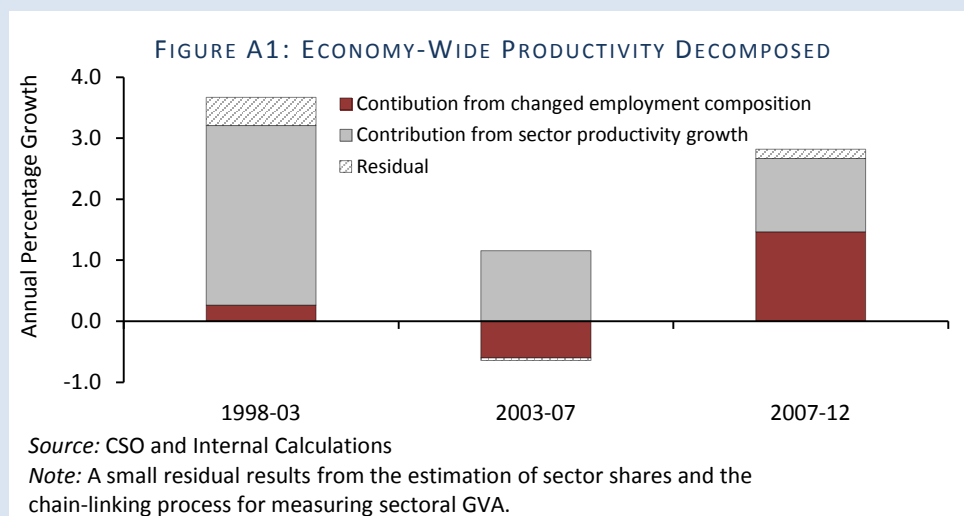
³¹ Real effective exchange rates (EC) suggest that the Ireland’s relative competitiveness is back at 2002-03 levels. More recently, the IMD World Competitiveness Survey (2014) ranked Ireland 15th out of 60 international economies on the basis of a comprehensive range of competitiveness measures.

³² The derivation of this formula and the decomposition can be found at www.fiscalcouncil.ie.

m. Essentially, the growth in productivity is broken down into two components:

- (i) the contribution to productivity growth purely from sector-level productivity growth; this is the sum of each sector’s productivity growth weighted by its share of output;
- (ii) the contribution from shifts between relatively productive and relatively unproductive sectors; this is the sum of the change in share of employment weighted by relative productivity.³³

Figure A1 shows the economy-wide split over three periods; the late 1990s/early 2000s; the mid-2000s (which roughly translates to the housing bubble period); and the post-bubble period.³⁴



We can see that at the tail-end of the Celtic Tiger (1998 to 2003), there is limited productivity growth from shifts in the sectoral composition of employment while productivity growth within sectors accounts for the vast majority of the economy-wide productivity growth over the period, which averaged three-and-a-half per cent *per annum*.

During the housing bubble period, aggregate productivity fell considerably, averaging just 0.5 per cent growth *per annum*. The contribution from shifting employment composition was negative, indicating that relatively unproductive sectors expanded their employment share. This is consistent with an environment in which employment in traditionally low productivity sectors is expanding rapidly. For instance, in the years 2003 to 2007, employment growth in Construction averaged 9.1 per cent *per annum*; similarly, Accommodation and Food Service activities grew at 4.2 per cent *per annum*. In contrast, higher productivity sectors such as ICT and pharma experienced employment growth of 1.1 per cent and 3.2 per cent *per annum*, respectively.

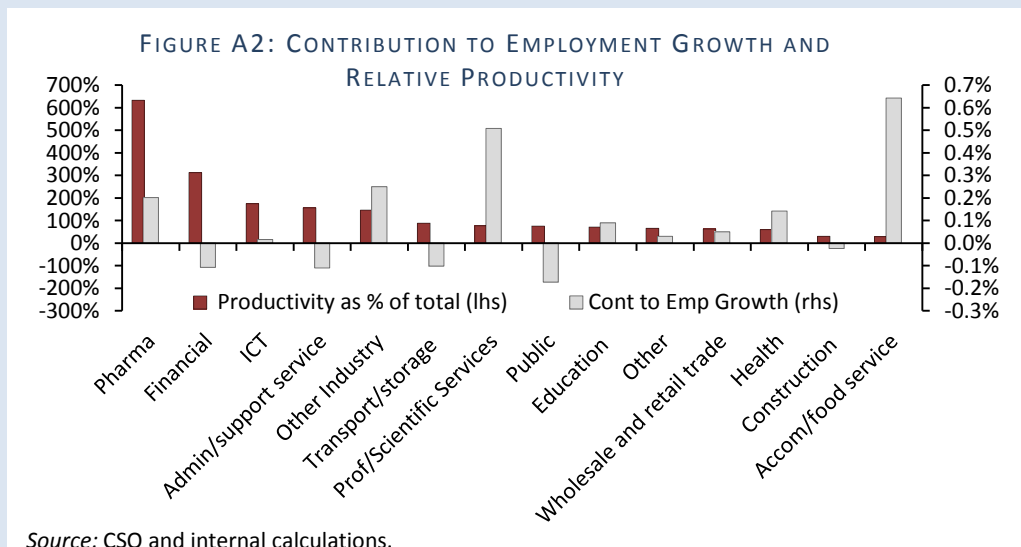
Productivity growth within sectors also fell considerably over the same period, from a 2.9 per cent annual contribution to just 1.2 per cent, possibly reflecting the maturing of the catch-up phase of Irish economic growth. One of the largest contributors to this source of productivity growth was the financial services sector (reflecting, in part, the unsustainable expansion of credit during the period).

³³ The formula assumes that average and marginal productivity are equal.

³⁴ A similar split results from removing sectors dominated by the public sector where output is difficult to estimate.

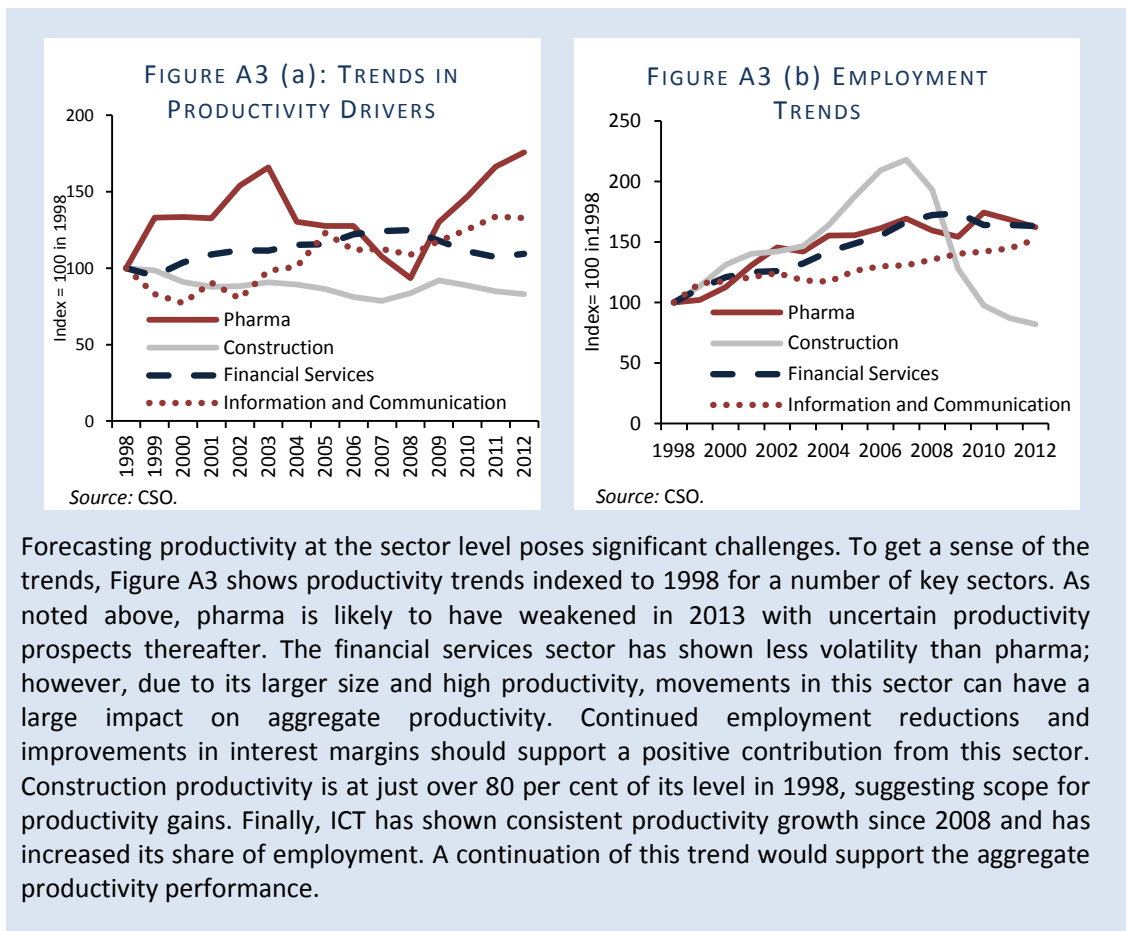
Since the recession (2007-12), aggregate productivity growth has jumped back to 2.7 per cent *per annum*, close to rates seen prior to the housing boom. However, more than half of this has been due to shifts in the composition of employment as the bulk of job losses were concentrated in low-productivity sectors while the annual contribution from sectoral productivity growth did not fare much better than it had during the housing boom at c.1.2 per cent. If employment shares are held constant, then a repeat of the post-2003 productivity performance going forward would see productivity growth of slightly over 1 per cent *per annum*.

In the medium term, the outlook for Irish productivity depends, in part, on the nature of the recovery. A domestic demand-led recovery accompanied by strong growth in construction activity would imply relatively weak productivity growth.



Measured productivity was actually negative in 2013. Part of this is explained by the pharmaceutical sector's 'patent cliff', but it may not be the whole story. It is difficult to draw firm conclusions regarding shifts in the composition of employment for 2013 due to CSO sampling issues regarding agriculture. Figure A2 shows the contribution of several non-agri sectors to employment growth in 2013 and their relative productivity in 2012. The largest contributor to non-agri employment was the least productive sector in the economy, accommodation and food services. While the second largest contributor, professional, scientific and technical services, is considerably more productive, it is still less productive than the aggregate. Some of the more productive sectors saw their share of employment decline, and while the pharma sector did post jobs growth, its relative productivity fell substantially in 2013. There is considerable uncertainty regarding the future of pharmaceutical productivity in Ireland, but Van Egeraat (2014) projects that output losses resulting from patent expirations relevant to Ireland should be concentrated in the period 2012 to 2014.³⁵

³⁵ See comment on forthcoming work, "CSO pharmaceutical industrial production figures – patent cliff or hill" by C. Van Egeraat (2014) available at: <http://irelandafternama.wordpress.com/2012/11/07/cso-pharmaceutical-industrial-production-figures-patent-cliff-or-hill/>



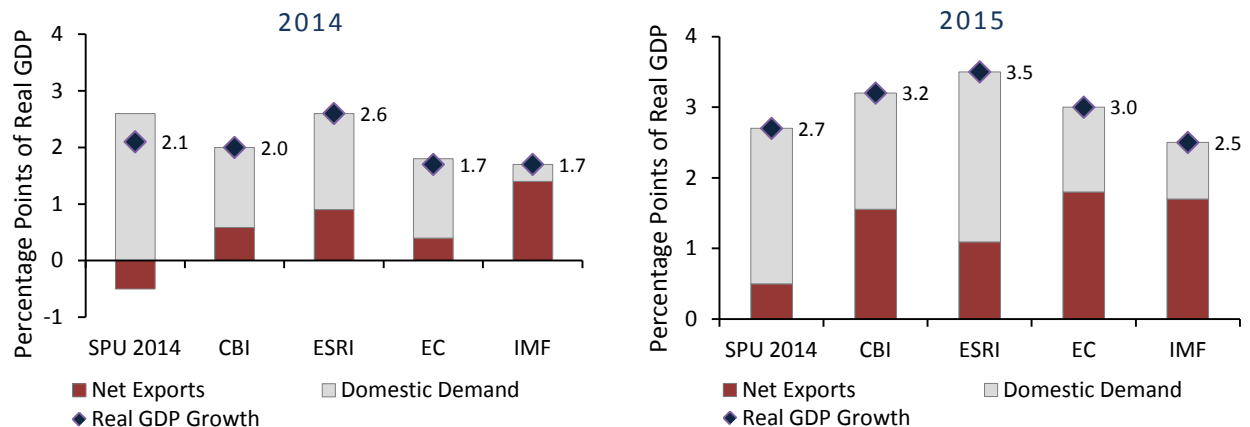
Forecasting productivity at the sector level poses significant challenges. To get a sense of the trends, Figure A3 shows productivity trends indexed to 1998 for a number of key sectors. As noted above, pharma is likely to have weakened in 2013 with uncertain productivity prospects thereafter. The financial services sector has shown less volatility than pharma; however, due to its larger size and high productivity, movements in this sector can have a large impact on aggregate productivity. Continued employment reductions and improvements in interest margins should support a positive contribution from this sector. Construction productivity is at just over 80 per cent of its level in 1998, suggesting scope for productivity gains. Finally, ICT has shown consistent productivity growth since 2008 and has increased its share of employment. A continuation of this trend would support the aggregate productivity performance.

2.2.2 FORECASTS OF OTHER AGENCIES

The *SPU 2014* growth forecasts for 2014 to 2015 are broadly aligned with consensus forecasts. These project that the economy will grow at a reasonable pace this year, with real GDP running at close to 2 per cent, before accelerating to roughly 2½-3½ per cent in 2015 (Annex A.1-A.2). At the higher end, the ESRI foresee real GDP growth of 2.6 per cent in 2014 and 3.5 per cent the following year, while the EC and IMF forecasts are at the lower end of the range.

As with the Benchmark projections prepared by the Council’s Secretariat, differences with the *SPU 2014* and other forecasts largely relate to the composition of growth. As Figure 2.11 shows, contributions from domestic demand components are more pronounced in the *SPU 2014* forecasts than in those of other agencies. For 2014 and 2015, the *SPU 2014* expects domestic demand to contribute 2.6 percentage points and 2.2 percentage points to real GDP growth, respectively, while the consensus among agencies is roughly 1 and 1½ percentage points over the same period.

FIGURE 2.11: COMPARATIVE REAL GDP GROWTH CONTRIBUTIONS
(PERCENTAGE POINTS)



Sources: SPU 2014; EC; ESRI; IMF; Central Bank of Ireland.

TABLE 2.2: MEDIUM TERM MACROECONOMIC FORECASTS TO 2018

| % change unless otherwise stated | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------------------|------|------|------|------|------|
| SPU 2014 | | | | | |
| GDP | 2.1 | 2.7 | 3.0 | 3.5 | 3.5 |
| Employment | 2.2 | 2.0 | 2.0 | 1.9 | 1.9 |
| Productivity | -0.1 | 0.7 | 1.0 | 1.5 | 1.5 |
| ESRI (MTR: Recovery Scenario) | | | | | |
| GDP | 3.0 | 4.0 | 4.1 | 4.2 | 3.7 |
| Employment | 0.9 | 2.3 | 2.9 | 1.9 | 2.2 |
| Productivity (implied)* | 2.1 | 1.7 | 1.2 | 2.3 | 1.5 |
| IMF (12th Review) | | | | | |
| GDP | 1.7 | 2.5 | 2.5 | 2.5 | 2.5 |
| Employment | 1.5 | 1.2 | 1.2 | 1.7 | 1.7 |
| Productivity (implied)* | 0.2 | 1.3 | 1.3 | 0.8 | 0.8 |
| OECD (May 2014) | | | | | |
| GDP | 1.9 | 2.2 | 3.3 | 3.3 | 3.0 |

Sources: SPU 2014; ESRI (Medium-Term Review 2013); IMF (12th Review); OECD (Economic Outlook, May 2014).

* Implied productivity is simply GDP growth less employment growth.

Few other agencies provide medium-term forecasts (2016 to 2018 in this case) and these tend to be updated infrequently (Annex A.3). The latest *Medium-Term Review* from the ESRI (FitzGerald *et al.*, 2013b) based on its *HERMES* macro-economic model outlines three scenarios as an update to its 2008 publication.³⁶ The IMF provides more regular updates to baseline forecasts for the medium term as does the OECD with its annual long-term baseline projections.

³⁶ The latest ESRI *Medium-Term Review* was published in July 2013 as an update to the May 2008 publication. Three scenarios were shown, with aggregate productivity growth ranging from approximately 1.2 per cent *per annum* over

The *SPU 2014* medium-term real GDP growth forecasts fall between the two more favourable ESRI scenarios, though they are above the IMF and OECD baseline projections (see Table 2.2). They are roughly one percentage point higher than the IMF forecasts which assume real GDP growth averaging 2.5 per cent for the same period. This is primarily driven by greater productivity advances in the *SPU 2014* projections, which are expected to grow at nearly twice the rates assumed by the IMF. Productivity gains are, however, short of the two more favourable ESRI scenarios.³⁷

TABLE 2.3: OUTPUT GAP FORECASTS TO 2018

| % | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------|------|------|------|------|------|
| SPU 2014 | -0.7 | -0.3 | -0.1 | 0.0 | 0.0 |
| OECD (May 2014) | -7.8 | -6.7 | -4.5 | -2.7 | -1.5 |
| IMF (12th Review) | -1.3 | -0.4 | 0.1 | 0.3 | 0.4 |
| EC (Spring 2014) | -1.0 | 0.0 | n.a. | n.a. | n.a. |

Sources: *SPU 2014*; ESRI (*Medium-Term Review 2013*); IMF (*12th Review*); OECD (*Economic Outlook, May 2014*)

* Potential GDP growth rates unavailable for IMF

A wide range of estimates of the output gap and potential output growth rates exist across forecasters and methodologies (Table 2.3 and Annex Table A.4). This is to be expected given the difficulties in separating cyclical and trend components of output. Though actual and trend growth are anticipated to converge within a horizon of a few years, there is a great deal of uncertainty as to the trend path to which real GDP may converge and whether some of the growth from 2016 to 2018 that results may in fact be more cyclical than assumed.^{38, 39}

2.3 RISKS

Downside risks are likely to dominate over the forecast horizon. Overall, the discussion on risks in *SPU 2014* is limited and a statement of the balance of risks, akin to that contained in *Budget 2014*, is not provided. Stating the balance of risks improves the transparency of forecasts and should be incorporated in future official forecasts.

the period 2014-2018 to 1.8 per cent *per annum*. The IMF and *SPU 2014* base productivity forecasts are closer to 1 per cent *per annum*, but the *SPU 2014* projects a rise to ½ per cent *per annum* by 2017/2018 (IMF are 0.8 per cent).

³⁷ The ESRI forecasts for productivity gains appear to reflect an assumed continuation of high productivity growth in the manufacturing sector as in the past, with the market services sector lagging somewhat. More generally, rising working population educational attainment is linked to higher average attainment amongst the current cohort of the population in their late twenties.

³⁸ The EC methodology implies a very low output gap of just -1 per cent in 2014 – smaller than IMF and OECD estimates. While the IMF and the EC tend to assume that the output gap will be closed before 2017, much like the *SPU 2014* projections (Table 2.3), OECD estimates do not foresee this happening even by 2018.

³⁹ The EC forecasts in Spring 2014 revised potential output growth in 2018 down from 2.3 per cent (EC, Winter 2014) to 1.3 per cent. The large swing is symptomatic of sensitivity to labour inputs (Analytical Note 2). Key assumptions concerning recent working age population growth may change again as more recent data are incorporated.

The *SPU 2014* briefly documents some risks – the fragility of the external recovery; low inflation; geopolitical risks; short-term persistence of pharma-chem weaknesses; the concentrated nature of the strong IT services sector and the uncertain path for consumption given high levels of household indebtedness. Two upside risks are also listed: a more rapid recovery in investment from record low levels and stronger-than-expected employment growth. Uncertainties regarding medium-term supply-side developments are acknowledged, but specific risks are not outlined. The Council’s own risk assessment reflects the possibilities of high forecast errors in either direction and covers:

Domestic risks primarily relate to uncertainty about the dynamics of the post-bubble recession and recovery (Box D, IFAC, 2013b). Household indebtedness as a share of disposable income remains well above international and historical norms (Figure 2.12) largely as a result of mortgage debt (Cussen *et al.*, 2013). However, repayments finally appear to be reducing this ratio as disposable incomes have stabilised.⁴⁰ Non-financial corporate balance sheets also remain strained and international experience cautions about the persistence of weak domestic demand and the risks of setbacks under such conditions.⁴¹

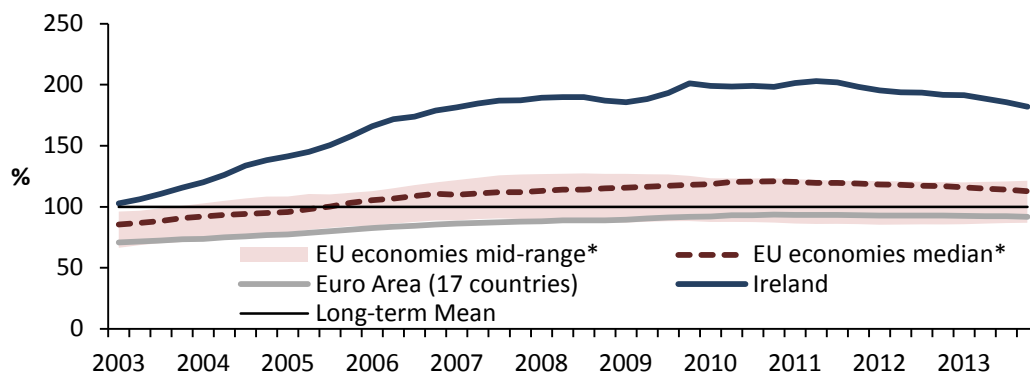
Developments in relation to external demand as well as Ireland’s competitiveness and productivity will be key to sustaining net export performance and strong FDI inflows. Consensus forecasts for major trading partners have been more stable of late, yet fragilities vis-à-vis Euro Area policy shocks and geopolitical tensions in Eastern Europe still represent low-probability, but high-impact risks. More persistent risks also surround the longer-term prospects for the global economy. Ongoing demand shortfalls could arise from more sluggish technology advancements and weaker demand.^{42,43, 44} Cost pressures could also undermine recent competitiveness gains and trade potential.⁴⁵

⁴⁰ Focusing on consumption, Lydon (2013) suggests that Irish households with debt problems reduce spending by 18 per cent when controlling for other characteristics. Findings may be influenced by unobserved characteristics and sample selection issues, however (e.g., under-sampling of borrowers in arrears longer than one year).

⁴¹ McCann (2014) profiles Irish SME indebtedness, showing that, while just under one-third of domestic bank loans to Irish SMEs and corporates was impaired at end-2013, roughly one-third of Irish SMEs actually carried no debt. Close to 84 per cent have Debt-to-Turnover (DT) ratios – positively associated with default rates – less than one-third. Only 7 per cent have ratios greater than one. Incidences of extreme indebtedness (DT>1) are therefore less common than may be expected. O’ Toole, Gerlach-Kristen and O’ Connell (2013) note that, although hotels and property-related sectors continue to face the highest debt burdens, debt overhang is very much a firm-by-firm issue rather than a sectoral issue.

⁴² See Summers (2013) for an accessible account. See Eggertsson and Mehrotra (2014) for a recent theoretical model of the secular-stagnation phenomenon. Secular stagnation is usefully viewed as a situation where global saving (at potential output) would be brought into balance with global investment at a negative real interest rate. With a zero lower bound on nominal interest rates and low expected inflation, it can be impossible to achieve the market-equilibrating negative real interest rate. (See IMF, 2014, for a review of recent world real interest rate

FIGURE 2.12: HOUSEHOLD DEBT AS A PERCENTAGE OF DISPOSABLE INCOME



Source: Eurostat and internal calculations.

Note: Disposable income = 4Q moving sum of actual gross disposable income; Debt = Long-term loans; long-term mean=100 (since 2000, not available for all economies over full period observed); * mid-range (middle 50 per cent of distribution); long-term mean and median cover 10 EU economies for which data are available.

Low inflation/deflation in the Euro Area could raise real interest rates and real debt burdens, while also potentially deferring consumption and investment decisions. Competitiveness gains could also, in turn, be undermined given downward nominal rigidities in wages and prices.

Credit institutions’ ability to support the recovery remains uncertain. Legacy asset problems still represent a drag on profitability, though domestic lenders have substantially downsized their balance sheets. Mortgage arrears finally appear to be easing and distressed loans are being worked through. Maintaining the pace of the work-through and credibly removing uncertainty regarding asset values would help to sustain any improvement in market funding costs, future profitability, and ultimately lending to the economy.⁴⁶

developments.) Global income must then adjust downwards to bring saving into balance with investment at the actual real interest rate. This can result in a persistent shortfall of output below potential.

⁴³ The supply- and demand-side factors can be linked if weak technological progress is a factor behind weak investment demand. Persistent shortfalls in aggregate demand can also weaken supply potential through “hysteresis” effects. Examples of such effects are the loss of skills and labour market contacts that result during extended periods of unemployment or the failure of potentially viable businesses in a recession, especially where credit is difficult to obtain.

⁴⁴ On the optimistic side, see Brynjolfsson and McAfee (2014) and Mokyr (2013); a much more pessimistic assessment is provided by Gordon (2012 and 2014).

⁴⁵ These and other competitiveness aggregates are explored in detail in the National Competitiveness Council’s “Costs of Doing Business in Ireland, 2014” report.

⁴⁶ IMF (2014) estimates of credit supply shocks’ impact on GDP suggest that these are pronounced in the Irish case, with a 10 percentage point tightening of lending standards – similar to that observed globally after the Lehman Brothers bankruptcy – estimated to be associated with a cumulative 4 per cent contraction in Irish real GDP over 4 years.

Rapid house price increases in parts of Dublin have not as yet been accompanied by the strong credit growth or unsustainable construction-supply response that characterised the past cycle. However, the experience of the last bubble is a warning that price increases – even if initially driven by fundamentals – can lead to expectations that can too easily become entrenched and divorced from those fundamentals, with credit potentially serving as an unsustainable catalyst.⁴⁷ The negative implications for economic growth are all too familiar, with unsustainable misallocations of labour and capital towards ultimately unproductive areas of the economy an obvious legacy of the bubble (see Analytical Note 1).

The labour market is a key driver of potential growth. Failure to implement policies underpinning a continued restoration in competitiveness and an improvement in re-employment opportunities for the longer-term unemployed (Conefrey *et al.*, 2013) could undermine the envisaged recovery. In a review of the *Action Plan for Jobs*, the OECD (2014) highlights challenges faced in activating the unemployed, including the need to strengthen training provisions. It also questions the cost-effectiveness of existing activation programmes and highlights the need to modernise apprenticeship systems.⁴⁸

On the upside, investment developments could surprise if a stabilisation in overall economic activity reduces uncertainties relating to returns. This could be further supported if operational positions in domestic lenders improve and international financial markets prove accommodating. Also, if labour market developments were to surpass expectations and savings rates fell from high levels, consumer spending could turn out better than forecast.

2.4 THE COUNCIL'S APPROACH TO ENDORSEMENT

The Council's endorsement function (outlined in detail in IFAC, 2013b) requires it to "...endorse, as it considers appropriate, the macroeconomic forecasts prepared by the Department of Finance...".⁴⁹ In the event that the Council is not in a position to endorse the macroeconomic forecasts, the Council is required to set out the reasons for non-endorsement. This section

⁴⁷ Globalised credit expansions, if co-incident, may be primed to accelerate or "turbocharge" initial boom periods, thereby aggravating the severity of the boom-bust cycle as highlighted by Honohan (2011).

⁴⁸ See Department of Jobs, Enterprise and Innovation (2014) for original document.

⁴⁹ The endorsement is provided by way of a formal letter to the Department of Finance ahead of the publication of the Budget or draft Stability Programme. This letter is made public no later than Budget day or the day of publication of the draft Stability Programme.

summarises the framework and underlying methodologies used by the Council to inform its endorsement.

2.4.1 ENDORSEMENT OF SHORT-TERM FORECASTS, 2014 TO 2015

The Council's approach to endorsement focuses on whether the macroeconomic forecasts are within an "endorsable range" of appropriate forecasts. This range is informed by Benchmark projections prepared by the Secretariat, macroeconomic uncertainty (including the size of past forecast errors) and a recognition of potential data revisions.⁵⁰ The size of the endorsable range may vary across time and for different variables depending on judgement. Other elements accounted for include the methodology used, the soundness of judgements involved and the appropriateness of forecasts as "most likely" projections.^{51, 52}

SHORT-TERM FORECASTING TOOLS

A set of macroeconomic models is being developed by the Secretariat. In some areas, a "suite of models" approach is being developed, using a range of models to forecast the same variable, and then drawing on the range of outputs.⁵³ The models used by the Council have a number of origins. Some are the same as those employed by the Department of Finance, while others are adaptations or refinements of these models. Additional models have been developed independently by the Council's Secretariat or in consultation with forecasting teams in other agencies. Since November, new models of imports, tourism exports and unemployment have been added.⁵⁴ Judgement plays

⁵⁰ To ensure that the Council is able to provide an independent analysis of, and to effectively challenge the Department of Finance forecasts, the benchmark projections are completed before the Council engages in in-depth endorsement meetings with the Department of Finance.

⁵¹ Soundly-based forecasts need to be internally consistent in terms of the projections for different items, given the accounting relationships and economic links between different variables. As explained in the previous *Fiscal Assessment Report* (IFAC, 2013b, Box B), the appropriateness of forecasts as "most likely" projections clarifies assumptions about risk embodied in the forecast and can determine whether specific forecasts lie within an endorsable range.

⁵² In addition to discussions with Council members, an important input into the preparation of the Benchmark projections involves a round of discussions with other forecasters, coming from a wide variety of different perspectives. For this round of forecasts, the Secretariat held discussions with forecasters at the EC, the IMF, the ESRI, Ulster Bank and KBC Bank Ireland. The Secretariat also held discussions with various members of the CSO to gain further insights into topical issues and to gain more information on the statistical treatment of a number of key variables.

⁵³ This approach is prudent given the uncertainty around the forecasts from any single model and it helps to provide a more robust picture. The methodology for short-run forecasts is detailed in the previous *Fiscal Assessment Report* (IFAC, 2013b). It is based heavily on a system of equations mirroring the income and expenditure side of the National Accounts, with GDP and GNP derived using a "bottom up" approach from their components.

⁵⁴ Other approaches and information sources are employed to help arrive at reasonable forecasts where models prove insufficient guides. For example, data on aircraft purchases are taken from equity analyst projections and annual reports, labour market forecasts are augmented by looking at disaggregated trends in the *Quarterly National*

an important role in the Benchmark projections, with many factors affecting the economy in the short term not lending themselves to sufficient description by macroeconomic models.

2.4.2 ENDORSEMENT OF MEDIUM-TERM FORECASTS, 2016 TO 2018

The Council's mandate to endorse the forecasts in the *SPU 2014* includes medium-term forecasts (2016-2018) that cover a longer time horizon than in the *Budget*. These involve a different approach to the endorsement method underpinning the Council's first exercise in autumn 2013 which covered a typical two-year *Budget* horizon.⁵⁵

Medium-term growth forecasts rely less on individually-modelled demand components and high frequency indicators and more on assumptions relating to potential output and the output gap. Uncertainty around forecasts tends to increase at longer horizons, as reflected in the Council's fan chart analysis.⁵⁶ The endorsable range is therefore wider than for short-term forecasts.

The Council's endorsement of the medium-term forecasts focuses on the key variables defined in the Memorandum of Understanding (MoU).⁵⁷ The stability programme is required by EU regulations to include estimates of certain supply-side trend variables made under the methodology commonly agreed between EU Member States and the EC.

MEDIUM-TERM FORECASTING TOOLS

For this first endorsement of medium-term forecasts, the Council applied the concept of an endorsable range without relying on a unique set of Benchmark projections. Given the particular challenges of medium-term forecasting, the Council will continue to develop its tools to support a set of Benchmark projections at longer horizons for future endorsement rounds.

Household Survey and detailed consumption sub-component forecasts are checked against trends in sub-components of retail sales data.

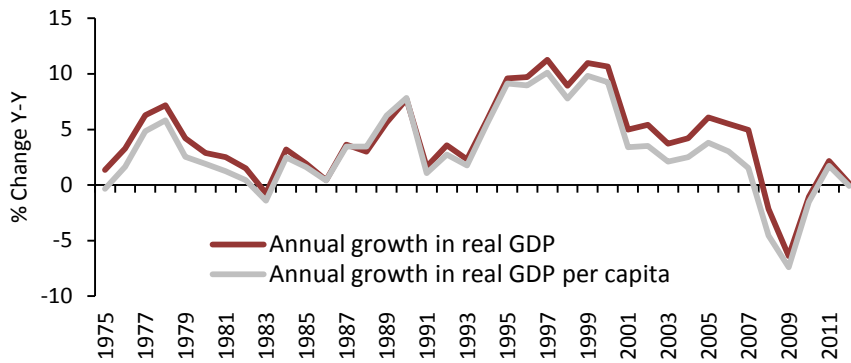
⁵⁵ See IFAC 2013b for an outline of the methods related to short-term forecasts.

⁵⁶ In a simple model where real output follows a stochastic trend or more narrowly has a unit root, the level of GDP would typically show greater uncertainty at longer horizons. In practice, there is likely to be some reversion to a trend but this may be weak over the standard Stability Programme horizon. While high frequency short-term volatility can also be significant, this tends to be less persistent than errors to medium-term forecasts.

⁵⁷ The MoU outlines the modalities of the arrangements necessary for the Council to carry out the endorsement function. It was revised following *Budget 2014*. The main changes concerned the need for an expanded data set given the (medium-term) requirements underlying the stability programme. It is available at: <http://www.fiscalcouncil.ie>

In the medium term, economic activity can be expected to be determined more by structural factors. This differs from projections for horizons of up to two years which depend more on the balance between cyclical demand and supply, as well as short-run dynamics and one-offs.

FIGURE 2.13: REAL GDP GROWTH RATES



Source: CSO, SPU 2014.

There are three standard approaches to projecting the medium-term path of the economy. The first uses statistical filtering to extract a trend from the data that can then be used to project the economic variables forward. The second approach models the supply-side of the economy as a production function with potential output a function of labour supply, the capital stock and total factor productivity (this broadly matches the Department’s approach and is detailed in Analytical Note 2). The third involves a full-scale model of the economy with both supply and demand determining the medium-term path.⁵⁸ In practice, these approaches are often used in combination.⁵⁹

The Council’s initial approach to assessing medium-term projections has primarily relied on the production function method. This approach has its origins in the Solow growth model (Solow, 1956). Labour inputs are determined by the working-age population, labour force participation, average hours worked and the unemployment rate. The capital stock depends on accumulated investment and depreciation. Total factor productivity depends on what is conceived as a global technological frontier, often understood as being embodied by those economies at the forefront of

⁵⁸ This approach is taken for the ESRI HERMES model.

⁵⁹ For example, filtering may be used to derive the path of the inputs to the production function.

technological advancement.⁶⁰ For this endorsement, the Council considered a range of projection and filtering methods for each component using a similar approach to that of the EC methodology.

At present, there are a number of specific challenges in using this framework to assess medium-term economic developments in Ireland:

High openness to migration and foreign investment mean that the availability of labour and capital in Ireland can adjust very rapidly, while these factors are closer to being fixed in larger economies. Foreign direct investment and activities of foreign-owned firms also play a key role in determining productivity.

The Irish economy has experienced a wide range of growth rates over recent decades, making it difficult to reliably identify stable trends (Figure 2.13). The housing boom and subsequent crisis make it difficult to assess the level of potential output, while there is also a possibility that domestic demand will remain relatively weak for a prolonged period due to high debt levels.

Output is highly concentrated in a small number of sectors and is therefore likely to depend on sector- and even firm-specific developments rather than on the general economic environment.

By focusing on the framework of the EC common methodology for this initial medium-term endorsement round, the Council assessed the consistency of Department of Finance supply-side estimates with the EC common methodology. This helped to explain exactly how the methodology was being used to reach the published *SPU 2014* estimates.⁶¹ It also provided a means of assessing the sensitivity of the medium-term forecasts to changes in the underlying assumptions.

⁶⁰ It is argued that economies not at the technology frontier may converge with it by adopting already-established technologies, while innovation will matter more to economies that are nearer the frontier as growth opportunities from adopting existing technologies dwindle. An economy's steady-state level of technology should be determined by the rate of convergence towards the frontier as well as differences in structural factors. Actual total factor productivity is determined as a residual.

⁶¹ There are limited degrees of freedom under the EC common methodology so that differences with the *SPU 2014* estimates can be more easily clarified when adopting the same approach. Varying assumptions, different filtering methods and alternative variables were analysed within the methodology in order to show the impact that these had on the estimates considered.

2.5 ENDORSEMENT OF THE *SPU 2014* PROJECTIONS

This section details the second endorsement exercise by the Council covering the *SPU 2014* (Annex B details the timeline). The Department of Finance provided high levels of cooperation in all of their interactions with the Council.

The Council endorsed the *SPU 2014* macroeconomic forecasts to 2018. It was satisfied that these were within its endorsable range, taking into account the methodology and the plausibility of the judgements made. Estimates of key trend supply-side variables in *SPU 2014* follow a common EC methodology. For these variables, the Council verified the correct application of this method.

Key issues identified by the Council at the time of the endorsement were largely the same as those outlined in the current assessment (see Section 2.2). They concerned: the composition of real GDP growth forecasts for 2014 and 2015; the strength of medium-term growth projections; the dependence on continued strength in labour developments; and the degree to which net-exports driven forecasts for 2017-2018 might be at variance with declining unemployment rates.

Separate issues arose in relation to the actual and trend real GDP growth rates for the medium term (2016 to 2018). The Council considered these to be near the upper-bound of any endorsable range and is concerned that potential output growth rates may not be met in light of a number of constraining factors as discussed earlier. For later years, it is far more difficult to state with confidence whether the *SPU 2014* forecast growth rates correspond to trend growth rates for the economy as implied by the output gap estimates. Another plausible scenario would see a larger initial output gap that closes later with trend output somewhat lower than projected by 2018. In the context of greater uncertainties at longer time horizons, the *SPU 2014* forecasts remain within the endorsable range, however. Another issue – and one that also emerged in the previous endorsement – was the consistency of Department of Finance annual growth forecasts with CSO published quarterly data. Some of these appeared relatively unlikely – an issue that remains an avoidable source of potential error.⁶²

The Council identified some areas in which forecasting methodologies could be strengthened. First, annual forecasts made by the Department should be based on plausible quarterly profiles for growth. Where revisions are believed likely (including on the basis of other high frequency data),

⁶² This issue did not give rise to a significant reservation as with the *Budget 2014* consumption projections. See also Box C of the previous *Fiscal Assessment Report* (IFAC, 2013b) on “Annual GDP and Carryover Effects”.

these should be acknowledged explicitly as was the case for the consumption forecasts in *Budget 2014*. Second, greater importance should be assigned to building a comprehensive set of methodologies to further improve the Department's understanding of medium-term supply-side issues and to provide a fuller picture of the cyclical position of the economy and potential output.⁶³ Ideally, estimates of the output gap and medium-term trends would not just rely on statistical methods, but should be anchored to wider analysis of the macroeconomy. Third, the development of models should incorporate the financial/credit cycle as a part of the overall framework. Fourth, statements on the balance of risks should be incorporated in future forecast publications.⁶⁴

⁶³ To reinforce the Department's medium-term forecasts, alternative projections that complement the EC common methodology could be provided in future publications. Such forecasts, if subject to deviations, would not be subject to endorsement by the Council, but would support the forecasts for the key variables over the short and medium term. In particular, the pace of actual growth in the medium term should depend on a combination of plausible output gap and trend growth estimates. The key variables include real potential output, total factor productivity, the capital stock, the working age population, the trend labour force participation rate, structural unemployment, and the trend level of hours worked. Projections on the EC basis must be included in the Stability Programme and form a necessary part of the assessment of compliance with EU budget rules, but this does not preclude the construction of alternative estimates. These are possible in the context of the MoU with the Council regarding endorsement. It provides for the Department of Finance to "...detail any numerical deviation in its estimates over both the short and medium term from the path implied by the commonly-agreed methodology" and to provide explanations for such deviations.

⁶⁴ For example, see Borio *et al.* (2013).

APPENDIX A: FISCAL COUNCIL BENCHMARK PROJECTIONS 26 MARCH

As part of the endorsement process, the Council's Secretariat produced a set of Benchmark projections in advance of its meetings with the Department of Finance. The Benchmark projections were finalised on 26 March 2014 and are summarised in Annex Table A.1.

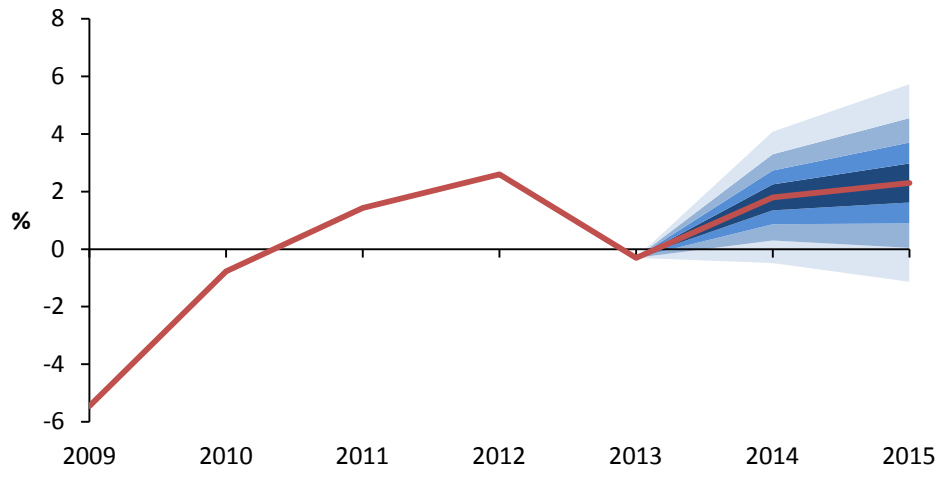
ANNEX TABLE A.1: BENCHMARK PROJECTIONS FOR 2014 AND 2015

| % change unless otherwise stated | 2014 | 2015 |
|-------------------------------------|-------|-------|
| Real GDP | 1.8 | 2.3 |
| Consumption | 0.8 | 1.0 |
| Investment | 12.9 | 7.6 |
| Government | -1.9 | -1.5 |
| Stock change (% of GDP) | 0.0 | 0.0 |
| Exports | 3.5 | 4.9 |
| Imports | 3.7 | 4.9 |
| Net Exports (p.p. contribution) | 0.6 | 1.1 |
| Domestic Demand (p.p. contribution) | 1.5 | 1.2 |
| Stock Changes (p.p. contribution) | -0.3 | 0.0 |
| Current Account (% GDP) | 8.2 | 7.6 |
| Employment | 2.2 | 1.3 |
| Unemployment Rate (%) | 11.5 | 10.7 |
| HICP | 0.4 | 1.0 |
| GDP Deflator | 0.5 | 0.5 |
| Nominal GDP (€ billions) | 167.8 | 172.6 |
| Nominal GDP | 2.3 | 2.8 |

The Council's "endorsable range" is informed by, but not mechanically linked to, the uncertainty captured in fan chart analysis. For context, Annex Figure A.1 shows the benchmark projections with the standard fan chart constructed around it.

It is important to note that the fan chart is symmetric by construction even though the Council may interpret the balance of risks to be weighted in a certain direction at a given point in time.

FIGURE A.1: REAL GDP FAN CHART BASED ON BENCHMARK PROJECTIONS (TO 2015)



3. ASSESSMENT OF BUDGETARY FORECASTS

KEY MESSAGES

- A General Government deficit of 4.8 per cent of GDP is likely for this year based on data to end-May. This outlook coupled with the planned €2 billion package of tax and expenditure measures in the forthcoming Budget should see the deficit just below 3 per cent of GDP in 2015 in line with Excessive Deficit Procedure (EDP) commitments.
- The General Government debt ratio is projected to remain unavoidably high in the near term at close to 120 per cent of GDP. The improving budgetary outlook, robust nominal GDP growth and the use of existing cash balances, however, should see a steady decline in the debt ratio over the period to 2018.
- While the budgetary projections in the *Stability Programme Update (SPU) 2014* are assessed to be appropriate, a number of risks remain including uncertainties surrounding growth prospects and significant challenges on the expenditure side.
- Medium-term fiscal adjustment plans indicate that government non-interest spending will have to fall by just over 8 percentage points of GDP between 2013 and 2018, reaching very low levels historically. These budgetary plans imply considerable pressures on government services, public investment and social payments.
- The prolonged tight spending plans will be difficult to achieve, given demographic and other pressures. The forthcoming *Comprehensive Review of Expenditure* (due October 2014) should be used to identify appropriately detailed expenditure plans and associated policies underpinning *SPU 2014*'s expenditure path. This would help to promote informed public debate and enhance the credibility of budgetary projections over the medium term.
- Budgetary outturns in recent years have been helped by much lower than expected interest and investment expenditures and higher than expected non-tax revenues.

3.1 INTRODUCTION

This chapter assesses the latest set of budgetary forecasts produced by the Department of Finance. This involves a number of steps: (i) a review of the accuracy of Department of Finance forecasts for 2013 (Section 3.2); (ii) an assessment of the forecasts contained in *SPU 2014* (Section 3.3); and (iii) an examination of the sensitivity of the main budgetary aggregates to changes in the economic outlook as well as a broader assessment of risks (Section 3.4). This chapter also takes a closer look at the expenditure projections underlying *SPU 2014*. A number of sources of pressure are highlighted as is the need for detailed plans to be set out in the forthcoming *Comprehensive Review of Expenditure*. Finally, two Analytical Notes provide further background to this Chapter covering the topics of: (3) Tax Forecasting Error Decomposition; and (4) DIRT Forecasting Methodology.

3.2 DEPARTMENT OF FINANCE BUDGETARY PROJECTIONS FOR 2013

A General Government deficit of 7.2 per cent of GDP was recorded in 2013. This was a full percentage point lower than the 2012 outturn.⁶⁵ The ratio of General Government debt to GDP stood at 123.7 per cent at end-2013, up from 117.4 per cent in 2012.

Forecasts for the General Government deficit were revised downwards throughout the course of the year (Table 3.1). The end-year deficit was €0.3 billion lower than had been envisaged in *Budget 2014* and €0.8 billion lower than foreseen in both *Budget 2013* and *SPU 2013*.

The lower than expected 2013 outturn largely reflected stronger receipts from social contributions and “other sources” of revenue. The latter is a broad category that includes dividend income, including the Central Bank surplus and miscellaneous capital and current receipts. Taxes ended the year in line with expectations and very close to the outlook in *Budget 2014*. New analysis by the Council contained in Analytical Note 3 of this report examines the sources of tax forecasting errors.⁶⁶

⁶⁵ The 2013 outturn for the public finances was published in the April Maastricht returns. These returns contain official estimates for the levels of the General Government balance and General Government debt for the preceding four years as well as forecasts for the current year. They are compiled by the Department of Finance and the Central Statistics Office and submitted to Eurostat by each Member State twice a year, at end-March and end-September.

⁶⁶ A caveat to this finding however is the movement in timing of the Budget from December to October. This could affect the accuracy of tax forecasts going forward. For more details see Box E, pp.32-33 of IFAC, 2013b.

TABLE 3.1: DEPARTMENT OF FINANCE PROJECTIONS FOR 2013 AGAINST OUTTURN

| € billions | <i>Budget 2013</i> | <i>SPU 2013</i> | <i>Budget 2014</i> | <i>Outturn</i> |
|--------------------------------------------------|--------------------|-----------------|--------------------|----------------|
| | Dec-12 | Apr-13 | Oct-13 | Apr-14 |
| General Government Deficit | 12.7 | 12.6 | 12.1 | 11.8 |
| General Government Deficit, % of GDP | 7.5 | 7.5 | 7.3 | 7.2 |
| Structural Deficit, % of GDP⁶⁷ | 7.7 | 6.7 | 5.3 | 6.2 |
| Primary Deficit, % of GDP | 2.0 | 2.6 | 2.7 | 2.5 |
| Revenue | 57.6 | 58.7 | 58.6 | 58.9 |
| <i>Tax</i> | 41.2 | 41.9 | 41.4 | 41.4 |
| <i>Social Contributions</i> | 9.7 | 9.8 | 9.9 | 10.2 |
| <i>Other</i> | 6.7 | 7.1 | 7.2 | 7.3 |
| Expenditure | 70.4 | 71.3 | 70.7 | 70.6 |
| <i>Government Services</i> | 27.2 | 27.3 | 27.0 | 26.7 |
| <i>Social Payments</i> | 26.2 | 28.2 | 28.4 | 28.6 |
| <i>Interest</i> | 9.3 | 8.2 | 7.6 | 7.7 |
| <i>Investment</i> | 3.1 | 3.2 | 3.0 | 2.7 |
| <i>Other</i> | 4.6 | 4.4 | 4.6 | 4.9 |
| Primary Expenditure | 61.1 | 63.1 | 63.0 | 63.0 |
| Debt | 203.5 | 207.0 | 205.9 | 202.9 |
| Debt, % of GDP | 121.3 | 123.3 | 124.1 | 123.7 |
| Nominal GDP | 167.7 | 167.9 | 165.9 | 164.1 |
| Nominal GDP, % growth | 2.8 | 2.6 | 1.2 | 0.1 |

Sources: Department of Finance, CSO and internal calculations.

The outturn for General Government expenditure was broadly in line with forecasts produced during the course of 2013. Gross departmental spending ended the year marginally below its allocation, despite expenditure overruns in the Health sector (discussed in more detail below). Forecasts for interest spending were reduced as the year progressed. This has been a feature of recent Department of Finance forecasts and has been noted previously by the Council (IFAC, 2013b). See Box B for more details.

⁶⁷ The methodology for estimating potential output has changed over the past year resulting in changes to the estimates for the structural budgetary balance. (See *SPU 2014*, Box 1, pp 23).

Although overall government revenues came in ahead of profile and expenditure was broadly on track, a weaker than expected level of nominal GDP meant that the General Government deficit to GDP ratio at 7.2 per cent was only marginally lower than the *Budget 2014* forecast.

There were also a number of one-off factors that added 0.4 per cent of GDP to the deficit in 2013. This mainly reflected exceptional payments associated with the liquidation of Irish Bank Resolution Corporation (IBRC) (0.7 per cent of GDP), although this was partly offset by mobile licence fees (see Chapter 4, Box C for more details).

The General Government debt to GDP ratio ended the year slightly above forecast due in part to revisions to nominal GDP. The actual level of debt was less than had been foreseen earlier in the year reflecting a lower level of borrowing in the latter part of 2013. The most noteworthy debt development in 2013 was the change in the composition of debt as the promissory notes were replaced by long-term government bonds.⁶⁸

BOX B: A CLOSER LOOK AT GENERAL GOVERNMENT DEFICIT FORECAST ERRORS⁶⁹

The Council has a mandate to assess the accuracy of budgetary forecasts. In this Box, we take a look back at the accuracy of forecasts for the General Government deficit from 2011 to 2013 from successive Budgets. We examine the one year ahead forecasting error – the difference between the outturn for the deficit in 2013 relative to the forecast in *Budget 2013* (we do the same for *Budget 2011* and *Budget 2012*).

DECOMPOSITION OF GENERAL GOVERNMENT DEFICIT FORECASTS

In the Tables below, we compare Department of Finance estimates for key General Government aggregates (including nominal GDP) with actual outturns. For example, in *Budget 2013*, the Department of Finance estimate for General Government Revenue in 2012 was €55.7 billion. The outturn was €56.6 billion. All else equal, the starting point is therefore better than was envisaged in *Budget 2013*. We apportion the forecast error in the deficit into an error due to these data revisions and a residual error. Negative numbers indicate a lower than forecast deficit.⁷⁰

⁶⁸ The promissory note transaction resulted in a switch of €25 billion from promissory note debt to government bonds. As of end-2013, 55 per cent of General Government debt was in the form of government bonds (€111 billion), with EU/IMF programme assistance loans accounting for a third (€67 billion) according to *SPU 2014*. The Government's holding of liquid assets (which leads to a corresponding increase in gross debt) amounted to €24 billion (of which €18.5 billion was in the form of Exchequer cash and deposits) at end-2013.

⁶⁹ The calculations behind these tables can be downloaded from www.fiscalcouncil.ie.

⁷⁰ Exceptional payments to the financial sector are excluded from the analysis.

The Tables highlight that the lower than expected deficit outturns in recent Budgets to a large extent reflected a favourable (tax and non-tax) revenue performance and lower than expected interest payments.⁷¹ This helped to compensate for expenditure pressures in 2012 and 2013.

TABLE B1: DECOMPOSITION FORECAST ERROR IN 2013

| Contributions, % of GDP | Due to 2012 Revision | Due to Residual Error | Combined |
|-----------------------------|----------------------|-----------------------|-------------|
| Nominal GDP | 0.0 | +0.2 | +0.2 |
| Revenue | -0.6 | -0.2 | -0.8 |
| Primary Expenditure | +0.7 | +0.4 | +1.1 |
| Interest | -0.2 | -0.7 | -1.0 |
| Total Forecast Error | -0.1 | -0.3 | -0.4 |

TABLE B2: DECOMPOSITION FORECAST ERROR IN 2012

| Contributions, % of GDP | Due to 2011 Revision | Due to Residual Error | Combined |
|-----------------------------|----------------------|-----------------------|-------------|
| Nominal GDP | -0.4 | +0.1 | -0.2 |
| Revenue | -0.7 | -0.3 | -1.0 |
| Primary Expenditure | 0.0 | +1.3 | +1.2 |
| Interest | 0.0 | -0.5 | -0.5 |
| Total Forecast Error | -1.1 | +0.6 | -0.4 |

TABLE B3: DECOMPOSITION FORECAST ERROR IN 2011

| Contributions, % of GDP | Due to 2010 Revision | Due to Residual Error | Combined |
|-----------------------------|----------------------|-----------------------|-------------|
| Nominal GDP | 0.0 | 0.0 | -0.1 |
| Revenue | +0.4 | +0.6 | +1.1 |
| Primary Expenditure | -1.5 | -0.1 | -1.6 |
| Interest | +0.2 | -0.2 | -0.1 |
| Total Forecast Error | -0.9 | +0.3 | -0.6 |

EXAMPLES OF ERRORS IN SPECIFIC FORECAST COMPONENTS

To get a sense of the magnitude of some of the revisions to General Government aggregates, in Figure B we plot successive forecasts for three specific cases:

- interest expenditure
- investment spending and
- other revenues (General Government revenue less taxes and social contributions).

There has been a pattern of downward revisions to forecasts for interest and investment spending with other revenues underestimated. These patterns have previously been noted by

⁷¹ Some of the factors causing revisions to interest expenditures were discussed in previous *Fiscal Assessment Reports* (IFAC, 2013b) – these relate to the extension of maturities on official loans, lower interest rates, borrowing activity by the National Treasury Management Agency and the promissory note transaction.

the Council (IFAC, 2013a).

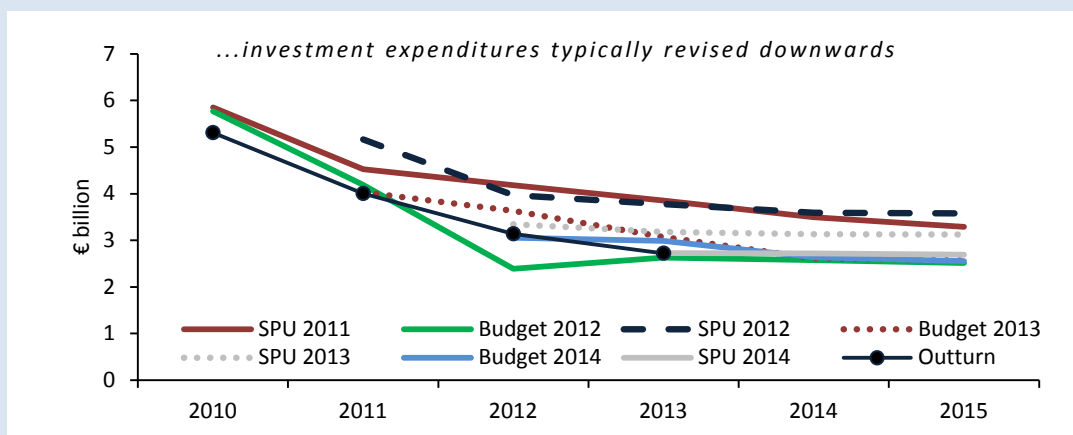
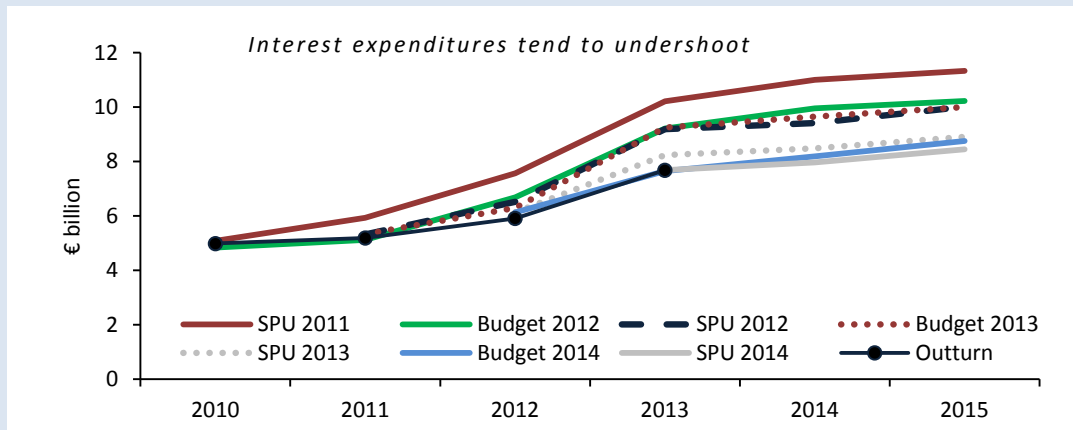
Forecasts for interest spending are provided to the Department of Finance by the NTMA. The Council acknowledges that the task of forecasting interest payments has been more difficult of late due to the substantial changes that have occurred in Ireland’s debt profile. For example, the decision to replace the promissory note with long-term government bonds generated interest savings from 2013 as did the extension of maturities on official loans. These developments could not have been foreseen in the budgetary projections.

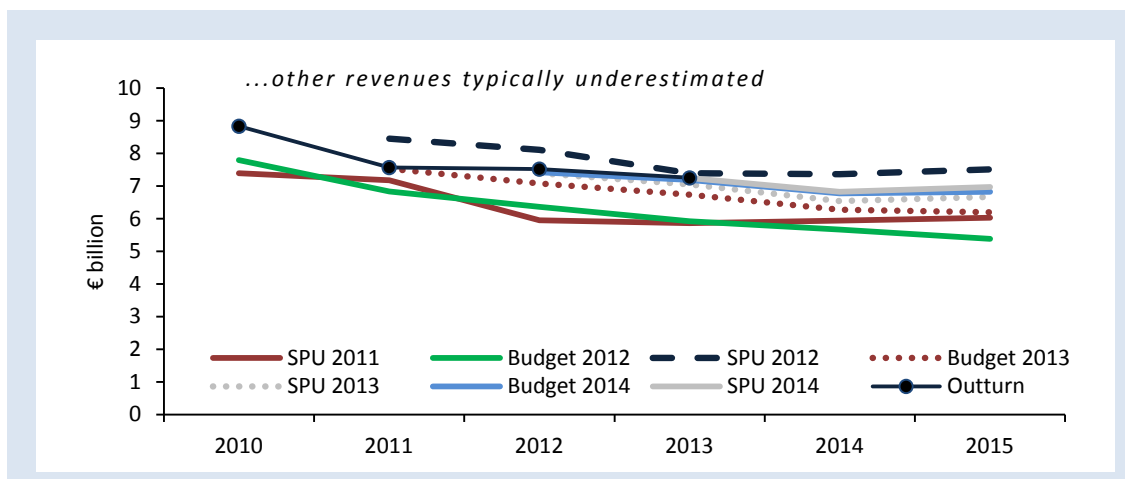
General Government investment spending has tended to be periodically revised downwards. This has also been evident from Exchequer data in recent years, with voted capital expenditure (including the capital carryover) coming in below profile.

In relation to “other revenues”, the Department of Finance has noted that much of the error relates to fees associated with the Eligible Liabilities Guarantee Scheme (ELG) and Central Bank Surplus Income. The latter category is forecast by the Central Bank. Other differences arise from the timing (and recording) of the sale of national lottery and Universal Mobile Telecommunications System (UMTS) licences.

It would be beneficial if the Department of Finance provided more information on the underlying assumptions behind forecasts of these aggregates in future publications.

FIGURE B: GENERAL GOVERNMENT AGGREGATES: FORECAST VINTAGES, SPU 2011 – SPU 2014





3.3 AN ASSESSMENT OF SPU 2014 FORECASTS

3.3.1 OVERVIEW OF BUDGETARY OUTLOOK TO 2018

SHORT-TERM FORECASTS, 2014 TO 2015

The budgetary outlook from *SPU 2014* is summarised in Table 3.2. The General Government deficit is projected to improve to 4.8 per cent of GDP in 2014.⁷² This improvement reflects a forecast €2 billion increase in revenues partly arising from tax measures introduced in *Budget 2014* as well as carryover effects from past tax changes and the impact of growth.⁷³ The 2014 deficit is also lowered by one-off factors (notably national lottery licence sales) amounting to approximately 0.2 per cent of GDP.

Expenditure savings of €1.6 billion as a result of *Budget 2014* measures underlie the expenditure forecast. As outlined in the previous assessment report (IFAC, 2013b), the bulk of this adjustment is apportioned to the two largest spending departments – Social Protection and Health. The outlook for interest expenditures has improved relative to *Budget 2014* reflecting lower interest payments in the early part of the year.

The latest Exchequer developments are summarised in Figure 3.1. By end-May, the Exchequer deficit at €3.5 billion was €1.2 billion lower than the profile for the year. Exchequer taxes at €15.6 billion were up 5.6 per cent year-on-year and were 2.9 per cent (€446 million) ahead of Department of Finance expectations. All tax heads with the exception of capital gains tax were ahead of target. In particular, income taxes were up 7.8 per cent year-on-year and were 1.8 per cent ahead of profile. This robust performance reflects the upturn in employment and the effect of past tax changes.

⁷² This forecast is largely unchanged from the outlook in *Budget 2014*.

⁷³ One of the main tax measures in *Budget 2014* involved changes to Deposit Interest Retention Tax (DIRT). This is expected to generate additional receipts of €105 million in 2014, while the capping of tax relief of medical insurance is expected to generate €94 million in 2014 – see Analytical Note 4 for more details).

On the expenditure side, current departmental spending at €21 billion was 0.4 per cent (€82 million) below profile to end-May. Nearly all government departments with the exception of Health have kept within budget. Current primary expenditure at €22.5 billion was down 5.4 per cent in the year. Capital expenditure (voted) at €0.8 billion was 6.9 per cent behind its expected profile.

TABLE 3.2: SPU 2014 PROJECTED CHANGES IN GOVERNMENT REVENUE AND EXPENDITURE

| | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------------------------------------------------------|-------------|-------------|------------|-------------|------------|
| Main Aggregates, % of GDP | | | | | |
| General Government Deficit ⁷⁴ | 4.8 | 2.9 | 2.2 | 1.2 | 0.0 |
| Primary Balance | -0.1 | +1.8 | +2.6 | +3.7 | +4.8 |
| Structural Deficit | 4.7 | 2.8 | 2.1 | 1.2 | 0.0 |
| General Government Debt | 121.4 | 120.0 | 115.9 | 112.0 | 107.2 |
| Nominal GDP Growth, % | 2.6 | 3.6 | 4.3 | 4.7 | 4.7 |
| Projected Changes in Government Revenue and Expenditure, € billions | | | | | |
| Total Revenue | 2.0 | 2.5 | 1.6 | 2.0 | 2.8 |
| Tax | 2.5 | 2.1 | 1.8 | 2.0 | 2.5 |
| Social Contributions | -0.1 | 0.2 | 0.3 | 0.4 | 0.3 |
| Other | -0.4 | 0.1 | -0.5 | -0.4 | 0.0 |
| Total Expenditure | -1.7 | -0.4 | 0.4 | 0.3 | 0.6 |
| Compensation of Employees | -0.2 | -0.3 | 0.0 | 0.0 | 0.0 |
| Intermediate Consumption | -0.1 | -0.1 | 0.2 | 0.4 | 0.1 |
| Social Payments | -0.6 | -0.8 | -0.2 | -0.5 | 0.2 |
| Interest | 0.3 | 0.5 | 0.4 | 0.4 | 0.3 |
| Other | -1.1 | 0.4 | 0.0 | -0.1 | 0.0 |
| Primary Expenditure | -1.9 | -0.9 | 0.0 | -0.2 | 0.3 |

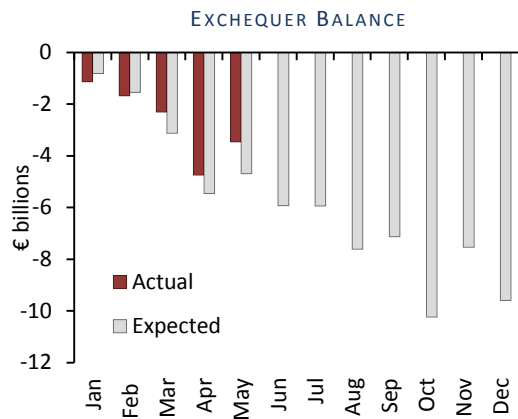
Note: Numbers rounded to one decimal place.

The Department of Finance now publishes monthly General Government data (with a lag of one month). The figures to end-April report a General Government deficit of €4.8 billion – reflecting the Exchequer deficit and the balances on the Social Insurance Fund and Local Government sector. The publication of monthly General Government data marks a further significant achievement in terms of fiscal transparency and follows a series of improvements to Exchequer releases over the past year or so (see IMF, 2013b and IFAC, 2013b).

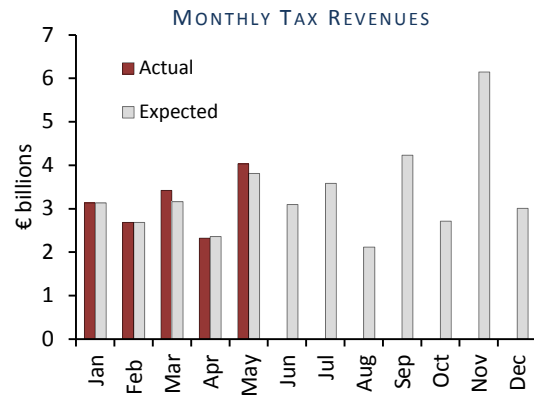
⁷⁴ The deficit ceiling for Ireland under the Excessive Deficit Procedure (EDP) is 5.1 per cent of GDP in 2014 and 2.9 per cent in 2015. The deficit here refers to the deficit less deficit increasing financial sector measures. The latter are estimated at €50 million in 2014 and €100 million in both 2015 and 2016.

FIGURE 3.1: EMERGING FISCAL OUTLOOK: OUTTURN VS PROFILE TO MAY 2014

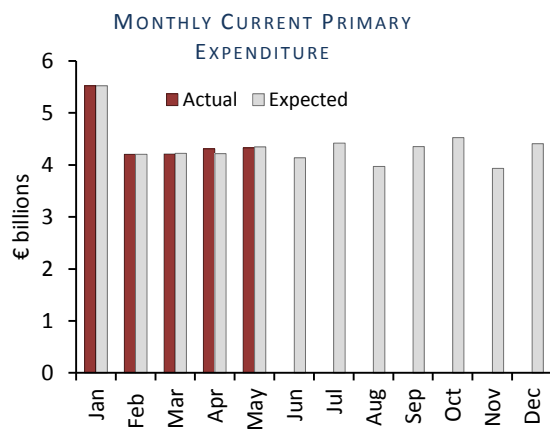
Exchequer balance ahead of Budget 2014 profile...



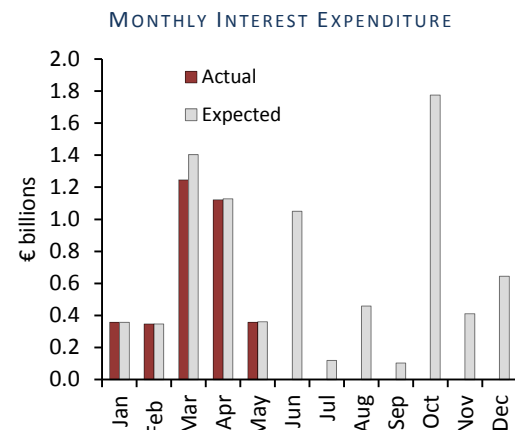
...while taxes continue to outperform



Primary expenditure on track...



...while Interest savings are again apparent



Source: Department of Finance.

These data and the macroeconomic outlook for the remainder of 2014 mean that it is likely that a General Government deficit to GDP ratio of 4.8 per cent will be achieved. This outcome could also be helped by a possible upward revision to the level of nominal GDP (see Chapter 2).

The General Government debt ratio is projected to decline by over 2 percentage points of GDP to 121.4 per cent by end-2014 due to a lower deficit and the use of precautionary cash balances.⁷⁵ This would mark the first decline in the debt ratio since 2006.

In 2015, the General Government deficit is projected to fall just below 3 per cent of GDP in line with EDP commitments (Table 3.2). This forecast is premised on a package of tax and expenditure measures of €2 billion in *Budget 2015* and nominal GDP growth of 3.6 per cent.⁷⁶ *SPU 2014* contained no additional details on the specific taxation and expenditure measures planned in *Budget 2015*.⁷⁷

General Government revenues are projected to remain broadly unchanged as a share of GDP in 2015 (at 36.3 per cent). The contributions from the main components of Government revenue are shown in Figure 3.2A.⁷⁸

The share of primary (non-interest) spending in GDP is forecast to decline by 1.8 percentage points to 34.6 per cent in 2015. A significant proportion of the fall in spending reflects the improved outlook for the labour market, savings arising from the Haddington Road Agreement, the impact of past expenditure measures and further planned adjustments in the forthcoming budget (Figure 3.2B).

Projections in *SPU 2014* show the Government just meeting its EDP commitments in 2015. While this outlook is assessed to be appropriate, a number of risks could endanger it, principally uncertainties surrounding growth prospects and significant challenges on the expenditure side. These are outlined below.

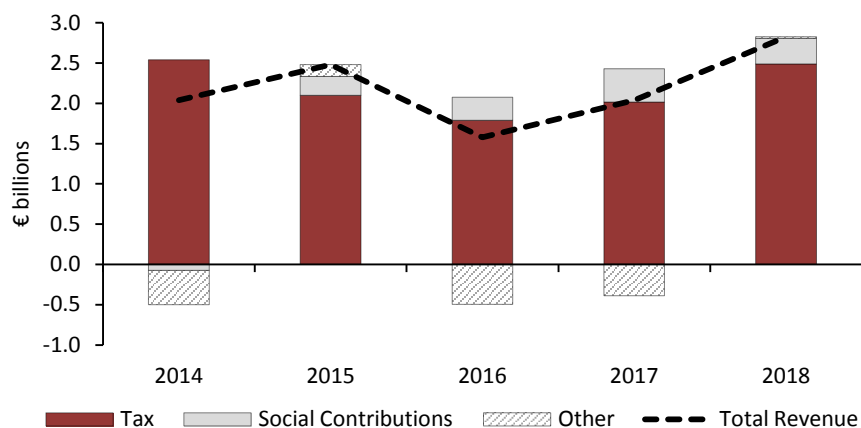
⁷⁵ The *SPU 2014* projections for General Government debt show a €7.1 billion decline in Exchequer deposits (against an expected Exchequer deficit of €8.7 billion) in 2014. These liquid assets provide an important buffer in respect of short-term funding needs.

⁷⁶ The stability programme signalled that the actual consolidation effort would depend on developments up to Budget day and also following the conclusions of the *Comprehensive Review of Expenditure* (CRE) and a review of tax reliefs and incentives, both of which are expected in October.

⁷⁷ The lack of detail on the planned measures for 2015 was also noted in the recent European Commission assessment of *SPU 2014* (European Commission, 2014e).

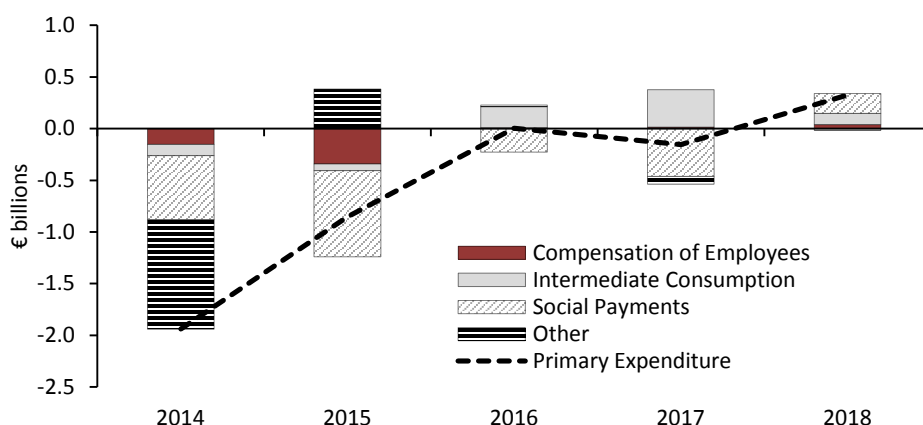
⁷⁸ There has been a downward trend in “other revenues” reflecting the ending of bank guarantee income. The increase in 2015 reflects the introduction of Uisce Éireann.

FIGURE 3.2a: SPU 2014 PROJECTED CHANGES IN GOVERNMENT REVENUE TO 2018



Source: SPU 2014.

FIGURE 3.2b: SPU 2014 PROJECTED CHANGES IN GOVERNMENT PRIMARY EXPENDITURE TO 2018



Source: SPU 2014.

MEDIUM-TERM FORECASTS, 2016 TO 2018

The budgetary projections from 2016 to 2018 are premised on average annual nominal GDP growth of 4.6 per cent. The forecasts for General Government revenues and expenditures out to 2018 are set so that the structural budget converges to a balanced position in line with Ireland’s Medium-Term Budgetary Objective (MTO) (for more details see Chapter 4).

Government revenues are forecast to increase cumulatively by €6.4 billion over the three-year period to 2018 on foot of a sustained upturn in economic activity. Overall tax revenues are forecast to grow broadly in line with nominal GDP (at a rate of 4.4 per cent *per annum*).

On the expenditure side, continued restraint is envisaged with primary spending declining by 4.3 per cent of GDP from 2016 to 2018. Most of this will be driven by savings in social payments, compensation of employees and broader public services (including intermediate consumption). These forecasts are supported by the forecast fall in the unemployment rate. Over the three year period to 2018, the unemployment rate declines by 2.5 percentage points to 8.0 per cent. In Live Register terms, this can be approximated as a cumulative fall of 75,000 persons.⁷⁹

Investment is set to remain at a stable nominal level while declining as a share of output. Debt interest costs are projected to increase further adding to an already sizable interest burden.

Overall, the medium-term fiscal adjustment plans set out in *SPU 2014* imply a sizable and sustained fall in non-interest spending. These budgetary plans imply considerable pressures on government services, public investment and social payments. This is discussed in more detail in the next section.

3.3.2 EXPENDITURE CHALLENGES

The *SPU 2014* projections for expenditure are set within the parameters of the domestic and European rules (see Chapter 4). Primary expenditure as a share of GDP is forecast to decline by just over 8 percentage points between 2013 and 2018. Figure 3.3A shows that this leaves the primary expenditure share of economic output (at 30.2 per cent of GDP) at a very low level historically.⁸⁰ Under the existing fiscal framework, there is limited scope for primary expenditure to increase above this ratio in the absence of discretionary revenue-raising measures.⁸¹

Achieving the envisaged expenditure adjustments will be challenging. Given rising prices, fixed nominal spending would imply a falling volume of public expenditure and a reduction in public services in the absence of productivity gains. A further challenge will arise from demographic pressures as the demand for public sector services increases (principally in education and healthcare).⁸²

The plans for Ireland also appear challenging in an international context. In Figure 3.3B, the share of primary spending in GDP is compared across a range of advanced economies with relatively high debt

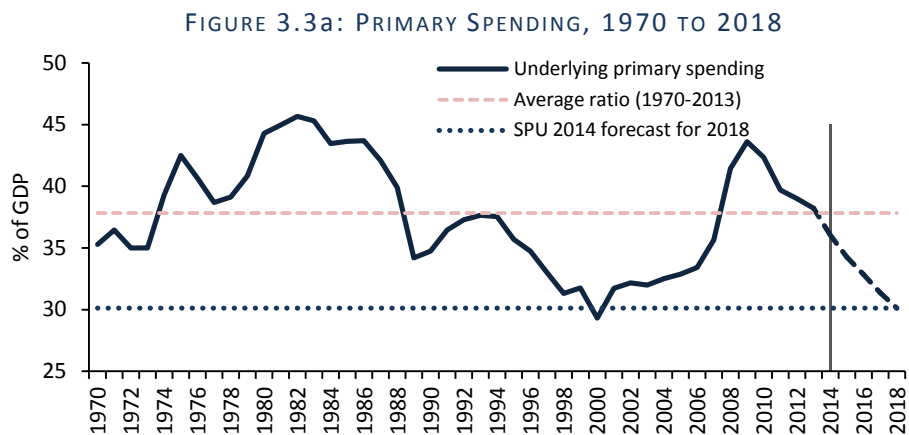
⁷⁹ These calculations are based on *SPU 2013* estimates for the relationship between the Live Register and the unemployment rate.

⁸⁰ A breakdown of expenditure by category is shown in Figure 3.4A.

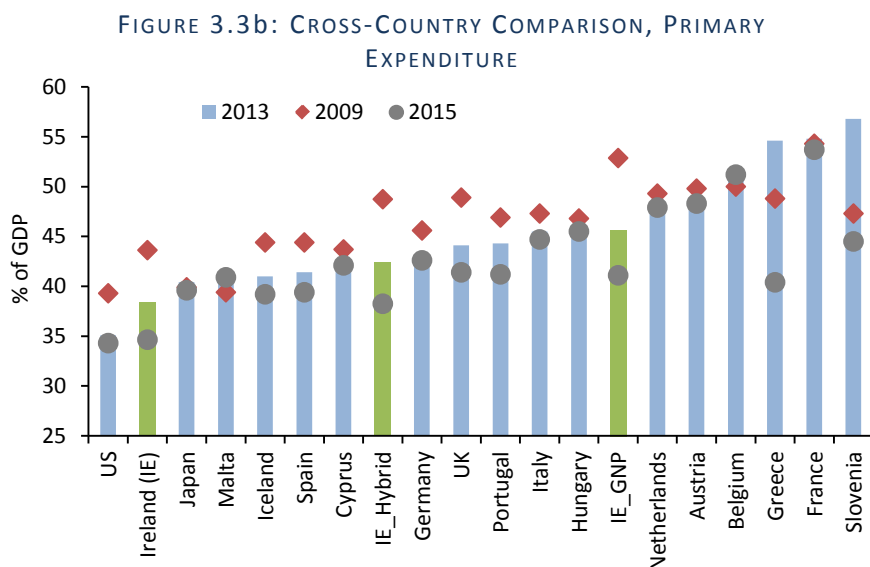
⁸¹ Conversely, any discretionary revenue reductions would require expenditure to be reduced below the level set out in *SPU 2014*.

⁸² More broadly, Baumol's "cost disease argument" contends that the size of government can increase while maintaining a set level of services due to the cost of government services tending to rise faster than average prices in the economy.

to GDP ratios. Primary spending in Ireland is already at the lower end of the spectrum with the expected change in the ratio between 2009 and 2015 being particularly stark.^{83, 84} In Figure 3.3C, the burden imposed by a high level of debt in Ireland is also apparent when interest costs (relative to revenue) are compared across countries.



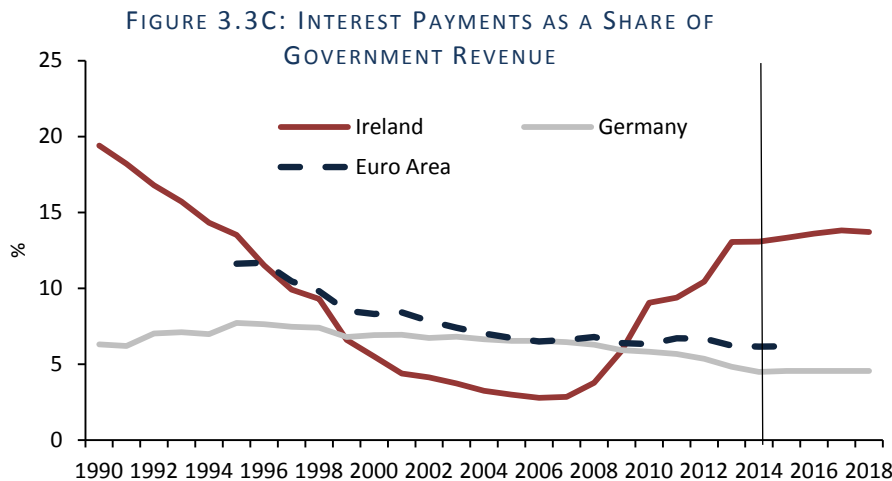
Source: Internal calculations based on CSO and Department of Finance data.
 Note: Underlying primary expenditure excludes exceptional payments to the banking sector.



Source: Internal calculations, SPU 2014 and EC Spring 2014 forecasts.

⁸³ For comparative purposes, ratios relative to GNP and the Council's Hybrid measure of output are also shown.

⁸⁴ While the focus of this section is on expenditure, it is worth noting that the ratio of General Government revenue to GDP in Ireland remains well below the Euro Area average. In 2013, these ratios were 35.9 per cent and 46.8 per cent respectively, based on data from Eurostat.



Source: *SPU 2014*, Eurostat and German Stability Programme 2014 Update.

THE COMPOSITION OF GOVERNMENT SPENDING

The composition of government spending underpinning *SPU 2014* is shown in Figure 3.4A, with the envisaged adjustments depicted in Figure 3.4B. Most of the main primary expenditure categories are projected to decline as a share of nominal GDP over the forecast horizon.

SOCIAL PAYMENTS

Social payments is the largest category of government spending, accounting for approximately 40 per cent of the total. It includes unemployment related expenditures as well as a range of other areas of spending (e.g., pensions, child benefit, disability payments, allowances, etc). The subcomponents within social spending are easier to assess using Exchequer data (Figure 3.4C). While a significant proportion of social welfare expenditure has remained stable as a share of GDP, pension expenditure has grown at a faster rate, while unemployment-related spending grew significantly as a result of the crisis.

The budgetary projections in *SPU 2014* assume a €2 billion decline in social payments over the period to 2018. Most of this decline is accounted for by the forecast fall in the unemployment rate. However, it is not clear how the remainder of the savings in social payments (up to a third) will be achieved.⁸⁵ In addition, the costs of demographic and other pressures have to be met.

The costs associated with population change and an increasing dependency ratio will also put upward pressure on social welfare related spending (Figure 3.4D).⁸⁶ Spending on pensions, health, education

⁸⁵ This figure is based on a Department of Finance method for estimating unemployment. See Annex 3 of *SPU 2013*.

⁸⁶ The projections are based on European Commission estimates.

and long-term care are projected to increase by 2½ percentage points of GDP between 2014 and 2020.⁸⁷ All else being equal, this has the potential to crowd out other areas of spending.

There are also other sources of pressure on social expenditure. For example, in the area of healthcare, technological developments, drug costs and incomes all play a large role in determining costs. In addition, institutional and legal arrangements can also influence the incentive structures facing physicians and patients and hence the availability and take-up of services and the final cost to the State.⁸⁸ In this context, the proposed reforms to the healthcare system in Ireland must be carefully costed to assess the impact of changing incentive structures on costs.⁸⁹

COMPENSATION OF EMPLOYEES

SPU 2014 envisages a 2.6 per cent reduction in the public sector pay bill to 2016 supported by the Haddington Road Agreement (HRA). Thereafter, the pay bill increases on average by 0.2 per cent *per annum* in the two year period to 2018. The recent *Revised Estimates for Public Services 2014* shows an estimate of public service employees for 2014 broadly unchanged from the 2013 level. If this level is maintained, this implies that savings arising from public service number reductions will not make a significant contribution to expenditure savings from 2014.⁹⁰ Without offsetting staffing reductions, these forecasts provide limited scope for pay increases in the post-HRA period.⁹¹

In the absence of either further productivity increases or per capita pay reductions, the overall cost base will rise in line with any demand increases. While it may be possible, and potentially desirable, to meet these demand pressures without direct hiring, there will nonetheless be a cost to the State.⁹²

INVESTMENT

The decline in government investment spending has been a notable feature of the budgetary adjustment process since 2008. *SPU 2014* shows government investment is expected to average 1.5 per cent of GDP over the period to 2018, well below the current Euro Area average of approximately 2 per cent. While there is no single measure of government capital, Figure 3.4E shows estimates for the

⁸⁷ These projections assume no policy changes and are informative in highlighting the challenges posed by population ageing.

⁸⁸ These arrangements include the role of GPs as a 'gatekeeper' and the nature of system financing.

⁸⁹ These reforms include the introduction of Universal Health Insurance, a 'money follows the patient' model of funding hospital care, universal primary care and the introduction of hospital groups as a transition step to independent hospital trusts.

⁹⁰ Some savings may arise from the replacement of existing employees with employees on the lower end of pay scales.

⁹¹ The cessation of certain measures under the HRA will also place upward pressure on pay costs, e.g., the return of annual increment payments.

⁹² For example, the use of external agency staff for hospitals.

Government's net acquisition of non-financial assets. This shows that depreciation exceeded investment in 2013, implying a marginal decline in the Government's stock of capital. This appears likely to continue out to 2018 under the projected investment rates. This highlights the risk that current low levels of investment will lead to a decline in the public capital stock, impairing the ability to deliver public services while supporting economic growth. It also highlights the limited room for further reductions in the capital budget.⁹³

EXPENDITURE PLANNING

As well as highlighting the limited room for manoeuvre on the expenditure side, the preceding sections underline the implications of "top-down" expenditure planning. By "top-down", we refer to an approach where expenditure aggregates or ceilings are set so as to meet the requirements of the fiscal rules.⁹⁴

There is a risk that forecasts of key expenditure (and revenue) components become overly mechanistic and do not adequately reflect 'bottom-up' pressures.⁹⁵ Any failure to take account of these pressures can lead to difficulties in the budget delivery stage.⁹⁶ With this in mind, the forthcoming *Comprehensive Review of Expenditure* (October 2014) will be key to effective expenditure planning.⁹⁷ It should set out clear and detailed plans on how planned expenditure savings will be delivered. This would also help to underpin the credibility of the budgetary projections over the medium term.

In the absence of further reforms to public spending, it may be difficult to achieve these expenditure reductions without impairing public policy objectives. Furthermore, any reductions in discretionary revenues can only be made in parallel with policy measures to reduce expenditure. In setting the

⁹³ Recent announcements in relation to both the Strategic Investment Fund and a €0.2 billion infrastructural stimulus package financed from the proceeds of the sale of State assets help to somewhat allay these concerns.

⁹⁴ See the Department of Finance's (2013e) *Medium-Term Budget Framework* for a description of how medium-term expenditure ceilings are set.

⁹⁵ The *SPU 2014* forecasts assume tax revenue grows in line with nominal GDP, with expenditure constrained to ensure compliance with the fiscal rules. In practice, additional expenditure would be permitted under the rules if additional discretionary revenue-raising measures are introduced. Conversely, a discretionary reduction in revenue would require offsetting reductions on the expenditure side.

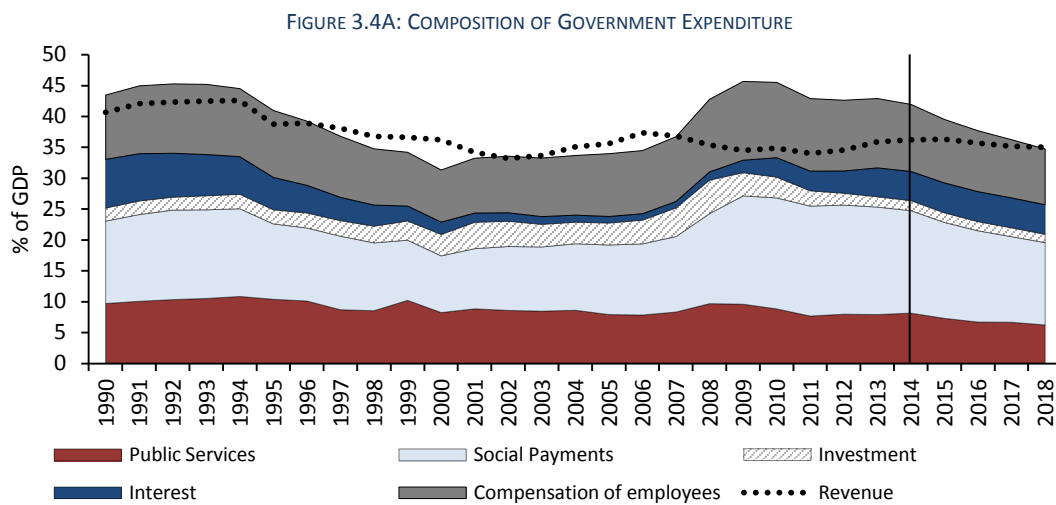
⁹⁶ See Ljungman, G. (2009), "Top-Down Budgeting – An Instrument to Strengthen Budget Management", IMF Working Paper.

⁹⁷ The 2014 *Medium Term Economic Strategy* (MTES) notes (p24) "The next Comprehensive Review of Expenditure will be undertaken in advance of Budget 2015. This will again allow for a detailed examination of current expenditure across all areas of Government, and it will build on the knowledge and experience gained from previous reviews and other evaluations. It will examine spending trends and pressures, and help to identify ways of addressing the challenges arising in the context of fiscal policy. The purpose of the CRE will be to inform Government decisions on future budgetary matters and allow for the Government's recalibration of ministerial expenditure ceilings in light of changing priorities and evaluations of expenditure."

expenditure ceilings, the Government must be mindful not only of the overall fiscal stance but also of the demand pressures and rigidities already built in by existing policies.

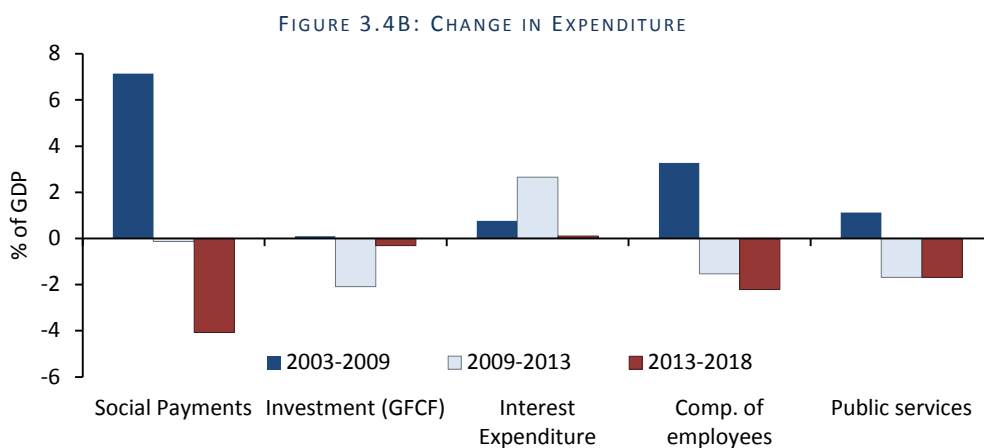
Taken together, this suggests that there is limited room for increases in expenditure without offsetting adjustments in other areas. Given this, all adjustment margins should be kept open and under close review.

FIGURE 3.4: CHALLENGES IN EXPENDITURE MANAGEMENT



Source: CSO; SPU 2014.

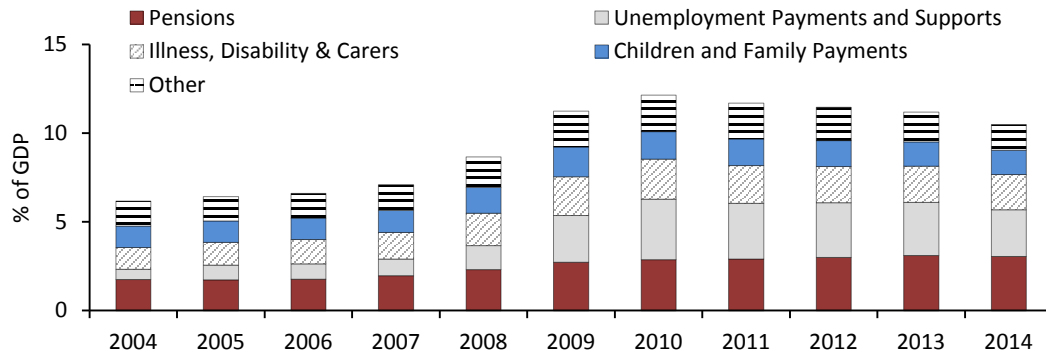
Note: The 'Public Services' category includes items such as intermediate consumption, subsidies and capital transfers.



Source: SPU 2014.

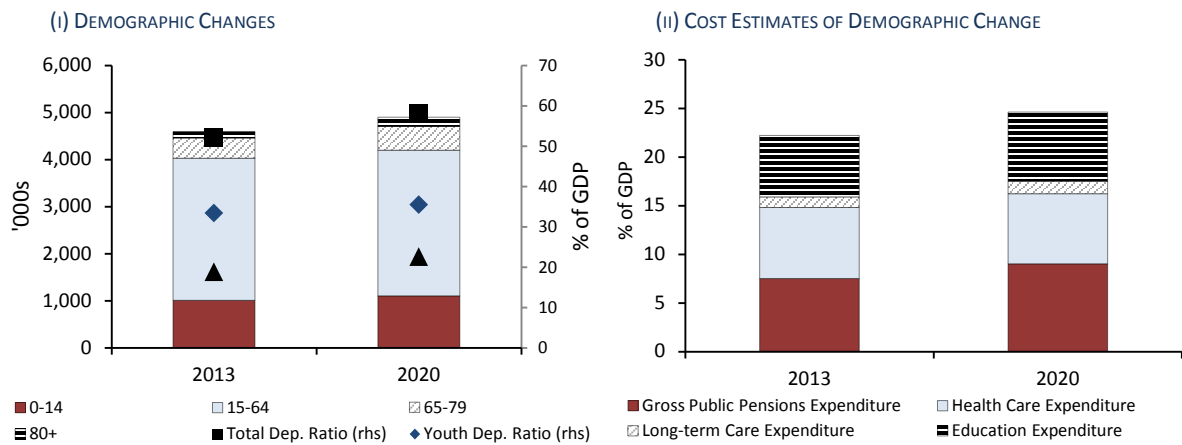
Note: The 'Public Services' category includes items such as intermediate consumption, subsidies and capital transfers.

FIGURE 3.4C: SOCIAL WELFARE EXPENDITURE



Source: Internal calculations

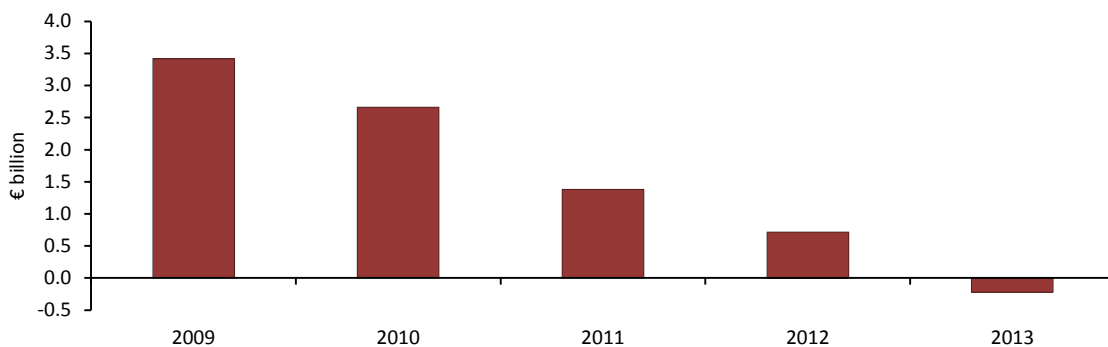
FIGURE 3.4D: IMPLICATIONS OF PROJECTED DEMOGRAPHIC CHANGES TO 2020⁹⁸



Source: The 2012 Ageing Report, European Economy 4/2011.

Source: European Economy, Occasional Papers 162, October 2013.

FIGURE 3.4E: NET ACQUISITION OF NON-FINANCIAL PUBLIC ASSETS



Source: CSO.

⁹⁸ The total dependency ratio is the ratio of the population aged under 15 and over 64 as a percentage of those aged 15 to 64.

3.4 SENSITIVITY AND RISK ANALYSIS

The stability programme contained a limited discussion on risks. This included sensitivity analysis (using the ESRI *HERMES* model) to quantify the effect of changes in output, interest rates and savings rates on the fiscal ratios. Risks associated with the banking sector or other broader contingent liability risks, however, were not considered.⁹⁹ The Council's assessment of fiscal risks updates analysis in earlier reports but also draws particular attention to risks on the expenditure side. Three main classes of risk are considered in Table 3.3.

TABLE 3.3: RISKS TO THE BUDGETARY OUTLOOK

| Source of Risk | Nature of Risk |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (a) Nominal GDP Outlook | <ul style="list-style-type: none"> - Historical volatility of Irish growth and susceptibility to conditions in the international economy - Uncertainty surrounding the persistence of the balance sheet recession and deleveraging effects on domestic demand - A period of sustained weakness in prices |
| (b) Expenditure | <ul style="list-style-type: none"> - Challenges posed by expenditure pressures in key sectors |
| (c) Other risks | <ul style="list-style-type: none"> - Balance sheet risks - Interest rates and funding requirements |

3.4.1 SENSITIVITY TO GROWTH SHOCKS

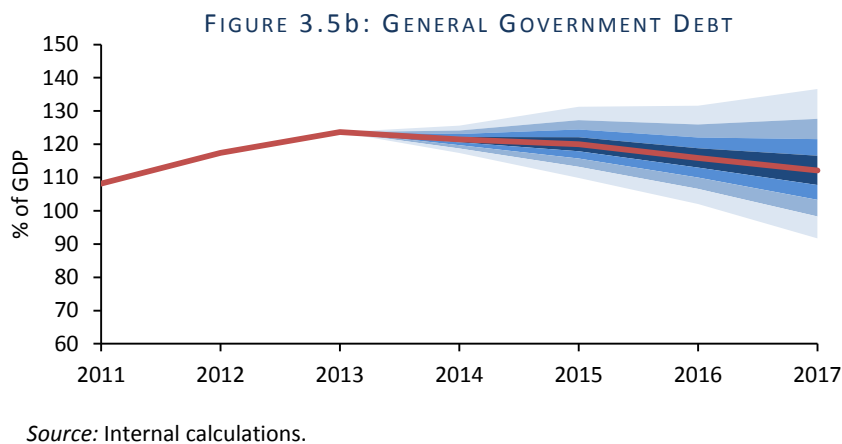
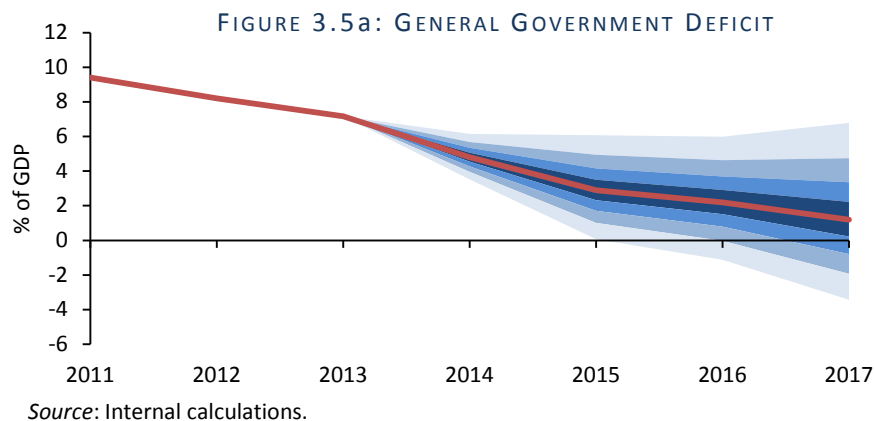
The Council's Fiscal Feedbacks model can be used to highlight the uncertainty surrounding the budgetary outlook in *SPU 2014*. The fan charts generated by the model are based on historical forecast errors. These suggest that there remains a 1-in-2 probability that the deficit to GDP ratio would be above the 2.9 per cent EDP ceiling in 2015 in the absence of further offsetting adjustments (Figure 3.5A).^{100, 101} There is also an estimated 1-in-3 probability that the debt to GDP ratio will have failed to stabilise by end-2015 unless there are other positive surprises or further policy measures beyond those currently planned are taken (Figure 3.5B).¹⁰²

⁹⁹ The Council notes the publication of the draft National Risk Assessment in April. This sets out a very broad range of risks and marks a promising step in improving risk analysis.

¹⁰⁰ For a discussion on the use of fan charts, see IFAC (2012c) and (2013a).

¹⁰¹ Additional sensitivity analysis suggests that if growth turns out to be one percentage point weaker/stronger per annum over the forecast period relative to the *SPU 2014* baseline, then the General Government deficit would be approximately half a percentage point higher/lower by 2015.

¹⁰² These probabilities are broadly unchanged relative to the Council's previous assessment based on *Budget 2014*.



A comparison of *SPU 2014* projections with other agencies also highlights the uncertainty in the budgetary outlook (see Annex C). While all agencies expect that the deficit will fall to below 5 per cent of GDP in 2014, there are diverging views on the macroeconomic and budgetary outlook in 2015.¹⁰³ The OECD, for example, projects that the 3 per cent deficit ceiling in 2015 will be breached (albeit by a very small margin). The European Commission are forecasting a deficit of 4.2 per cent of GDP, on a no policy change basis – i.e., excluding the planned €2 billion adjustment in *Budget 2015*. This would suggest the need for adjustments of the order of 1½ per cent of GDP in *Budget 2015* (approximately €2½ billion – (see EC, 2014e)).

¹⁰³ The OECD forecast real GDP growth of 1.9 per cent in 2014 and 2.2 per cent in 2015. The European Commission's forecasts are for growth of 1.7 per cent and 3.0 per cent over the same period. These compare with forecasts of 2.1 per cent and 2.7 per cent respectively in *SPU 2014*.

3.4.2 EXPENDITURE PRESSURES

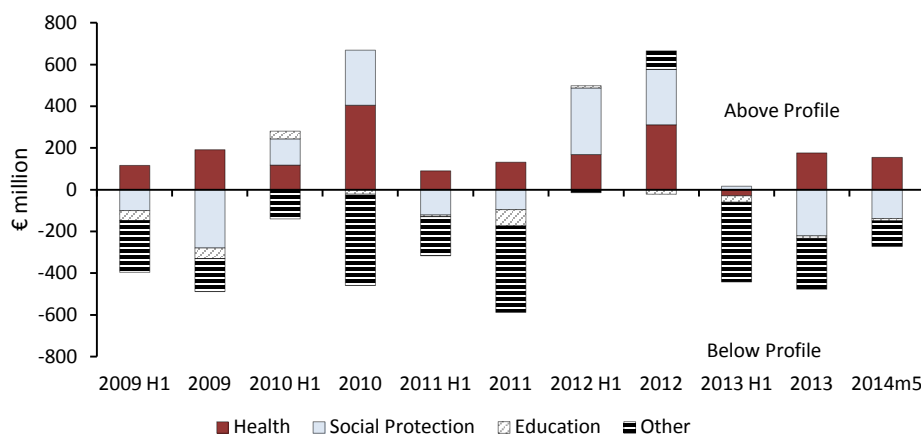
In Section 3.3.2, we outlined the challenges facing the Government in planning expenditure within the parameters of the fiscal rules. This highlighted the limited room for manoeuvre due to various inbuilt rigidities in the system (both economic and social).

Budgetary execution is also important and perhaps most relevant for the Department of Health as there has been a persistent tendency for this department to exceed its budget (Figure 3.6). This was also noted in the 2012 Annual Report by the Comptroller and Auditor General. These problems have again resurfaced in 2014. Based on Exchequer data to end-May, current spending in Health was €156 million (or 3.1 per cent) ahead of profile. Historically, these overruns tend not to be corrected in the second half of the year as reported by the Council in a previous *Fiscal Assessment Report* (IFAC, 2012b).

The Department of Health’s estimates for expenditure savings in *Budget 2014* (specifically in relation to medical card probity) further affirms the Council’s concerns with expenditure control in that Department. A recent HSE (2014) report noted a deficit of €80 million in the first quarter of 2014 largely due to pressures in the acute hospital sector.

The inability to meet expenditure ceilings in key spending departments such as Health may also reflect the presence of a soft-budget constraint (where it is anticipated that the constraint will be relaxed). The November 2013 *Fiscal Assessment Report* pointed to the challenges posed by weak incentive structures (IFAC 2013b, Box G).

FIGURE 3.6: CUMULATIVE OVERRUNS IN NET CURRENT EXPENDITURE: MID-YEAR VS END-YEAR



Source: Department of Finance.

3.4.3 OTHER RISKS

BALANCE SHEET EXPOSURES

The Government's balance sheet contains a wide range of assets and liabilities as well as important off-balance sheet (contingent and implicit) liabilities (for more details see Barnes and Smyth, (2013)).¹⁰⁴ Over the past year balance sheet exposures have fallen significantly. According to the CSO's Government Finance Statistics, contingent liability exposures declined to €73 billion last year, down from €121 billion in 2012.¹⁰⁵ This fall largely reflected the closing of the Eligible Liabilities Guarantee Scheme (ELG) to new liabilities in March 2013.¹⁰⁶

Aside from the ELG scheme, exposures relating to NAMA have also declined reflecting the repayment of €7.5 billion in senior bonds. Furthermore, the Department of Finance announced in April that the proceeds from the sale of Irish Bank Resolution Corporation (IBRC) assets will be sufficient to discharge the outstanding debt owed to NAMA. The State is likely to gain from this transaction although the precise General Government implications are as yet unknown.¹⁰⁷

Other downside risks relating to the banking sector appear to have receded as evidenced by a continued decline in the usage of ECB facilities by Irish banks and also by a gradual return to market funding by the three covered banks.^{108, 109} However, the prospects for the banking sector are heavily dependent on the forthcoming 2014 EU wide stress test.

In terms of other sizable off balance sheet liabilities, a recent report on public sector pensions estimated that the total accrued liability was €98 billion in 2013.¹¹⁰ This figure was revised downwards from the previous estimate of €116 billion in 2009 mainly due to pay and pension reductions. The other main off-balance sheet liability of Government is Public Private Partnerships (PPPs). These were valued at €5.7 at end-2013.

¹⁰⁴ Contingent liabilities are commitments, such as guarantees, that could lead to liabilities if triggered, while implicit liabilities have no contractual basis but could nevertheless lead to expenses for the Government in the future.

¹⁰⁵ According to the CSO, the value of contingent liability guarantees declined to €68 billion in 2013.

¹⁰⁶ At end-March 2013, the total amounts guaranteed under the Scheme amounted to €75 billion (see NTMA for more details).

¹⁰⁷ As part of the liquidation of IBRC and the ending of the promissory notes, NAMA was required to issue €12.9 billion of Government guaranteed NAMA bonds to the Central Bank in exchange for IBRC debts under the ELA Facility Deed. This debt is now expected to be repaid in full with the remaining proceeds available to remaining creditors.

¹⁰⁸ A recent Department of Finance (2014c) report noted that utilisation of ECB facilities by banks in Ireland amounted to approximately €31.4 billion at end-April 2014, the lowest level since the introduction of the Bank Guarantee in September 2008.

¹⁰⁹ See NTMA Presentation for Institutional Investors, May 2014.

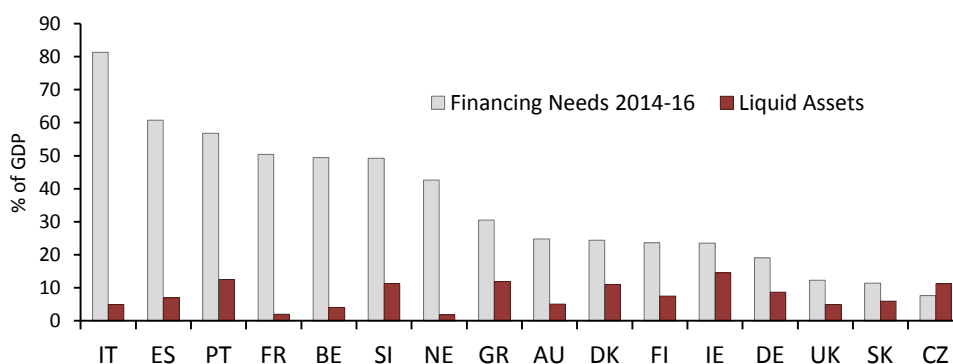
¹¹⁰ This represents the present value of pension costs of all current public sector staff/pensioners. The CSO reports these liabilities in the Government Financial Statistics.

INTEREST RATES AND FUNDING REQUIREMENTS

The previous assessment report (IFAC, 2013b) examined the sensitivity of the General Government deficit and debt ratios to interest rate shocks. The effects were found to be relatively modest in the short term.¹¹¹ The yields on Irish Government bonds have also declined further over the past six months (see Chapter 1).

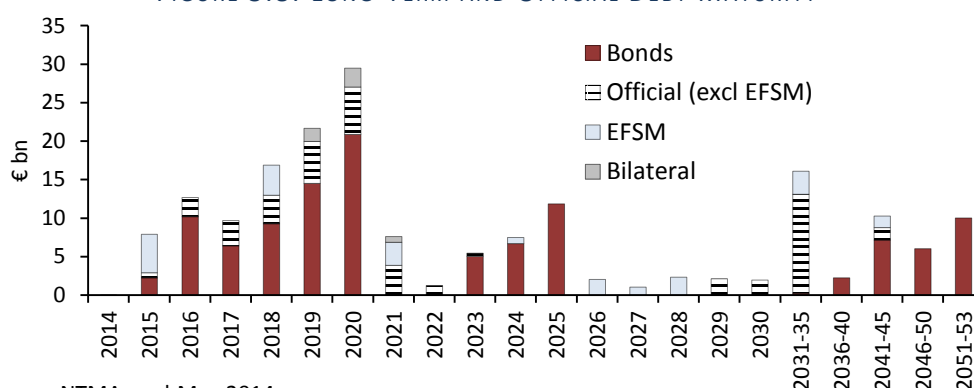
Funding requirements over the period to 2016 have been helped by a combination of strong cash balances and the activities of the NTMA.¹¹² Compared to other European economies, Irish liquid reserves are at a high level (Figure 3.7). As noted in Section 3.3, the *SPU 2014* projections assume that cash reserves will be run down significantly in 2014. However, Ireland also has significant funding requirements post-2018 as existing bonds mature and as official EU/IMF programme loans are repaid (Figure 3.8).

FIGURE 3.7: FINANCING NEEDS AND LIQUID GOVERNMENT ASSETS



Source: Internal calculations based on Eurostat and IMF data data.

FIGURE 3.8: LONG-TERM AND OFFICIAL DEBT MATURITY



Source: NTMA, end-May 2014.

¹¹¹ In the November *Fiscal Assessment Report*, it was estimated that a 150 basis point increase (decrease) in rates over three years would add (subtract) approximately half a percentage point of GDP to the deficit ratio.

¹¹² According to the projections in *SPU 2014*, the Government will need to raise approximately €13 billion per annum over the period 2015 to 2018, though much of the 2015 requirement has been pre-funded by the NTMA.

4. ASSESSMENT OF COMPLIANCE WITH FISCAL RULES

KEY MESSAGES

- Two separate fiscal objectives frame the *Stability Programme Update 2014 (SPU 2014)* budgetary plan. The first is the requirement to achieve a General Government deficit of less than 3 per cent of GDP in 2015 under the Excessive Deficit Procedure (EDP). The second is to meet the Medium-Term Budgetary Objective (MTO) of a balanced budget in structural terms by 2018.
- Ireland's excessive deficit is forecast to end in 2015, although there is no margin of safety in the *SPU 2014* projection. A successful exit from the EDP also requires that the deficit is on a path that ensures it will remain below 3 per cent of GDP on a sustainable basis.
- The fiscal projections in *SPU 2014* imply compliance with the Budgetary Rule in each year from 2014 to 2018 by some margin, as 2018 has been set as the deadline to meet the MTO. This deadline is more ambitious than necessary under the minimum requirements of the fiscal framework.
- The 2013 fiscal outturn published in the *SPU 2014* complies with the Budgetary Rule through the Adjustment Path condition. In parallel, expenditure growth was below the EU Expenditure Benchmark.
- On the basis of the *SPU 2014* forecasts, the planned evolution of the debt to GDP ratio to 2018 is compliant with the debt rules.

4.1 INTRODUCTION

The Council's mandate includes reporting on the compliance with the Budgetary Rule and also monitoring compliance with the full range of EU fiscal rules as part of a broader assessment of the fiscal stance. *SPU 2014* sets out the Government's most recent medium-term fiscal plan. This chapter examines the consistency of this plan with the fiscal rules and discusses some of the key elements of the fiscal framework at both the domestic and European levels. Finally, Analytical Note 5 provides further background to this chapter covering the topic of the Future Implications of the Debt Rule.

4.2 COMPLIANCE WITH THE BUDGETARY RULE

This section assesses the consistency of *SPU 2014* projections with the Budgetary Rule, which the Council is explicitly required to monitor. The Council also examines the role of the EU Expenditure Benchmark (EB) in assessing compliance with this rule.

4.2.1 CLARIFICATION ON THE INTERPRETATION OF THE BUDGETARY RULE

This section clarifies the interpretation of certain elements of the Budgetary Rule by reference to the *Medium-Term Budgetary Framework (MTBF)*, published by the Department of Finance in December 2013.¹¹³ This document provides an overview of the set of arrangements, procedures, rules and institutions that underpin the conduct of the reformed budgetary framework supported by the relevant provisions in national and European legislation.

The 'budget condition' of the *FRA* provides that the Budgetary Rule is complied with when "... the budgetary position of the general government is in balance or in surplus". Taken in isolation, this may be interpreted as providing for the 'budget condition' to be met through either a headline General Government balance/surplus or a structural budget balance/surplus. This interpretation was used by the Council in previous *Fiscal Assessment Reports (FAR)*. However, the MTBF states that for the Budgetary Rule to be respected one of the two following conditions must be satisfied.

These conditions are that the budgetary position of general government:

- is in balance or in surplus and this will be deemed to be the case if the medium-term budgetary objective set under the *Stability and Growth Pact* is achieved or,
- if it is not, that it is on the adjustment path towards our medium-term budgetary objective.

¹¹³ As required under Article 9 of the Budgetary Frameworks Directive (EU Council Directive 2011/85/EU, 8 November 2011).

The Adjustment Path condition is framed around the provisions of the preventive arm of the *Stability and Growth Pact (SGP)*. If a country is not at its MTO, it must be on an appropriate adjustment path towards it. An assessment of this adjustment focuses on the change in the structural balance but also considers expenditure growth by reference to the EU expenditure rule. This rule was introduced to the *SGP* framework in the 2011 reforms and limits expenditure growth to a country specific benchmark rate.

This EU EB is designed to ensure that expenditure policies are consistent with remaining at the MTO or an appropriate adjustment path towards it, while allowing revenue to fluctuate with the economic cycle. This should ensure that sustainable expenditure policies are pursued while addressing some of the uncertainties around estimates of the structural budget balance (see Box C). Furthermore, the growth of expenditure is predominantly under the direct control of government allowing for a more direct approach in addressing an *ex ante* deviation. An analysis of expenditure growth by reference to the EU EB should be part of an assessment of any actual or expected significant deviation of the budgetary position from the Budgetary Rule.^{114, 115, 116}

4.2.2 ASSESSMENT OF COMPLIANCE WITH THE BUDGETARY RULE

STRUCTURAL BUDGET BALANCE

The structural budget balance complies with the Budgetary Rule in 2013 under the Adjustment Path condition based on the forecasts contained in *SPU 2014*. The Department of Finance estimates the structural balance for 2013 at -6.2 per cent of GDP, which is in excess of Ireland's MTO of a structural budget balance (Table 4.1). However, the improvement in the structural balance of 1.6 percentage points from 2012 to 2013 is larger than that required in the Adjustment Path condition. As Ireland's

¹¹⁴ In the Irish context, the EU EB is also used as a reference in setting Ministerial ceilings for gross voted expenditure (see Annex H, IFAC (2013b), for a wider discussion of the *Medium-Term Expenditure Framework*).

¹¹⁵ The *FRA* links the assessment of a deviation from the Budgetary Rule with the evaluation of a deviation under the Balanced Budget Rule under the *SGP*. Part 3 Section 8(3)(b) of the *FRA* identifies the monitoring and compliance role of the Council as including identification of any failure to comply with Section 6(1) of the same Act. Section 6(1) of the *FRA* cites Article 6 Part 2 of EU Council Regulation (EC) No 1466/97, which outlines the consequences of a significant deviation under Article 5(1), which states that, "Sufficient progress towards the medium-term budgetary objective shall be evaluated on the basis of an overall assessment with the structural balance as the reference, including an analysis of expenditure net of discretionary revenue measures."

¹¹⁶ A significant deviation occurs where the structural balance deviates by at least 0.5 per cent of GDP in one or at least 0.25 per cent of GDP on average per year in two successive years from the appropriate adjustment path.

debt ratio is greater than 60 per cent of GDP, the *SGP* requires that the annual change in the structural balance must be greater than a 0.5 percentage point benchmark.¹¹⁷

TABLE 4.1: SUMMARY OF MAIN FISCAL AGGREGATES

| | Outturn | | SPU 2014 Forecast | | | | |
|--------------------------------------------------|---------|-------|-------------------|-------|-------|-------|-------|
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Main Aggregates, % of GDP | | | | | | | |
| General Government Balance ¹¹⁸ | -8.2 | -7.2 | -4.8 | -2.9 | -2.2 | -1.2 | 0.0 |
| Structural Balance (SB) | -7.8 | -6.2 | -4.7 | -2.8 | -2.1 | -1.2 | 0.0 |
| Change in the SB | 0.7 | 1.6 | 1.5 | 1.9 | 0.7 | 0.9 | 1.1 |
| Output Gap (% of Potential GDP) | -3.8 | -1.3 | -0.7 | -0.3 | -0.1 | 0.0 | 0.0 |
| General Government Debt | 117.4 | 123.7 | 121.4 | 120.0 | 115.9 | 112.0 | 107.2 |

Source: SPU 2014, Department of Finance.

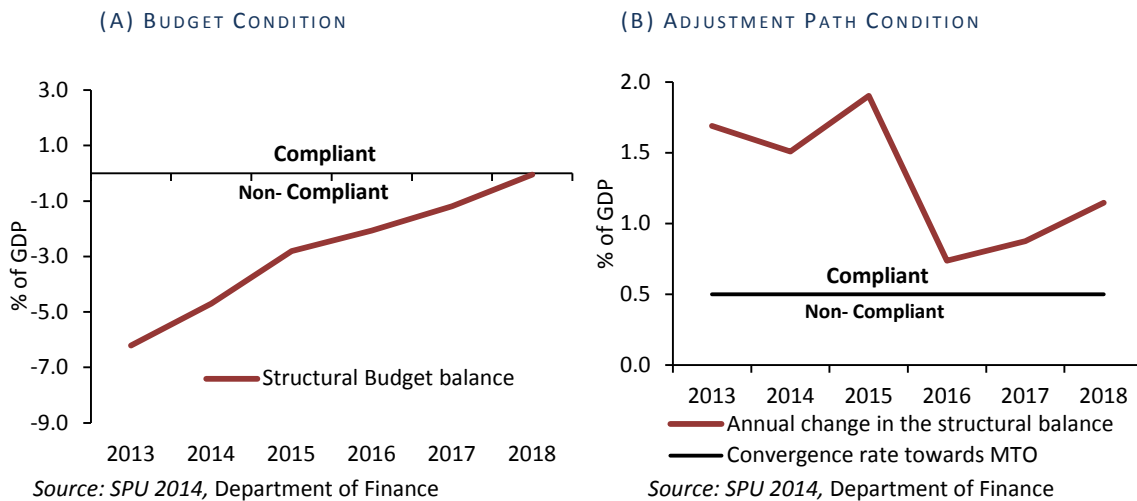
Note: Rounding may affect figures.

While the Council's formal requirement to assess (*ex post*) compliance with the Budgetary Rule is backward-looking in nature, the mandate to assess the fiscal stance suggests considering compliance on a forward-looking basis. Figure 4.1 shows the structural balance estimates for 2014 to 2018 against the requirements of the budget condition and the Adjustment Path condition. The budget condition (Figure 4.1(A)) is first met in 2018, at which point the structural position is in balance. The forecasts are compliant with the Adjustment Path condition (Figure 4.1(B)) for all years to 2018, as the change in the structural balance is greater than 0.5 percentage points of GDP.

¹¹⁷ There are indications that the minimum benchmark for high-debt countries will be set at 0.6 percentage points of GDP. For example, the *Country Specific Recommendations* for Austria state, "Austria is required to pursue an annual structural adjustment of above 0.5% of GDP in 2014, which has been operationalized in consultation with Member States as a requirement of an effort of at least 0.6% of GDP". (EC, 2014d).

¹¹⁸ Table refers to the underlying General Government Balance.

FIGURE 4.1: ASSESSMENT OF COMPLIANCE WITH THE BUDGETARY RULE



The Government's stated fiscal objective is "... the correction of the excessive deficit by next year. Thereafter, fiscal policy will be set in line with the requirement to move towards Ireland's medium-term budgetary objective, which is for a balanced budget in structural terms."¹¹⁹ The structural budget balance for the years 2016 to 2018 is driven by the targeting of a 2018 deadline to meet the MTO, which was proposed by the EC and agreed with the Department of Finance following *SPU 2013*.¹²⁰ This 2018 target was first published by Government in the *Medium-Term Economic Strategy* in November 2013 and shortened the convergence path from the 2019 deadline published in *SPU 2013*.¹²¹ Given that this deadline is more ambitious than would be achieved with minimum compliance under the EU rules, it ensures that the Budgetary Rule would be complied with by some margin out to 2018 and implies a primary surplus of 4.8 per cent of GDP in 2018.^{122, 123}

¹¹⁹ Page 1 of *SPU 2014*.

¹²⁰ It is important to note that MTOs are updated every three years and consequently Ireland's MTO will be reassessed before 2018.

¹²¹ The *SPU 2013* showed a relatively small structural deficit of 0.4 per cent in 2018 and a structural surplus of 1 per cent in 2019.

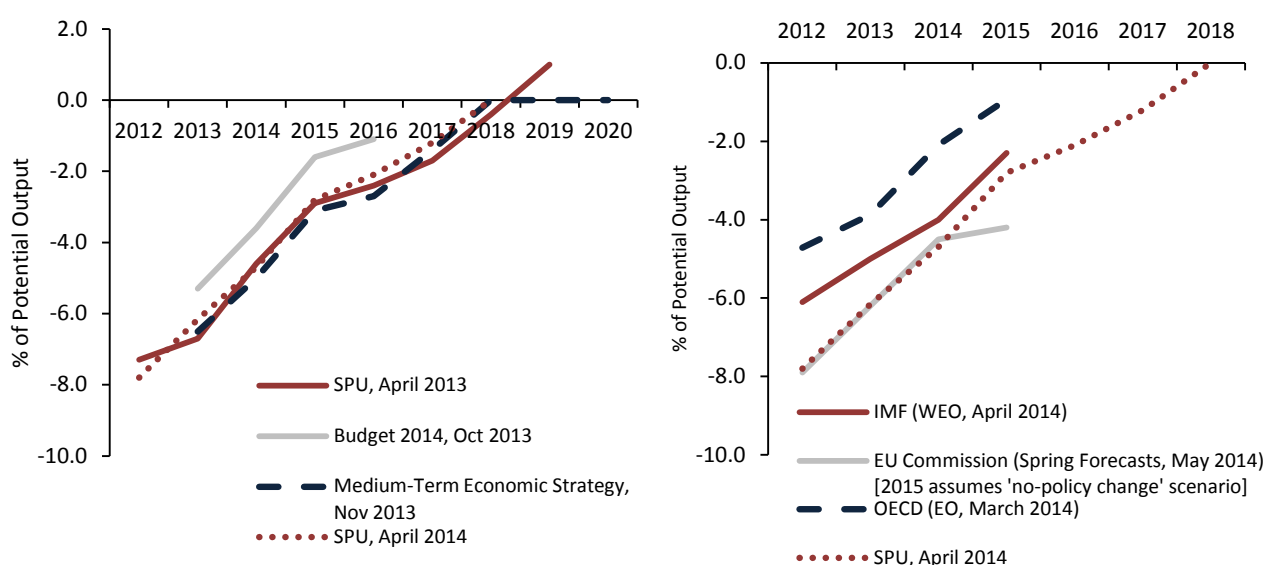
¹²² Article 3(1)(b) of the Treaty on Stability Coordination and Governance (TSCG) requires signatory countries, when not at their MTO, to be making sufficiently rapid progress towards it. In a case where a country would have to maintain a primary surplus in excess of 5.5 per cent of GDP for a sustained period in order to meet their MTO an exception is made by the EC requiring an MTO corresponding to a primary surplus of 5.5 per cent to be presented.

¹²³ The European Commission (EC, 2014b) have commented that the 2018 deadline, and implied structural primary surplus, represents "... an ambitious plan relative to past experience across Member States ...". By way of illustration, applying a 0.6 percentage point adjustment on a mechanical basis from 2015 (post-EDP) would lead to the MTO being met in 2020.

The extent of revisions to structural balance estimates has been highlighted previously by the Council.¹²⁴ This is a particular concern given the central role of the structural balance in assessing compliance with both domestic and European fiscal rules. Figure 4.2 shows structural balance estimates published by the Department since the *SPU 2013* and also compares the latest structural balance estimates from other institutions.¹²⁵ See Box C for an examination of the causes of the revision to the 2013 structural balance estimate between *SPU 2013* and *SPU 2014*.

FIGURE 4.2: ALTERNATIVE STRUCTURAL BALANCE ESTIMATES

(A) DEPARTMENT OF FINANCE, FORECAST VINTAGES (B) OTHER AGENCIES LATEST ESTIMATES



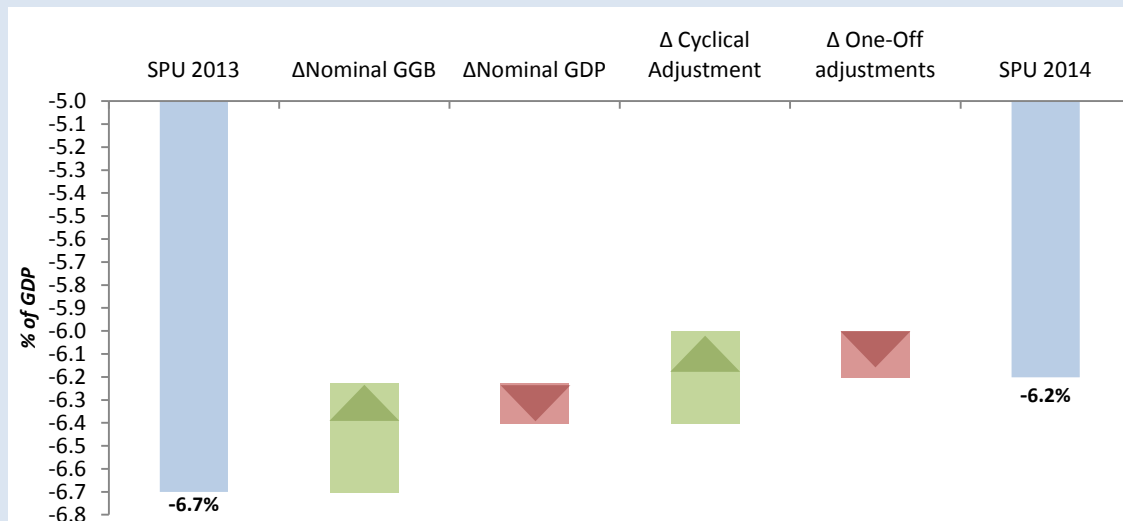
¹²⁴ See IFAC (2013b).

¹²⁵ A recent paper by the ESRI estimated a structural balance for 2014 using the *HERMES* macroeconomic model of the Irish economy. The structural balance estimate produced using this approach is close to zero for 2014. This implies that the bulk of the headline general government deficit this year is cyclical in nature and consequently that the structural balance is already at, or very nearly at, the MTO. (Bergin and Fitzgerald, 2014).

BOX C: REVISIONS TO STRUCTURAL BALANCE ESTIMATES FOR 2013

This Box examines the source of the 0.5 percentage point revision to the structural balance estimate for 2013 since *SPU 2013*. Broadly speaking such revisions can arise from three areas; (i) changes to the headline deficit ratio, (ii) changes to the estimated impact of the economic cycle or (iii) adjustment to the calculation of one-off and temporary measures.

FIGURE C: DECOMPOSITION OF CHANGES TO THE STRUCTURAL BALANCE ESTIMATE FOR 2013



Source: Internal calculations. As the residual from this calculation is minor and does not materially impact on results it is omitted from the chart.

GENERAL GOVERNMENT BALANCE

The 2013 General Government balance as a percentage of GDP was forecast at 7.5 per cent in *SPU 2013* and the latest outturn figure is 7.2 per cent in *SPU 2014*. This change in the headline ratio masks the extent of the reduction in the nominal deficit estimate as it is offset in part by downward revisions to the nominal GDP level. (See Chapter 3).

CYCLICAL ADJUSTMENT

A revision of 0.4 percentage points arises from changes to the cyclical component of the budgetary balance. The cyclical component is calculated by multiplying the output gap by the estimated sensitivity of the budget balance to changes in the output gap.

The estimate of the output gap for 2013 was revised from -0.5 per cent of potential GDP in *SPU 2013* to -1.3 per cent of potential GDP in *SPU 2014*. Over this period, real GDP growth was revised from 1.3 per cent to -0.3 per cent, while potential GDP growth was revised marginally from 0.3 per cent to 0.4 per cent. This arises not only from data and forecast revision but also from the change in the methodology for calculating the NAWRU (see Analytical Note 2).¹²⁶ In estimating the sensitivity of the budget

¹²⁶ The composition of potential growth over this period changed, with a labour contribution of -1.1 percentage points being revised up to 0.1 percentage points. This was offset by a downward reduction in the contribution of Total Factor Productivity (TFP) from 1.3 to 0.1 percentage points.

balance to changes in the output gap, the EC approach is based on a methodology devised by the OECD, which was recently updated.¹²⁷ This update gives a semi-elasticity of the budgetary balance for Ireland of 0.5, which was used for both *SPU 2013* and *SPU 2014*.

ONE-OFFS AND TEMPORARY MEASURES

The 'two-pack' Code of Conduct defines 'one-off and temporary measures' as measures having a transitory budgetary effect that do not lead to a sustained change in the inter-temporal budgetary position.¹²⁸ More detailed guidance from the EC identifies certain principles aimed at ensuring consistent treatment across countries but the interpretation remains relatively subjective.¹²⁹ This element of the structural balance estimation is typically the least technically complex but is also open to more subjectivity.¹³⁰ The one-off measures of -0.4 percentage points of GDP (€0.6 billion) for 2013 in *SPU 2014* arise predominantly from a combination of:

- (i) €1.1 billion from the Eligible Liabilities Guarantee (ELG) call relating to the promissory note restructuring
- (ii) -€0.7 billion in mobile license sales
- (iii) €0.2 billion in promissory note interest.

The estimate of -0.4 per cent of GDP represents a downward revision from -0.6 percentage points of GDP in *SPU 2013*, while the latest EC estimate of -0.3 percentage points of GDP is somewhat lower.

¹²⁷ See Mourre *et al* (2013).

¹²⁸ Examples of one-off and temporary measures are sales of non-financial assets; receipts of auctions of publicly owned licenses; short-term emergency costs emerging from natural disasters; tax amnesties; revenues resulting from the transfers of pension obligations and assets.

¹²⁹ The EC paper (Larch and Turrinni, 2009) specifies that items classified as one-off or temporary in their impact on the cyclically adjusted balance should: (i) have an impact of at least 0.1% of GDP; (ii) should be concentrated in a single year of very limited number of years; (iii) typically but not exclusively be classified as a capital transfer; and (iv) deficit increasing measures should not be regarded as one-off on the basis that expenditure measures initially regarded as one-off can become permanent.

¹³⁰ For example, work by the EC has shown that there are typically more and larger one-off adjustments when the deficit is closer to 3 per cent of GDP. (EC, 2009).

EXPENDITURE BENCHMARK

The expenditure aggregate assessed under the EU EB is estimated to have fallen in real terms by just under 6 per cent in 2013 on the basis of *SPU 2014* outturn figures.^{131, 132} This compares to the -0.8 per cent reference rate of real growth required under the EU EB for 2013.¹³³

Between 2014 and 2016 real annual growth in the expenditure aggregate is limited to -0.7 per cent under the EU EB.¹³⁴ Figure 4.3(A) shows that this requirement is complied with as the annual change in the expenditure aggregate is forecast to fall faster than that. A consequence of setting the EU EB in advance for a three year period is that the potential growth rate underpinning the benchmark may become decoupled from the potential growth forecasts underpinning the structural balance. Meeting the current EU EB given the revised estimates for potential output would – in the absence of discretionary tax changes – lead to over-performance relative to the required adjustment path to the MTO.

The EU EB reference rate will be updated in late 2015 for the period 2017 to 2019. On the basis of *SPU 2014* forecasts, the rate of expenditure growth consistent with compliance with the EU EB would be higher than under the current benchmark for 2014 to 2016 (see Figure 4.3(A)).¹³⁵ The impact of the EU EB on nominal expenditure over the forecast horizon is shown in Figure 4.3(B). General Government expenditure is expected to contract in 2014 and 2015 before expanding from 2016, although a significant element of this growth is accounted for by the increase in debt servicing costs.

¹³¹ The expenditure aggregate is general government expenditure excluding interest, exceptional investment costs relating to infrastructure, cyclical unemployment benefit spending and certain spending on EU programmes. The exclusion of cyclical unemployment expenditure makes the EU EB more demanding when cyclical unemployment is falling, i.e., this source of falling expenditure does not 'count' towards meeting the EU EB reference rate of growth. However, the fact that the EC/EU methodology identifies little of the currently high unemployment as cyclical significantly attenuates this effect, with some portion of the fall in expenditure now being allowed to count.

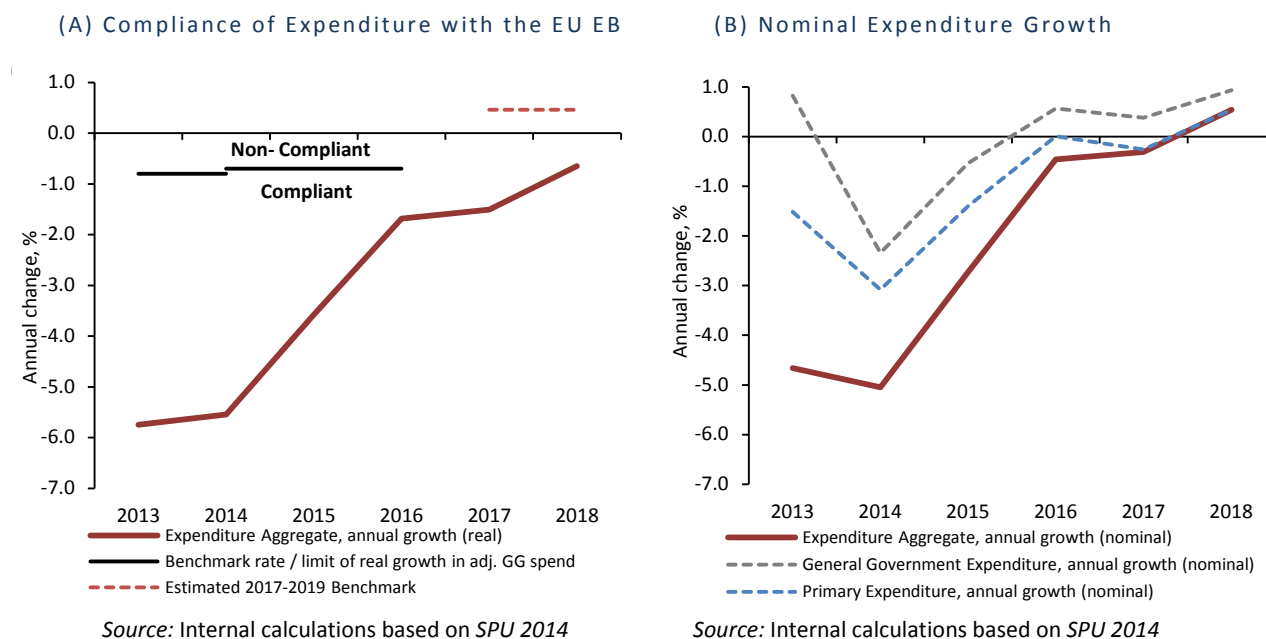
¹³² The deflator used in this calculation is the average of the forecast deflators produced by the Department of Finance in their *SPU 2013* and *Budget 2014* forecasts.

¹³³ See Annex 4 of EC (2013a) for the 2013 EU EB reference rate.

¹³⁴ See Box 1.7 of EC (2013a) for the current EU EB reference rate.

¹³⁵ Illustratively, based on *SPU 2014* data the 2017-2019 benchmark rate of expenditure growth is estimated to be approximately ½ per cent. The reference rate of potential growth is calculated as the average growth from 2011 to 2020 and assumes growth in 2019 and 2020 remains at the 2018 rate of 3.5 per cent published in *SPU 2014*. It also allows for this reference rate to be reduced by a convergence margin as the MTO will not be met until 2018. It is important to note that the formal update of the EU EB in 2015 will be based on EC data and forecasts.

FIGURE 4.3 ASSESSMENT OF COMPLIANCE WITH THE EXPENDITURE BENCHMARK



4.3 COMPLIANCE WITH OTHER IRISH AND EU FISCAL RULES

The Council has no formal mandate to assess compliance with the domestic Debt Rule enacted in the *FRA* or the EU Fiscal rules. However, the *FRA* provides that in its assessment of the fiscal stance the Council must make “...reference to the provisions of the S

tability and Growth Pact”.

4.3.1 OVERVIEW OF OTHER FISCAL RULES

SPU 2014 sets out a fiscal path that meets the requirements of domestic and European fiscal rules. In terms of compliance with other individual domestic and EU rules:

Ireland remains in an Excessive Deficit Procedure (EDP) as the General Government deficit, net of one-off banking reform measures, is in excess of the target of below 3 per cent of GDP. The *SPU 2014* sets out a deficit path that meets the requirements of the targets established under the EU Council decision and shows a deficit of 2.9 per cent of GDP in 2015. This leaves no margin to accommodate negative shocks (see Chapter 3). The specific arrangements related to an EDP exit are discussed in detail in Section 4.3.2.

After 2015, and assuming the planned 2015 General Government deficit is met and the debt-to-GDP ratio declines as anticipated, Ireland will move from the corrective arm of the *SGP* to the preventive

arm. The requirements under the preventive arm are consistent with the discussion in Section 4.2, with an *ex post* assessment undertaken by the EC to identify any significant deviation from the appropriate convergence path with the MTO.

Debt in 2013 remains higher than the requirements of the domestic Debt Rule and the requirement under the *SGP*. However, the full Debt Rule and the European debt criteria will not apply to Ireland until three years after exit from the EDP, i.e., from 2019. See Analytical Note 5 for an assessment of the *SPU 2014* debt forecasts in relation to debt targets.

4.3.2 EXCESSIVE DEFICIT PROCEDURE (EDP) EXIT

Ireland formally entered an EDP on 27 April 2009 with a deadline of 2013 for the closing of the excessive deficit. As shown in Table 4.2, two later EU Council decisions extended this deadline to 2014 and subsequently to 2015.

On the basis of the *SPU 2014* forecasts, Ireland's excessive deficit will be corrected in 2015, but the formal process to end the EDP will not be complete until the following year. A formal decision of the EU Council is required to end, or 'abrogate' an EDP even if the actual budget deficit is less than 3 per cent of GDP. For all countries that entered an EDP after November 2011 this decision is based on an EC assessment of whether the excessive deficit has been corrected in a sustainable manner and that the debt criteria are met.¹³⁶ As Ireland entered an EDP prior to the November 2011 reform of the *SGP* this second requirement will not apply in the abrogation assessment.

¹³⁶ This assessment is based on "notified", i.e., outturn, data provided by countries under the Maastricht Returns. The sustainable element is assessed by reference to EC forecasts.

TABLE 4.2: TIMELINE FOR THE EDP¹³⁷

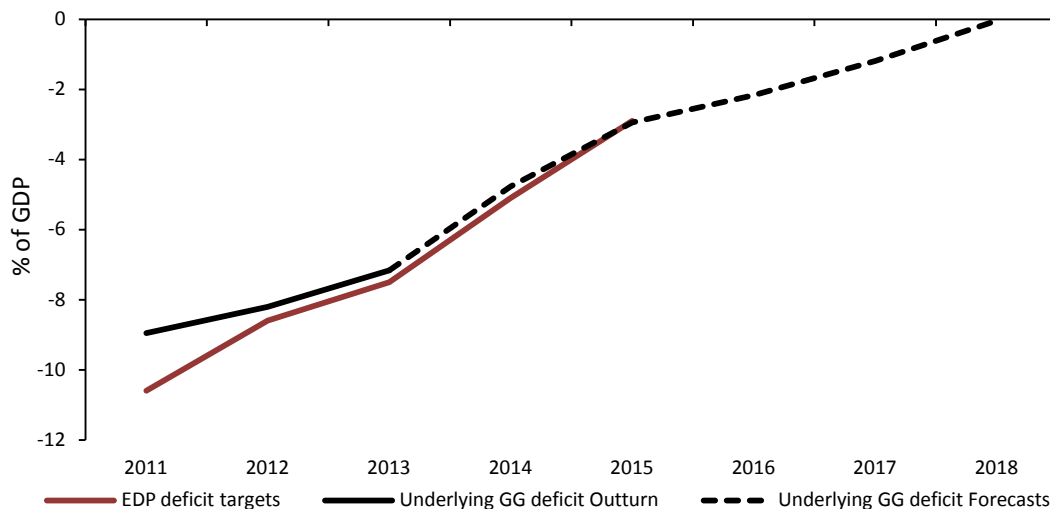
| Date | |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| January 2009 | The Irish Authorities provided an addendum to the October 2008 <i>Stability Programme</i> forecasting excessive deficits in each year to 2013 (Department of Finance, 2009). |
| 18 February 2009 | The EC assessed Ireland's deficit position to be exceptional but not temporary under terms of the <i>SGP</i> . Their report also took into account other factors including the debt position and medium-term outlook and concluded that there was a need for enhanced surveillance under the EDP. |
| 24 March 2009 | The EC presented three reports to the EU Council, (i) establishing that the EC considered that an excessive deficit existed in Ireland, (ii) recommending an EU Council decision that an excessive deficit exists and (iii) proposing recommendations for the Council to make to the Irish authorities to end the excessive deficit. |
| 27 April 2009 | On the basis of the documents of 24 March 2009, the EU Council decided that an excessive deficit existed in Ireland. Furthermore, the EU Council recommended, on the basis of the EC report that the Irish authorities should end the excessive deficit by 2013. The Council also established a deadline of 27 October 2009 for effective action to be taken by the Irish authorities in implementing measures to achieve the 2009 deficit target. |
| 2 December 2009 | Following a proposal from the EC, the EU Council concluded that the Irish authorities had taken effective action in compliance with the Council recommendations of 27 April 2009 but that unexpected adverse economic events could be considered to have occurred in Ireland and had major unfavourable impact on the public finances. The EU Council postponed the deadline for the correction of the excessive deficit to 2014. A deadline of 2 June 2010 was established for determining effective action on the part of the Irish authorities. ¹³⁸ |
| 13 July 2010 | On the basis of an EC assessment, the EU Council concluded that the Irish authorities had taken effective action in compliance with its previous recommendations. |
| 7 December 2010 | Following a proposal from the EC, the EU Council adopted revised recommendations extending the deadline for the correction of the excessive deficit to 2015. |
| 16 December 2010 | The Memorandum of Understanding on Specific Economic Policy Conditionality (the "Memorandum of Understanding") between the Commission and the Irish authorities was signed. |
| 24 August 2011 | The EC assessed that Ireland had made adequate progress towards the correction of the excessive deficit within the time limits set by the EU Council on 7 December 2010. As such, the EDP was held in 'abeyance', i.e., no further formal steps under the EDP were required. |

¹³⁷ Relevant documents are available on the EC website at: http://ec.europa.eu/economy_finance/economic_governance/sgp/deficit/countries/ireland_en.htm

¹³⁸ Article 3(5) of EU Regulation 1467/97 provides for revised EU Council recommendations in exceptional circumstances where effective action is assessed to have been taken.

Figure 4.4 shows that the forecast of the General Government deficit-to-GDP ratio complies with the deficit path required under the EDP to 2015.¹³⁹ Post-2015, the General Government balance is forecast to converge to a balanced position by 2018, respecting the requirement that the correction of the excessive deficit will be sustained over the medium term.

FIGURE 4.4: GENERAL GOVERNMENT DEFICIT CEILINGS COMPARED WITH *SPU 2014* FORECASTS



Source: *SPU 2014*.

If the EC assess that the excessive deficit is not corrected by 2015 in a sustainable manner, the next step is for the Commission to undertake an assessment of “effective action”.

This assessment would focus on the key budgetary recommendations made by the EU Council to Ireland in December 2010; (i) that specified, annual, General Government deficit ceilings be met to ensure a deficit of less than 3 per cent of GDP in 2015 and (ii) that a structural balance improvement (“fiscal effort”) of at least 9½ per cent of GDP over 2011-2015 be achieved. Furthermore, they recommended that further action be taken if necessary to ensure the 2015 deficit target is met.¹⁴⁰

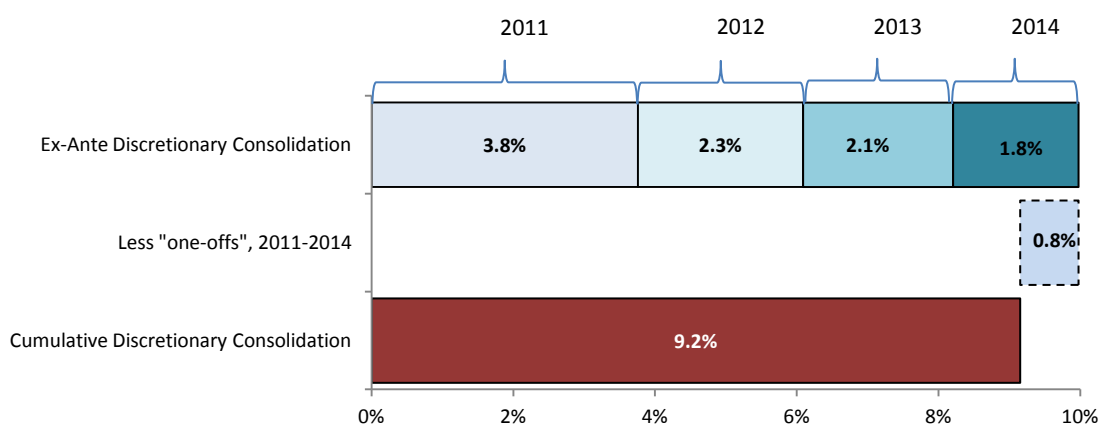
¹³⁹ The EDP recommendations specified that the target deficit path “... does not incorporate the possible direct effect of potential bank support measures in the context of the government's financial sector strategy [...]”. Adjusting the headline balance for these bank support measures gives the underlying deficit position.

¹⁴⁰ The EU Council also recommended that Irish authorities should “...seize opportunities, including from better economic conditions, to accelerate reducing the gross debt ratio towards the 60 per cent of GDP reference value”; that a budgetary advisory council and a fiscal responsibility law, including binding multi-annual ceilings, be established; and that further reforms to the social security system be introduced to reduce the risks to the long-term sustainability of the public finances.

On the basis of the *SPU 2014* estimates, the structural deficit is expected to be reduced by 5.7 percentage points between 2011 and 2015, below the recommended 9½ percentage point change (an annual average change of 1.9 percentage points). This “top-down” aggregate assessment does not take into account forecast errors arising since the EU Council recommendation. The EC have developed a methodology which attempts to compensate for the shortcomings of the simple “top-down” approach of assessing fiscal effort based on changes to the structural balance.¹⁴¹ The latest assessment by the EC indicates the annual “adjusted fiscal effort” is expected to average 1.6 per cent a year, less than the adjustment required under the EDP.¹⁴²

The “Two Pack” Code of Conduct requires that the analysis of fiscal effort should reference the achievement of expenditure plans, the implementation of discretionary revenue measures, and the composition of growth and its tax richness (see EC, 2013d). While elements of this analysis will be encompassed within the estimate of ‘adjusted fiscal effort’ more detailed evaluation is required, including a ‘bottom-up’ or ‘narrative’ style approach centred on the policy measures taken by government. *SPU 2014* states that “... discretionary consolidation measures implemented over the 2011-2014 period amount to around 9½ per cent of GDP.”¹⁴³ Figure 4.5 shows the cumulative consolidation measures announced in the period 2011 to 2014, less the impact of one off measures.

FIGURE 4.5: CONSOLIDATION MEASURES 2011-2014, % OF GDP¹⁴⁴



¹⁴¹ This method accounts for the impact of: (i) revisions to potential output growth, (ii) the impact of revisions to the revenue elasticity arising from composition of economic growth or of revenue windfalls/shortfalls and (iii) the possible impact of other unexpected events.

¹⁴² See EC (2014e).

¹⁴³ Page 39 of *SPU 2014*.

¹⁴⁴ Calculations are based on the sum of consolidation as a percentage of nominal GDP in each individual year.

This ‘bottom-up’ analysis of *ex ante* discretionary consolidation indicates some 9.2 percentage points of GDP has been undertaken. A detailed *ex post* assessment of individual measures would be required to determine if the planned revenue increases and expenditure reductions have been delivered in full. Given the uncertainty relating to estimates of the structural balance, a more detailed “bottom-up” assessment of fiscal effort is an important complement to any assessment of effective action.¹⁴⁵

The final EC assessment of “effective action”, and the consequent proposal to the EU Council, is a key determinant of whether a sanctions procedure is put in motion. If the Commission assessment shows effective action has been taken, and that targets were missed due to the existence of exceptional circumstances, then typically revised recommendations will be issued and the deadline for correcting the excessive deficit will be extended. If, however, effective action has not been taken the EDP will, on a decision by the EU Council, be ‘stepped up’. This is the first step in a procedure that can end in the imposition of sanctions of up to 0.2 per cent of the previous year’s GDP (0.2 per cent of Ireland’s 2014 GDP level represents just over €0.3 billion).^{146, 147}

In summary, the key target for 2015 is that the underlying General Government deficit must be below 3 per cent of GDP, and must be forecast by the EC to remain below 3 per cent into the medium term. If this excessive deficit is not corrected, an assessment of effective action is undertaken, which will include an analysis of the change in the structural balance (“top-down” assessment) and incorporate other measures of the ‘fiscal effort’ undertaken. This assessment is a key element in determining whether the deadline for correction of the excessive deficit is extended or whether sanctions are ultimately imposed.

¹⁴⁵ The most recent assessment by the EC (EC, 2014e) estimates that a discretionary fiscal effort of 9.9 per cent of GDP has been made between 2011 and 2014 on a ‘bottom-up’ basis.

¹⁴⁶ To impose a fine under the corrective arm, Reversed Qualified Majority Voting (RQMV) applies whereby a qualified majority of Member States is needed to reject an EC proposal. The Member State to which the vote applies is excluded. See Annex 7 (EC, 2013a) for a more detailed discussion of voting modalities.

¹⁴⁷ The EDP abrogation assessment will be based on data that incorporate the forthcoming revisions to the European System of Accounts (ESA) - see Chapter 2. In the absence of significant revisions to the nominal deficit, the impact of the upward revision to nominal GDP could reduce deficit to GDP ratio by less than 0.1 percentage points of GDP.

ANALYTICAL NOTE 1: HOUSE PRICE RISKS

Irish house prices have risen sharply in recent quarters. The pace of the turnaround has led some to question its sustainability and whether there is evidence of another asset price bubble in the making. Given the knock-on implications for the sustainability of both macroeconomic growth and government revenues, this note looks at house price risks. In light of recent experiences, improvements to data availability, particularly for new household numbers and available housing supply, could be made and authorities should ensure that policy responses have the correct orientation to address any emergent risks.

Having more than tripled in the period 1994 to 2007, real average property prices in Ireland underwent a dramatic correction. Real mix-adjusted residential property prices fell by 52 per cent from their 2007 peak, remaining 49 per cent lower by end-2013 (see Figure N1 summary indicators).¹⁴⁸ More recent price developments indicate a stabilisation: Dublin has recorded five consecutive quarters of annual increases and the first increase outside of Dublin for six years came in early 2014.

ASSET CONSIDERATIONS

Apart from fundamental factors such as incomes, supply and demographics, key factors affecting house prices relative to rents are what might be deemed “asset considerations”. These arise due to the fact that housing represents an investment asset as well as a consumer good. In this context, price expectations and interest rates are key influences with respect to the cost of home ownership. The User Cost of Capital for Housing (UCCH) attempts to compare all relevant housing costs against expected price rises. When nominal interest rates are low relative to expected house price inflation, this signals a negative cost associated with housing ownership. Significantly negative user costs are often associated with speculative bubble-type behaviour, as was the case in Ireland prior to the crash. Measuring price expectations poses some difficulties, but one proxy is to use recent historical changes. Effectively, we assume price expectations are backward-looking (as in Browne *et al.*, 2013). Figure N1 takes annual average house price changes as a proxy, similar to Duffy (2011), implying that one-year ahead expectations for national house prices would be for a rise of almost 4 per cent in early 2014. Another way to capture expectations is through surveys. Lyons (2014) highlights survey results from Daft.ie, showing respondents’ expected change in house prices over the next twelve months. Surveys covering 2012-2014 show expectations gradually recovering. Respondent expectations for Dublin are

¹⁴⁸ To measure the change in the average level of prices paid for residential properties sold in Ireland, the CSO use mix-adjustment to discount the effects of varying property characteristics. This approach is available for data from 2005 on.

for a 6 per cent rise for the twelve months from March 2014 while, outside the capital, expectations are for a stabilisation in prices.

Whichever measure of price expectations is used, user costs appear to have diminished of late. This signals a more benign housing cost environment. Housing valuation ratios comparing prices to rents or disposable incomes have also fallen sharply. These metrics point to a nascent recovery in house valuations, although both remain over 40 per cent below peak levels. Historically, real housing price declines tend to stretch out over five to six years, reversing much of their previous run-up (see Ahearne *et al.*, 2005; Reinhart and Rogoff, 2009). However, Irish house prices, at their trough, had corrected to real levels last seen in 1998 – prior to what is considered the start of the bubble-period.¹⁴⁹

CREDIT AVAILABILITY

Credit availability can serve a critical role in the fuelling of asset price bubbles, in that it can further promote a detachment of prices from fundamentals. Ireland's experience during the bubble-period demonstrated this behaviour. Growth rates in loans for house purchases averaged 23.4 per cent *per annum* over the period 1999-2007, compared to a Euro Area average of 10.4 per cent (ECB, 2009).

The housing market in recent years, by contrast, has witnessed a paucity of new lending. Net mortgage lending saw average annual declines of 2.4 per cent in 2013, with outstanding loans as a share of disposable incomes falling to early-2005 levels from a 2008 peak.¹⁵⁰ Looking at just new lending in 2013, first-time buyer and mover purchaser mortgages fell by 5.1 per cent in number and by 4 per cent in value, year-on-year. This follows a rebound in 2012 from a very low base – 2012 mortgage loans were equivalent to just 15 per cent of their 2005 number. The 2012 increase was partly spurred by the ending of mortgage interest relief for first-time buyers in December. Looking ahead, continued financial sector deleveraging and the withdrawal of a number of lenders from the Irish market may constrain new lending. Comparing Residential Property Price Register transactions and Irish Banking Federation (IBF) drawdown data might suggest a greater share of non-mortgage financed purchases

¹⁴⁹ Lyons R., and J. Muellbauer, in a forthcoming paper entitled "*Explaining the bubble: House prices, user-cost and credit conditions in Ireland, 1975-2012*", provide a thorough analysis of the various phases of Irish house price dynamics over the period 1975 to 2012.

¹⁵⁰ These figures are net of loan repayments.

were evident in 2013, including those of returning expatriates, new immigrants and non-residents, or those who held off buying in the latter stages of the bubble period.¹⁵¹

SUPPLY CONSTRAINTS

Recent price appreciations may be interpreted in a number of ways. On the basis of the data presented here, which is by no means comprehensive, a detachment from long-run fundamentals or an appreciation founded primarily on credit expansion may not provide sufficient explanation. A reversal in some over-correction may be quite likely, however, while supply constraints are also likely to be key drivers. The Housing Agency (2014) indicate that the latter may be a foremost problem in Dublin areas, which are expected to require roughly 7,500 additional houses *per annum* over 2014-2018. Completions in 2013 for Dublin as a whole, however, were less than 1,400. At a national level, the ESRI analyse a range of demographic scenarios for the next fifteen years, suggesting a need for at least 25,000 new dwellings *per annum* to meet ongoing demand, although precise estimates of the current vacant housing stock are not provided. While housing starts and Construction Purchasing Managers' Indices (PMIs) point to some supply expansion more recently, these originate from a very low base. Supply pressures could be expected to alleviate gradually as the sector recovers and provided that any constraints associated with new developments begin to ease.

NEED FOR IMPROVED DATA AVAILABILITY AND ANALYSIS

Even if supply issues are at the core of recent appreciations, the authorities should remain vigilant. Careful consideration should be given to monitoring risks of possible future bubbles, especially as trends now suggest reduced user costs. Greater awareness of risks would be well served by improving data availability with respect to regional household numbers as well as current and projected housing stocks. More detailed fundamental analysis of the housing market, if made publicly available, should also limit risks of price growth expectations becoming dislodged from fundamentals.

Other pre-emptive measures to limit the risk of future bubbles from forming might build on improved data and analysis by addressing barriers to supply responses, especially in areas of high demand and where suitable land may be available for development. Authorities should be cautious that, in responding to any perceived housing problems, price pressures are not fuelled even further such that these become ingrained in expectations. It is also important to ensure that the Central Bank has the necessary micro- and macro-prudential tools in place to control credit growth in the event that bubble-type dynamics take hold. Similar scope for a prudential role in fiscal policy should also be

¹⁵¹ Comparing these datasets to arrive at a share of cash transactions is problematic as IBF figures may include self-build mortgages with no corresponding transactions. Similarly, single transactions on the CSO's Residential Property Price Register may refer to multiple units.

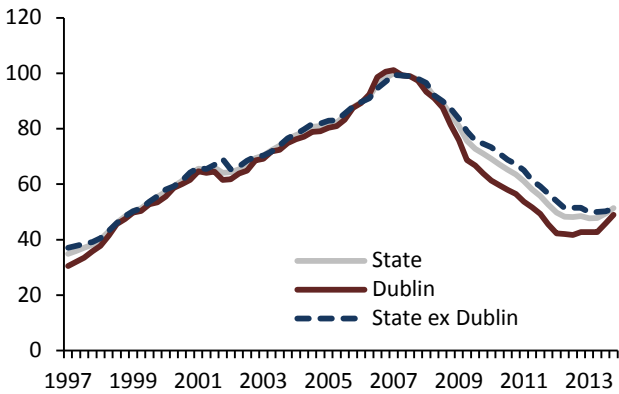
explored further (i.e., property-related tax policies could be used if risks of future bubbles were to emerge). The Council will continue to monitor various indicators to help assess whether grounds for concern exist with respect to housing market trends.

Figure N1: Ireland: Housing Developments

Real house prices remain well below their peak, having returned to 1999 price levels...

Real Residential Property Prices (HICP adjusted)

Index: Q1 2007=100

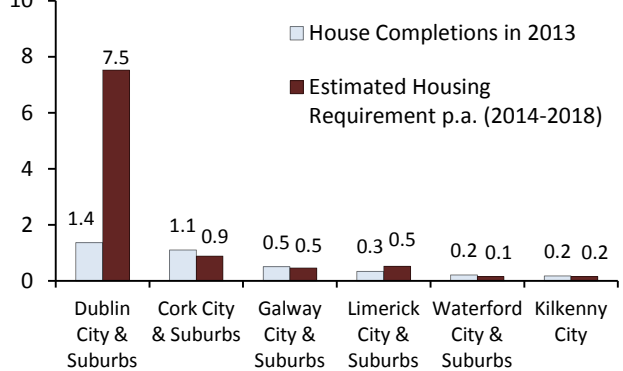


Sources: ESRI/PTSB; CSO.

...while supply pressures appear to be most prevalent in Dublin

Estimated housing requirements & completions

Units ('000s)

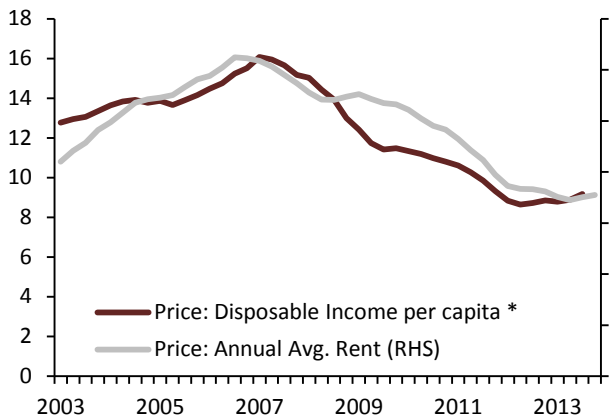


Sources: Housing Agency; DoECLG.

Note: Completions cover rural + urban settlements; requirements only cover urban settlements of 1,000 persons or more.

Typical housing valuations also remain well below peak levels...

Housing Valuation Ratios

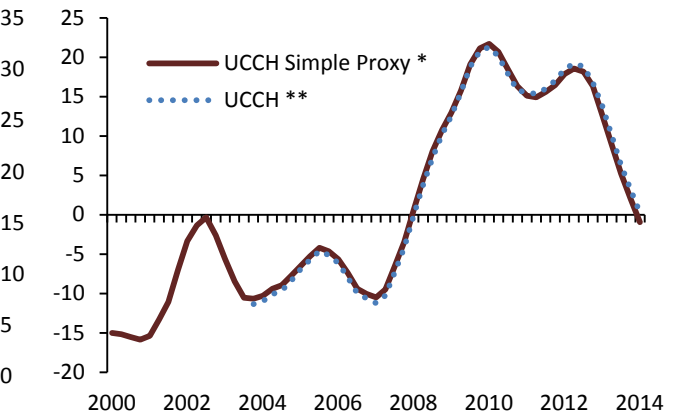


Sources: ESRI/PTSB; CSO.

*Average house prices divided by moving 4-quarter sum of adjusted personal disposable income per capita.

...but more favourable user costs have re-emerged as price expectations improve

User Cost of Capital for Housing (UCCH)



Sources: Central Bank of Ireland; CSO; ESRI/PTSB.

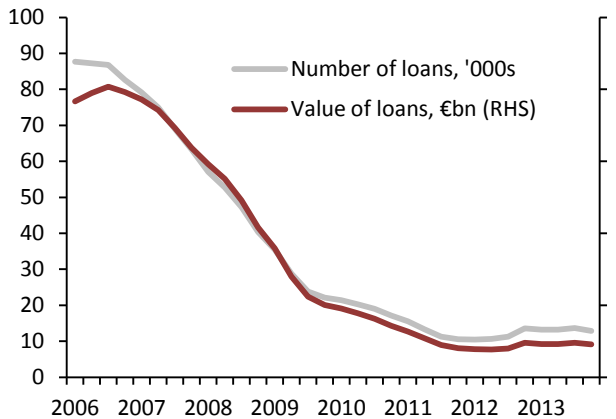
* New mortgage interest rates less annual price change for past 4Qs.

**Includes first-time buyer taxes/subsidies; down-payments; deprec / maint.

New lending remains at levels far below respective peaks...

Annualised Residential Mortgage Lending

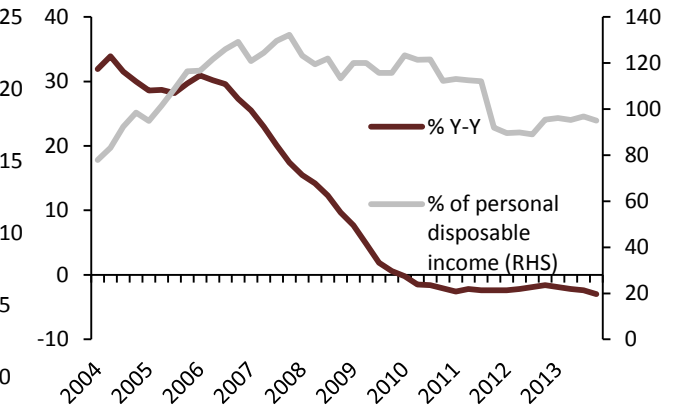
First-time buyer and mover purchaser loans



Source: IBF/PwC Mortgage Market Profile.

...and net lending is still declining. Outstanding lending as share of incomes has returned to 2005 levels

Loans to Irish Households for House Purchase



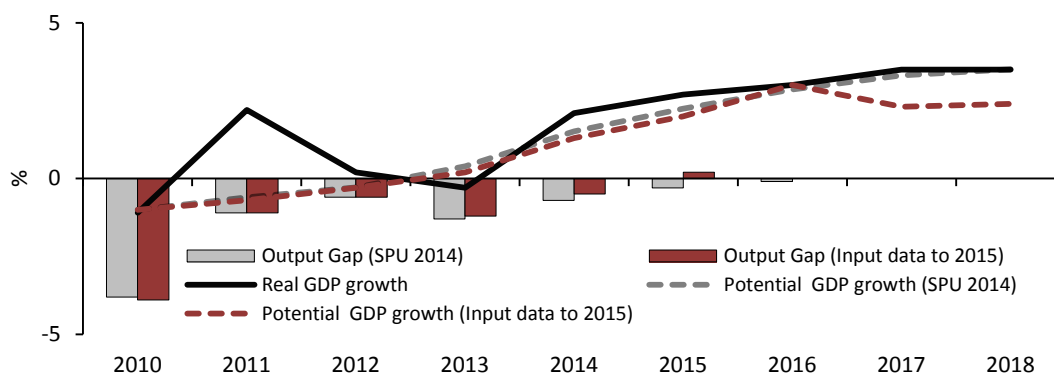
Sources: Central Bank of Ireland; CSO.

ANALYTICAL NOTE 2: SENSITIVITY ANALYSIS OF THE DEPARTMENT OF FINANCE APPROACH TO POTENTIAL OUTPUT ESTIMATION UNDER THE EC METHODOLOGY

The Department of Finance is obliged to include estimates of potential output made under the EC commonly agreed methodology in the *SPU*. This methodology is used to decompose output into trend and cyclical components, both over historical data as well as the forecast horizon. However, Department of Finance forecasts for actual variables can have a significant impact on estimated potential growth and the closure of the output gap. These may lead to significantly different estimates made by the EC within the same framework.

To derive medium-term forecasts and extend the variables that feed into the historical estimates of potential, the EC methodology uses a variety of statistical approaches. The Department’s supply side forecasts for *SPU 2014* are estimated in parallel with demand side forecasts over the horizon to 2018. In practice, the forecasts for demand and labour market developments are used as an input to the harmonised model. The Department use the resultant potential output and output gap estimates to inform their view of real output over the horizon. Using input variables rather than the more mechanistic methods used by the EC can lead to significant differences for the later years of the forecast horizon. Figure N2 shows the impact of using the *SPU 2014* forecasts only to 2015 and applying the EC extension methods thereafter.

FIGURE N2: POTENTIAL GROWTH USING *SPU 2014* FORECASTS TO 2015

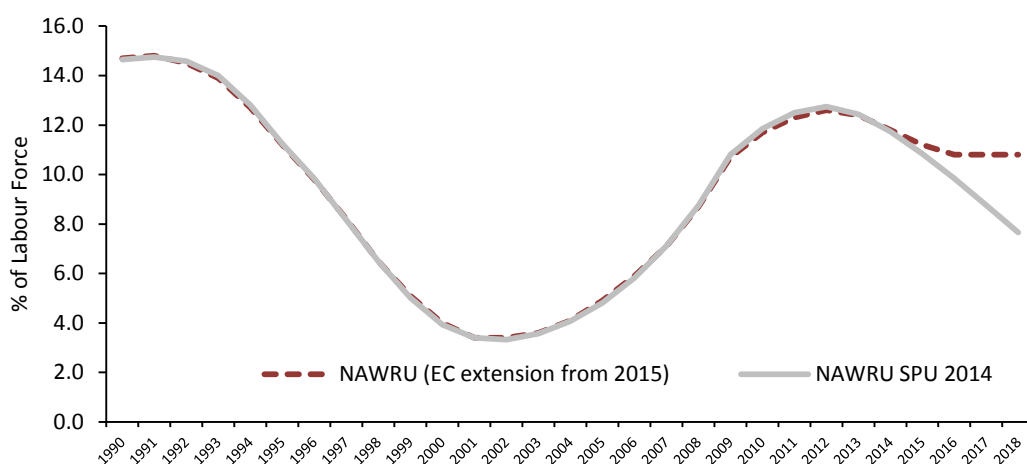


Source: *SPU 2014* and internal calculations.

Applying this method produces an the estimate of potential output growth in 2018 that is almost 1 percentage point lower that the *SPU 2014* estimate, mainly as a result of differences arising through the labour supply channel. This results in a positive output gap in 2015.

The main explanation for this difference is the approach to extending the estimate of the Non-Accelerating Wage Rate of Unemployment (NAWRU) beyond 2015. Figure N3 compares the NAWRU estimates using the Department’s 2018 forecasts of the unemployment rate, productivity and wage and price movements with the NAWRU estimated using the EC extension method from 2015.^{152, 153} This difference in approach to estimating the potential labour supply accounts for nearly all of the 2018 difference in potential growth: just over 1 percentage point. The Department’s estimates are based on labour market assumptions which include a sharp fall in the unemployment rate to 2018. The EC approach to extending the NAWRU beyond the horizon of their short-term forecasts is mechanical and heavily influenced by the initial end point of their short-term forecast (in this case to 2015).

FIGURE N3: COMPARISON OF NAWRU ESTIMATES



Source: SPU 2014 and internal calculations.

To estimate the contribution of capital accumulation, the EC commonly agreed methodology is based on the assumption that the maximum potential output contribution of capital is given by the full utilisation of capital stock in the economy. As such, capital is driven by the forecast of investment by the Department to 2018.¹⁵⁴

¹⁵² The recently revised mechanism used by the EC is: $NAWRU_t = NAWRU_{t-1} + 0.5 * (NAWRU_{t-1} - NAWRU_{t-2})$ for 2016 and the NAWRU is held constant for 2017 and 2018.

¹⁵³ Both estimates use the revised methodology being referred to as ‘New Keynesian’ for NAWRU estimation.

¹⁵⁴ The Department can also make assumptions in relation to the rate of capital depreciation, which is held constant from 2013 for the SPU 2014 estimates, in line with the EC approach. The impact of adjusting the depreciation rate from the 3.9 per cent assumed by both the EC and the Department to its long-run average of 3.7 per cent is limited, adding less than 0.1 of a percentage point to potential growth in 2018.

The other major component of potential growth is trend Total Factor Productivity (TFP). This is estimated in the EC common methodology using a Kalman filter approach, which uses actual TFP and a capacity utilisation series to obtain the results.¹⁵⁵ To produce the TFP input series the log of the Solow residual is calculated using a standard Cobb-Douglas production function approach and based on outturn data. This series is extended to 2018 by the Department using their actual forecasts for labour, capital and GDP growth. The impact of this extension is relatively limited adding 0.1 of a percentage point to potential growth in 2018.

ALTERNATIVE APPROACH TO TFP ESTIMATION

A significant limitation to the harmonised approach for Ireland is that the capacity utilisation input series has not been collected for Ireland since 2008. An alternative approach proposed by Clancy (2013) uses a composite index of weighted PMIs. Figure N4 compares the contribution of trend TFP to potential growth using the CUBS data and substituting the alternative composite PMI capacity utilisation. Both measures show trend TFP contributing 0.9 of a percentage point to potential output by 2018.

REVISIONS TO THE NAWRU METHODOLOGY: A NON-CENTRED ‘NEW KEYNESIAN’ APPROACH¹⁵⁶

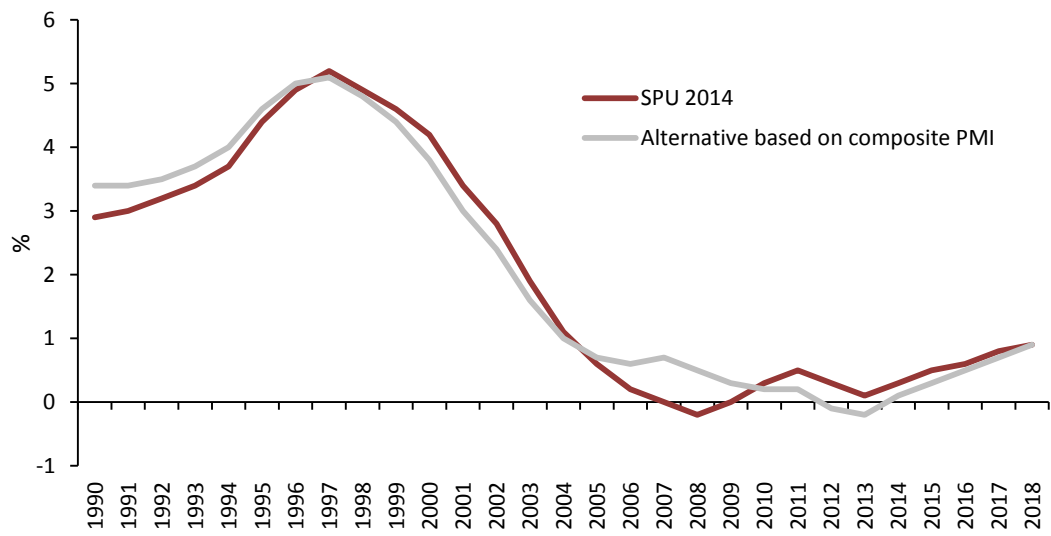
A change to the EC commonly agreed methodology, specifically the estimation of the NAWRU, was agreed by the Economic Policy Committee (EPC) in March 2014. This new approach is designed to lessen the impact of nominal wage rigidities on structural unemployment levels. The previous approach generated persistently high NAWRU estimates for countries with high wage rigidities and a high unemployment rate. To circumvent this, the new approach uses a proxy for real unit labour costs rather than estimating the NAWRU through the change in wage inflation. A new “non-centring” approach is also used.¹⁵⁷

¹⁵⁵ The specific capacity utilisation series used is the Capacity Utilisation Business Survey (CUBS). Note that this survey has not been conducted for Ireland since 2008 and consequently data is linearly extended from 2009.

¹⁵⁶ See also Box I.1, pg 27 of the EC’s Spring 2014 Forecasts and Box 1, pg 23, *SPU 2014* for a discussion of this methodological change.

¹⁵⁷ This approach adjusts the results of the new model by the average difference between the old and new models, where the new model gives a higher average NAWRU than the old model. This so-called ‘non-centring’ approach adjusts the results of the model for Ireland by 0.43 percentage points for each year.

FIGURE N4 CONTRIBUTION OF ALTERNATIVE TFP ESTIMATES TO POTENTIAL GROWTH



Source: SPU 2014 and internal calculations.

ANALYTICAL NOTE 3: TAX FORECASTING ERROR DECOMPOSITION

The Department of Finance is responsible for producing tax forecasts twice a year – in the *Stability Programme Update* and in the annual *Budget*. The approach used by the Department for one-year-ahead forecasts can be summarised using the following equation:

$$REV_{T+1} = (REV_T - T_T)(1 + (B_{T+1}^G E)) + T_{T+1} + M_{T+1} + J_{T+1}$$

where REV_{t+1} is the one year ahead forecast for a particular tax head; REV_t is an estimate of the yield for that tax head in the current year, i.e., the year in which the forecast is made; T_t are one-off items affecting the yield in the current year; B_{t+1}^G is the projected growth rate for the year ahead in the appropriate macroeconomic variable that best captures the tax base for each tax (i.e., the macro driver); E is the elasticity measuring the responsiveness of tax revenue to the tax base; T_{t+1} are one-off items affecting the yield in the coming year; M_{t+1} is the estimated static yield from any changes in policy affecting receipts for a particular tax in the coming year; and J_{t+1} is a judgement factor applied by the Department of Finance.

Building on analysis in previous FARs (IFAC 2012a, IFAC 2013a), this note focuses on the source of tax forecasting errors, decomposing the errors into three types:

- (1) starting point errors, i.e., errors caused by using an incorrect estimate of the yield for a particular tax in the current year (REV_t);
- (2) macro driver errors, i.e., errors caused by using an incorrect estimate of the projected growth rate in the macro driver (B_{t+1}^G); and
- (3) other errors, i.e., errors caused by using incorrect estimates of any other component of the forecast. These include one-off items (T_t and T_{t+1}); estimates of the yield from any changes in policy for the coming year (M_{t+1}); judgement factor (J_{t+1}); and the elasticity, E .

The exercise is carried out for one-year-ahead errors for four of the main tax heads: VAT; corporation tax; excise; and the “Pay As You Earn” (PAYE) component of income tax.

First, Department of Finance forecasts are replicated using the same data that were used in the official forecasting process. For VAT and corporation tax, data for REV_t are taken from *Budget* publications while data for the PAYE component of income tax and excise duty were provided by the Department of Finance; data for M_{t+1} are taken from *Budget* publications; and information about, B_{t+1}^G , T_t , T_{t+1}

and E was provided by the Department for the 2004-2012 period.¹⁵⁸ The judgement term, J_{t+1} , is defined as the difference between the forecast published by the Department (the official forecast) and the forecast generated in this replication exercise.

For VAT and corporation tax, the forecasting process follows the equation above, with nominal personal consumption and nominal GDP as the macro drivers, respectively. The process for excise duty differs slightly in that it consists of two parts: the first part relates to Vehicle Registration Tax (VRT) (the macro driver is the expected increase in the demand for new cars multiplied by the expected increase in the price of new cars); the second part involves forecasting excise duty minus VRT (the macro driver is the projected growth rate in nominal personal consumption excluding cars).¹⁵⁹ In the case of PAYE, the equation is modified to include two macro drivers – the expected growth in non-agricultural wages and non-agricultural employment – each of which is multiplied by an elasticity factor.

Starting point errors can be identified by estimating the equation using actual outturn data for Rev_t , which is published in the end year Exchequer statement, in place of the estimate used by the Department at the time the forecast was made.¹⁶⁰ All other values in the equation remain unchanged (i.e., those used by the Department of Finance at the time the forecast was made). By comparing the result to the official forecast, we isolate the degree to which the official forecast is inaccurate due to the use of an incorrect estimate of Rev_t .¹⁶¹ For example, the total VAT forecast error in 2004 was €325 million, but is reduced to €213 million when the actual yield for 2003 is used instead of the estimated yield (from the Budget). The starting point error in this case is €112 million. Similarly, the macro driver error is identified by estimating the equation using the correct value for B_{t+1}^g published in the *National Income and Expenditure Accounts* (NIE), and keeping all other values the same as those used in the official forecast.¹⁶² The “other” forecast error is calculated as a residual, i.e., the overall forecast error for a particular tax head minus the starting point error and the macro driver error. All errors are calculated in euro.

¹⁵⁸ Due to data limitations, we cannot decompose the forecast errors for other components of income tax, capital taxes, customs duties or stamp duties, or for the period before 2004.

¹⁵⁹ In the case of excise, the measure of personal consumption expenditure is adjusted to include expenditure by Irish residents abroad and exclude expenditure of non-Irish residents in Ireland.

¹⁶⁰ Outturn data for PAYE, VRT and excise excluding VRT are provided by the Department of Finance.

¹⁶¹ This approach ignores any impact of interactions between the starting point error and the base growth error. It is likely that any interaction terms would be relatively small and this approach greatly simplifies the analysis.

¹⁶² Outturn data for non-agricultural employment, which feeds into the PAYE forecast, are taken from the Quarterly National Household Survey. In the case of VRT, outturn data for new car sales and prices were provided by the CSO.

Figures N5-N8 detail the decomposition of tax errors for each of the tax heads. While there is some variation across tax heads, most of the total errors are dominated by “other” errors, with macro driver errors sometimes making a significant contribution.¹⁶³ Unsurprisingly, the relative share of macro driver errors rose around the time of the economic crisis, contributing substantially to the larger total errors across tax heads in 2008-2009. For VAT and PAYE in 2009, for example, the macro driver error accounted for around three-quarters and two-thirds, respectively, of the gross error, reflecting the underestimation in the fall in both personal consumption and earnings. Given the timing of the *Budget* in December over the 2004-2012 period, substantial information is available on the current year outcome when the forecasts are made. Therefore, starting point errors have generally been quite small, although corporation tax provides an exception in 2009. This probably reflects the relatively lumpy nature of corporation tax receipts around the end of the year. It will be interesting to see whether moving the Budget to October will have an effect on starting point errors (IFAC, 2013b).

For all tax heads, the “other” error category, which captures, inter alia, errors relating to M_{t+1} , J_{t+1} , E_t , T_t , T_{t+1} , plays a dominant role. “Other” errors accounted for almost 60 per cent of VAT forecast errors on average and peaked at 90 per cent in 2007.¹⁶⁴ While macro-driver errors are the main contributors for PAYE, “other” errors still contributed over 45 per cent on average to the gross error since 2004.¹⁶⁵ In the case of PAYE, other errors – which may include judgement – act to offset a portion of the large macro errors during the downturn. In the case of corporation tax, other errors are likely due to the difficulty in forecasting the effects of policy changes.¹⁶⁶ For excise, although not shown in the graph, the VRT component of excise duty is dominated by ‘other’ errors while the starting point error is quite small.¹⁶⁷

¹⁶³ A study by the IMF looking at the 1995-2003 period concluded “... revenue forecast errors can be largely explained by errors in the outlook for growth”. (IMF (2005) p.15.)

¹⁶⁴ In 2007, a series of VAT policy measures were expected to cost the State €213 million, such as: a change in the registration threshold for SMEs; a change in the cash accounting threshold for small firms; a reduction in the required number of returns for small firms; and a reduction in the VAT rate on child car seats.

¹⁶⁵ For PAYE, starting point errors are particularly small, as receipts are relatively constant from month to month.

¹⁶⁶ Although the rate of corporation tax has not changed since 2003, various policy changes have been introduced, for example, incentives for expenditure on research and development, changes in liability depending on accounting periods, or alternative thresholds for start-up/small companies.

¹⁶⁷ This is probably due to the fact very few cars are sold in the month of December, and as a result, at *Budget* time, it is easier to predict Rev_t for VRT than is the case for other tax heads.

FIGURE N5: VAT

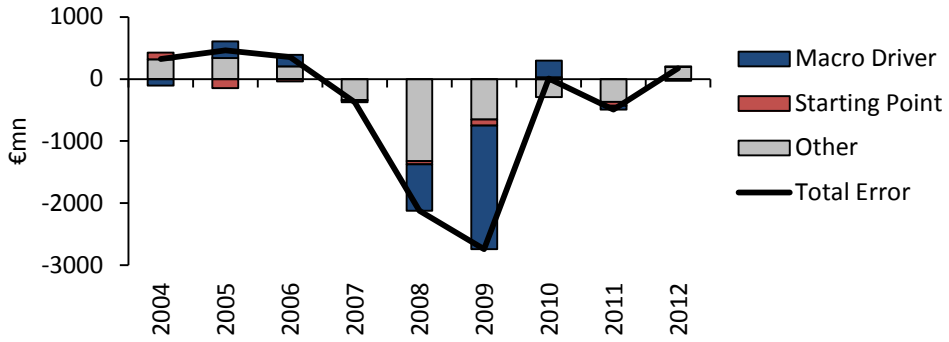


FIGURE N6: CORPORATION TAX

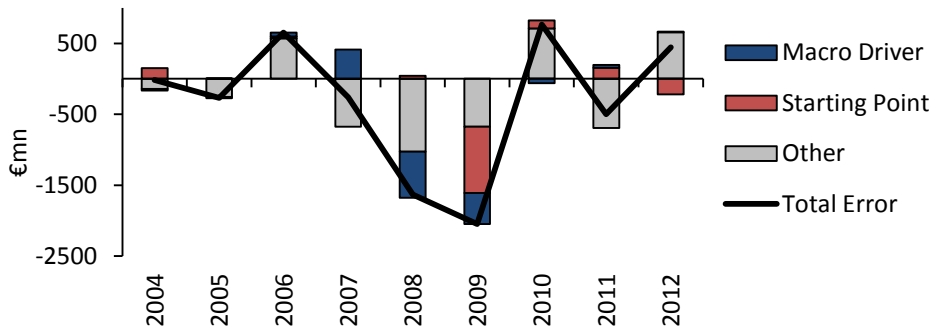


FIGURE N7: EXCISE

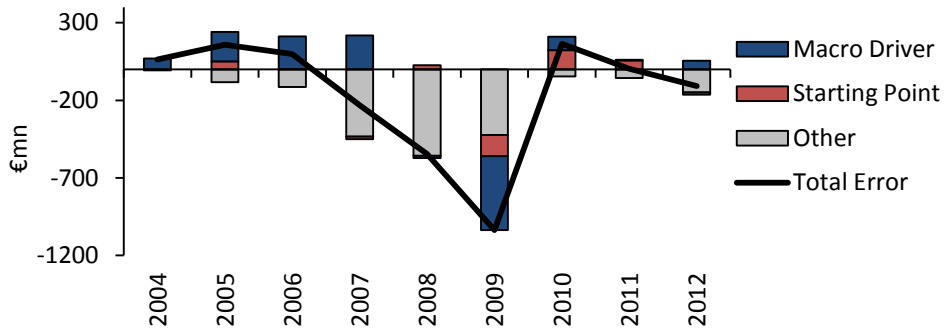
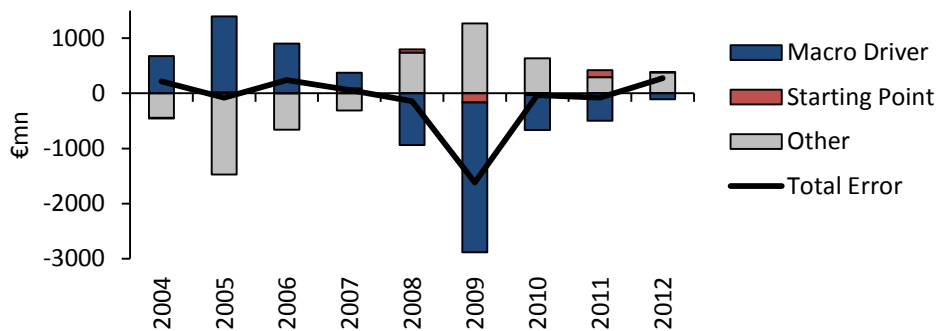


FIGURE N8: PAYE



Source: Internal calculations.

ANALYTICAL NOTE 4: DIRT FORECAST METHODOLOGY

The standard rate of Deposit Interest Retention Tax was increased by 8 percentage points to 41 per cent in *Budget 2014*.¹⁶⁸ The policy change is projected to add €140 million in revenue on a full-year basis.

DIRT revenues are the only element of non-PAYE income tax that is forecast by the Department of Finance. There seems to be little documentation of how DIRT revenues are forecast: the most comprehensive recent description appears to be the following two sentences in Annex 1 of the Medium Term Budgetary Framework (2013):

Deposit Interest Retention Tax is forecast using the Consumer Price Index, as, over the long run, it tends to move in line with interest rates. It also takes account of interest rate futures.

More formally, the calculation of DIRT revenue could be described by the following equation¹⁶⁹:

$$T_{t+1} = [(T_t + \text{Carryovers from previous budgets})(1 + \text{CPI})] + \text{New Measures} + \text{Other Adjustments}$$

where T_t is DIRT revenue in the base year and growth in the consumer price index (CPI) serves as the macro driver. Other adjustments may include alterations made by the Department of Finance based on deposit information from the Central Bank and information about predicted interest rate movements from ECB policy rate futures. For example, for 2014 the calculation was:

$$€627\text{m} = [(\text{€}501\text{m} + \text{€}13\text{m})(1 + 0.016)] + \text{€}105\text{m},$$

where the estimated outturn for 2013 was €501 million and €13 million reflected carryover effects from previous budgets. The projected CPI for 2014 was 1.6 per cent, €105 million was the static impact of the change in the DIRT rate introduced in *Budget 2014*, and no additional adjustments were made to incorporate, for example, expected interest rate changes.¹⁷⁰

¹⁶⁸ The Budget also brought the traditionally higher rate of DIRT for interest paid less than annually in line with the standard rate and abolished certain exemptions. (See Finance Bill (no.2) 2013 for details.)

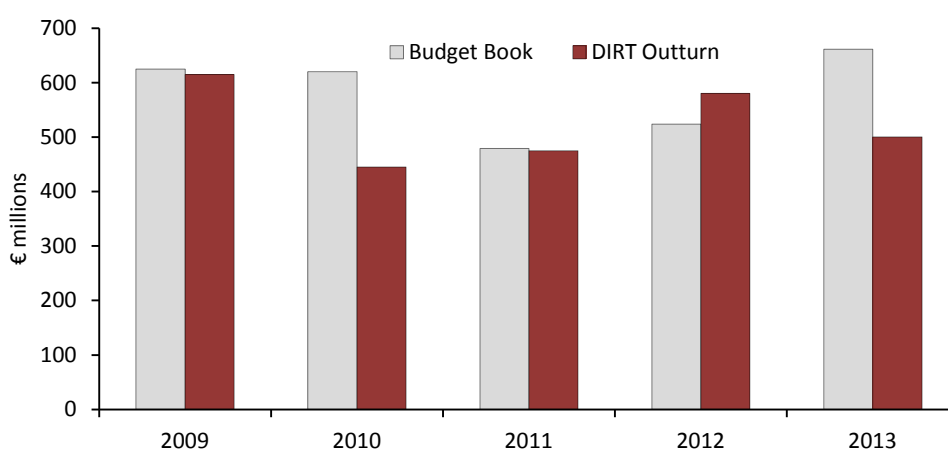
¹⁶⁹ For the DIRT forecast, the elasticity is assumed to be 1, so for simplicity it is omitted from the equation.

¹⁷⁰ The static impact takes no account of the likely change in behaviour resulting from the increase in taxes. In this case, it ignores the potential for reduced savings.

According to the Department of Finance, this static impact figure for the rate increase in *Budget 2014* was based on advice from the Revenue Commissioners that every one percentage point increase in the DIRT rate would raise approximately an additional €17 million in revenue. Specifically, the calculation took the available estimate of the outturn for DIRT and some exit taxes revenue for 2013 as €590 million, divided by 33 and multiplied by 8.¹⁷¹ The resulting (rounded) €140 million was then adjusted for 2014 based on the pattern observed in the previous year that 28 per cent of DIRT payments relate to interest from the previous year.¹⁷² This gave a (rounded) estimate of €105 million for the impact of the new measures for 2014.¹⁷³

An early assessment for 2014 based on the first two quarters of data only indicates that the DIRT revenue forecast is behind target (€270 million vs. target €300 million). As DIRT is paid quarterly in arrears, however, it is still too early to assess the extent to which the impact of the policy change has been accurately predicted. At this point, the initial CPI forecast of 1.6 per cent used in the forecasting equation looks high but even relatively large forecast errors in the macro driver forecast do not appear to have a significant impact on the DIRT revenue forecast.¹⁷⁴

FIGURE N9: BUDGET DIRT FORECAST VS OUTTURN



Source: Department of Finance and internal calculations.

¹⁷¹ This number comprised an estimated outturn for DIRT for 2013 of €510 million and about €80 million in receipts relating to Life Assurance Exit Tax (LAET) and other exit taxes that were also to be increased from 33 per cent to 41 per cent in *Budget 2014*. Consequently, the static impact figure used in the DIRT calculation appears to include about €19 million relating to LAET. We thank the Revenue Commissioners for the information on how these calculations were made.

¹⁷² DIRT is paid quarterly in arrears and so January receipts in 2014 are based on the lower 33 per cent rate.

¹⁷³ Given the relatively small numbers involved, no adjustments were made to account for revenues arising where interest is paid less than annually where the rate increase was smaller.

¹⁷⁴ The Department of Finance forecast for the CPI was revised downwards to 0.4 per cent in *SPU 2014*.

As is evident from Figure N9, the forecasting performance varies quite a lot from year to year: errors were relatively small in 2009 and 2011 (1.6 per cent and 0.8 per cent respectively) but quite large in 2010 and 2013 (€175 million (39.3 per cent) and €161 million (32.2 per cent) respectively). For all years, the contributions of starting point errors (estimates of T_t) and the macro driver errors (estimates of CPI) were extremely small.¹⁷⁵ Other potential sources of forecasting errors include: (i) error in the Revenue Commissioners' forecast for the effect of new measures or; (ii) error in the estimation of the carryovers from previous budgets.

Given the wide variation in the size of the errors from year to year, it seems more likely that the bulk of the errors arose from the omission of other relevant factors driving the tax revenue stream. For example, it may be possible to improve the forecasting equation by incorporating additional information on interest rate movements over and above that captured by the CPI or information on projected growth in deposits. Historically, the Department did not take interest rate movements into account but this has recently become part of their assessment. Since ECB policy rate futures signalled no change at *Budget 2014* time, no adjustment for interest rate movements was incorporated by the Department in their 2014 forecast.

¹⁷⁵ Macro driver errors and starting point errors are estimated by substituting the forecasts for these variables with the actual outturns in the forecasting equation. The actual outturns imply a different DIRT forecast from the Budget forecast. The difference between them is the error due to macro driver/starting point errors.

ANALYTICAL NOTE 5: FUTURE IMPLICATIONS OF THE DEBT RULE

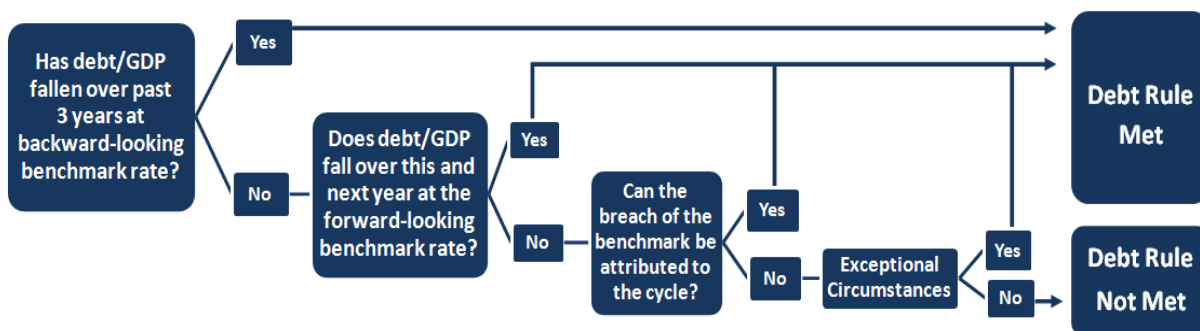
The EU *Stability and Growth Pact (SGP)* debt criterion was implemented in late 2011 as part of the EU “six pack” of reforms, while the Debt Rule came into force with the *Fiscal Responsibility Act* in 2012. While the *SGP* has always had a 60 per cent debt ceiling, this was not made operational until 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:

$$\begin{aligned} & \textit{Backward looking benchmark} \\ & = 60\% + \left(\frac{0.95}{3}\right)(b_{t-1} - 60\%) + \left(\frac{(0.95)^2}{3}\right)(b_{t-2} - 60\%) \\ & + \left(\frac{(0.95)^3}{3}\right)(b_{t-3} - 60\%) \end{aligned}$$

$$\begin{aligned} & \textit{Forward looking benchmark} \\ & = 60\% + \left(\frac{0.95}{3}\right)(b_{t+1} - 60\%) + \left(\frac{(0.95)^2}{3}\right)(b_t - 60\%) \\ & + \left(\frac{(0.95)^3}{3}\right)(b_{t-1} - 60\%) \end{aligned}$$

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:

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

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.¹⁷⁶

¹⁷⁶ 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.¹⁷⁷ 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.¹⁷⁸

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.¹⁷⁹ 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.)

¹⁷⁷ 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.

¹⁷⁸ See Annex 6 of EC (2013c).

¹⁷⁹ 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.¹⁸⁰ 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.¹⁸¹

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.

¹⁸⁰ 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.

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

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.

¹⁸¹ See IFAC (2013b) for a more detailed discussion of the sensitivity of debt dynamics to growth and interest rate shocks.

ANNEX A: DETAILED MACROECONOMIC FORECASTS

ANNEX TABLE A.1: DETAILED MACROECONOMIC FORECASTS FOR 2014

| % change unless otherwise stated | <i>SPU</i> 2014 | ESRI | CBI | EC | IMF | OECD |
|----------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|
| | Apr 2014 | Apr 2014 | Apr 2014 | May 2014 | Dec 2013 | May 2014 |
| Real GDP | 2.1 | 2.6 | 2.0 | 1.7 | 1.7 | 1.9 |
| Real GNP | 2.7 | 3.5 | 2.7 | NA | 1.3 | NA |
| Consumption | 2.0 | 1.5 | 1.1 | 0.4 | 0.5 | 0.9 |
| Investment | 15.4 | 9.6 | 11.1 | 12.0 | 4.4 | 14.1 |
| Government | -0.9 | -0.5 | -2.1 | -0.7 | -2.8 | -1.8 |
| Exports | 2.1 | 3.7 | 3.0 | 2.8 | 2.5 | 2.8 |
| Imports | 3.2 | 3.6 | 3.1 | 3.1 | 1.4 | 4.0 |
| Current Account (% GDP) | 5.8 | 7.8 | 6.9 | 7.4 | 4.6 | 6.6 |
| Employment | 2.2 | 2.8 | 2.6 | 2.4 | 1.5 | 2.2 |
| Unemployment Rate (%) | 11.5 | 11.4 | 11.3 | 11.4 | 12.3 | 11.4 |
| HICP | 0.5 | 0.4 | 0.5 | 0.6 | 0.9 | 0.3 |
| GDP Deflator | 0.5 | 1.0 | 0.7 | 1.1 | 0.7 | 0.4 |
| Nominal GDP (€ billions) | 168.4 | 170.0 | 168.5 | 168.7 | 169.5 | 167.7 |
| Nominal GDP | 2.6 | 3.7 | 2.7 | 2.8 | 2.5 | 2.3 |

ANNEX TABLE A.2: DETAILED MACROECONOMIC FORECASTS FOR 2015

| % change unless otherwise stated | <i>SPU</i> 2014 | ESRI | CBI | EC | IMF | OECD |
|----------------------------------|--------------------|----------|----------|----------|----------|----------|
| | Apr 2014 | Apr 2014 | Apr 2014 | May 2014 | Dec 2013 | May 2014 |
| Real GDP | 2.7 | 3.5 | 3.2 | 3.0 | 2.5 | 2.2 |
| Real GNP | 2.3 | 3.7 | 2.6 | NA | 2.1 | NA |
| Consumption | 1.6 | 2.0 | 1.3 | 0.8 | 1.0 | 1.0 |
| Investment | 12.4 | 10.4 | 10.2 | 6.5 | 5.4 | 8.0 |
| Government | -1.6 | 0.0 | -1.5 | -0.1 | -2.5 | -1.5 |
| Exports | 3.2 | 4.0 | 5.0 | 3.7 | 3.7 | 3.1 |
| Imports | 3.4 | 3.9 | 4.5 | 2.6 | 2.7 | 2.9 |
| Current Account (% GDP) | 5.2 | 8.4 | 7.0 | 8.9 | 4.7 | 7.6 |
| Employment | 2.0 | 2.7 | 2.2 | 2.3 | 1.2 | 1.7 |
| Unemployment Rate (%) | 10.5 | 10.1 | 10.4 | 10.2 | 11.7 | 10.4 |
| HICP | 0.9 | 1.2 | 1.0 | 1.1 | 1.1 | 0.7 |
| GDP Deflator | 0.9 | 1.0 | 1.2 | 0.9 | 1.0 | 0.9 |
| Nominal GDP (€ billions) | 174.5 | 178.0 | 176.0 | 175.3 | 175.4 | 172.9 |
| Nominal GDP | 3.6 | 3.7 | 4.4 | 3.9 | 3.5 | 3.1 |

ANNEX TABLE A.3: MEDIUM-TERM MACROECONOMIC FORECASTS ACROSS FORECASTING AGENCIES, 2013-18

| % change unless otherwise stated | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------------------|------|------|------|------|------|------|
| SPU 2014: Apr 2014 | | | | | | |
| GDP | -0.3 | 2.1 | 2.7 | 3.0 | 3.5 | 3.5 |
| GNP | 3.4 | 2.7 | 2.3 | 2.5 | 2.7 | 2.7 |
| Employment | 2.4 | 2.2 | 2.0 | 2.0 | 1.9 | 1.9 |
| Unemployment Rate | 13.0 | 11.5 | 10.5 | 9.7 | 8.9 | 8.0 |
| ESRI (MTR: Jul 2013) | | | | | | |
| <i>(a) Recovery Scenario</i> | | | | | | |
| GDP | 1.7 | 3.0 | 4.0 | 4.1 | 4.2 | 3.7 |
| GNP | 1.2 | 0.5 | 4.3 | 3.6 | 4.0 | 3.4 |
| Employment | 0.5 | 0.9 | 2.3 | 2.9 | 1.9 | 2.2 |
| Unemployment Rate | 14.0 | 13.4 | 11.8 | 10.6 | 9.5 | 8.2 |
| <i>(b) Delayed Adjustment Scenario</i> | | | | | | |
| GDP | 1.8 | 1.9 | 2.7 | 1.9 | 2.7 | 3.0 |
| GNP | 1.3 | -0.9 | 3.0 | 1.1 | 2.8 | 3.1 |
| Employment | 0.6 | 0.3 | 1.2 | 0.4 | 0.4 | 1.3 |
| Unemployment Rate | 13.9 | 13.8 | 12.9 | 13.5 | 13.1 | 11.9 |
| <i>(c) Stagnation Scenario</i> | | | | | | |
| GDP | 1.7 | 3.5 | 1.3 | 1.1 | 2.0 | 0.8 |
| GNP | 1.2 | 0.0 | 1.9 | 0.6 | 2.1 | 0.4 |
| Employment | 0.4 | 1.2 | 0.8 | -0.3 | 0.9 | 0.2 |
| Unemployment Rate | 14.1 | 13.1 | 12.5 | 13.4 | 12.8 | 12.5 |
| OECD (May 2014) | | | | | | |
| GDP | -0.3 | 1.9 | 2.2 | 3.3 | 3.3 | 3.0 |
| GNP | - | - | - | - | - | - |
| Employment | - | - | - | - | - | - |
| Unemployment Rate | 13.0 | 11.4 | 10.4 | - | - | - |
| IMF (12th Review: Dec 2013) | | | | | | |
| GDP | 0.3 | 1.7 | 2.5 | 2.5 | 2.5 | 2.5 |
| GNP | 0.2 | 1.3 | 2.1 | 2.1 | 2.1 | 2.2 |
| Employment | 1.6 | 1.5 | 1.2 | 1.2 | 1.7 | 1.7 |
| Unemployment Rate | 13.3 | 12.3 | 11.7 | 11.3 | 10.9 | 10.4 |

ANNEX TABLE A.4: POTENTIAL OUTPUT GROWTH FORECASTS TO 2018

| % | 2014 | 2015 | 2016 | 2017 | 2018 |
|-------------------------|------|------|------|------|------|
| <i>SPU 2014</i> | 1.5 | 2.2 | 2.9 | 3.3 | 3.5 |
| <i>OECD (May 2014)</i> | 0.8 | 1.0 | 0.9 | 1.4 | 1.8 |
| <i>EC (Spring 2014)</i> | 1.3 | 2.0 | 1.4 | 1.3 | 1.3 |

Sources: *SPU 2014*; ESRI (*Medium-Term Review 2013*); OECD (*Economic Outlook, May 2014*).

Note: The IMF do not publish forecasts of potential output growth.

Potential Output growth forecasts are shown above for three institutions. The main difference between the EC and the *SPU 2014* forecasts is on the labour side. The latter show a labour contribution of 1.7pp in 2018, while the EC show 0.1pp. This arises mainly from a higher NAWRU (10.5 per cent versus 7.7 per cent), but also from the EC showing a small contraction in the working age population (*SPU 2014* shows positive growth). Capital and TFP contributions are also weaker in the EC forecasts, primarily as a result of the extension methods used (see Annex C).

ANNEX B: TIMELINE FOR THE ENDORSEMENT OF *SPU 2014* PROJECTIONS

| Date | |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11 March | The Secretariat met with Department of Finance officials to discuss technical assumptions underpinning the forecasts for <i>SPU 2014</i> . ¹⁸² |
| 13 March | The CSO released preliminary national accounts estimates for 2013. |
| 21 March | The Department of Finance informed IFAC of changes to the EC methodology for estimating potential output. This mainly related to changes in the estimation of the NAWRU. |
| 25 March | The Council received preliminary forecasts from the Department in line with MoU requirements. These were not considered until benchmark projections were finalised. |
| 26 March | Benchmark projections were discussed by the Council and finalised by the Secretariat. |
| 27 March | The first endorsement meeting took place with the Department of Finance presenting their forecasts to the Secretariat. A number of clarifications of a factual nature were requested. |
| 31 March | The Secretariat submitted a number of queries to the Department in relation to the forecast set. ¹⁸³ |
| 31 March/1 April | The Department provided more details to IFAC in response to the queries received. |
| 2 April | The Council received a second set of preliminary forecasts from the Department. Changes to several components were included and the forecast level of nominal GDP was lower over the period to 2018 in the newer forecast set. |
| 3 April | The Council met to discuss the Department of Finance forecasts. Following this, Department of Finance staff met with the full Council and Secretariat to present their latest forecasts and to answer substantive questions. The Council sought additional information regarding a number of forecast components. ¹⁸⁴ |
| | Following the meeting, the Council met to discuss the forecasts. A number of additional clarifications were subsequently requested. ¹⁸⁵ |
| 4 April | The Department submitted a preliminary set of final forecasts to the Council. These differed slightly from the previous set, with changes primarily relating to the level of nominal GDP – these were lower over the forecast horizon compared to the initial forecast round. In response to the Council's request for clarification, the Department also provided further information on their forecasts for stock building and trade flows. Following the receipt of the final forecasts and the accompanying information, the Council decided to endorse the forecasts. |

¹⁸² These included assumptions related to oil prices, interest rates, exchange rates and sources of forecasts for major trading partners. Prior to this meeting, the Secretariat met with Department of Finance officials in February to discuss possible timings in relation to the endorsement of *SPU 2014*.

¹⁸³ Mainly covering deflators, investment, imports/exports, labour income, stock building and total factor productivity.

¹⁸⁴ Primarily concerning the balance of growth contributions, deflator assumptions, the potential growth rate and the output gap.

¹⁸⁵ Principally relating to deflators (specifically exports prices), stocks, and the quarterly profiles assumed for trade aggregates.

| | |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7 April | The Chair of the Council wrote a letter to the Secretary General of the Department of Finance endorsing the set of macroeconomic forecasts underlying <i>SPU 2014</i> . |
| 15 April | The endorsement letter and draft <i>SPU 2014</i> were published. |
| 16 April | A letter from the Secretary General of the Department of Finance was sent to the Chair of the Council noting the endorsement. |
| 30 April | The final <i>SPU</i> was formally submitted to the European Commission. |

ANNEX C: BUDGETARY FORECASTS OF OTHER AGENCIES

ANNEX TABLE C1: FISCAL OUTLOOK TO 2018

| % of GDP | SPU 2014 | IMF Dec 2013 | ESRI Apr 2014 | EC May 2014 | OECD May 2014 |
|----------------------------|-------------|-----------------|------------------|----------------|------------------|
| 2014 | | | | | |
| General Government Balance | -4.8 | -5.1 | -4.5 | -4.8 | -4.7 |
| Primary Balance | -0.1 | -0.3 | NA | -0.1 | NA |
| Structural Balance | -4.7 | -4.2 | NA | -4.5 | -1.4 |
| General Government Debt | 121.4 | 121.7 | 120.5 | 121.0 | NA |
| Nominal GDP, % y/y | 2.6 | 2.5 | 3.7 | 2.8 | 2.3 |
| 2015 | | | | | |
| General Government Balance | -2.9 | -2.9 | -2.8 | -4.2 | -3.1 |
| Primary Balance | 1.8 | 2.0 | NA | +0.6 | NA |
| Structural Balance | -2.8 | -2.3 | NA | -4.2 | -0.3 |
| General Government Debt | 120.0 | 121.9 | 116.1 | 120.4 | NA |
| Nominal GDP, % y/y | 3.6 | 3.5 | 3.7 | 3.9 | 3.1 |
| 2016 | | | | | |
| General Government Balance | -2.2 | -2.4 | NA | NA | NA |
| Primary Balance | 2.6 | 2.7 | NA | NA | NA |
| Structural Balance | -2.1 | -2.3 | NA | NA | NA |
| General Government Debt | 115.9 | 118.8 | NA | NA | NA |
| Nominal GDP, % y/y | 4.3 | 3.6 | NA | NA | NA |
| 2017 | | | | | |
| General Government Balance | -1.2 | -1.8 | NA | NA | NA |
| Primary Balance | 3.7 | 3.2 | NA | NA | NA |
| Structural Balance | -1.2 | -2.0 | NA | NA | NA |
| General Government Debt | 112.0 | 115.8 | NA | NA | NA |
| Nominal GDP, % y/y | 4.7 | 4.1 | NA | NA | NA |
| 2018 | | | | | |
| General Government Balance | 0.0 | -1.2 | NA | NA | NA |
| Primary Balance | 4.8 | 3.7 | NA | NA | NA |
| Structural Balance | 0.0 | -1.7 | NA | NA | NA |
| General Government Debt | 107.2 | 112.2 | NA | NA | NA |
| Nominal GDP, % y/y | 4.7 | 4.2 | NA | NA | NA |

Note: IMF General Government and primary balance figures exclude financial sector support. OECD figures refer to General Government financial balances and gross financial liabilities. European Commission forecast for 2015 is on a no policy change assumption.

GLOSSARY¹⁸⁶

Automatic stabilisers: Features of the tax and spending regime which react automatically to the economic cycle and reduce its fluctuations. As a result, the budget balance in per cent of GDP tends to improve in years of high growth, and deteriorate during economic slowdowns.

Budget balance: The balance between total public expenditure and revenue in a specific year, with a positive balance indicating a surplus and a negative balance indicating a deficit. For the monitoring of Member State budgetary positions, the EU uses general government aggregates.

Cyclical component of budget balance: That part of the change in the budget balance that follows automatically from the cyclical conditions of the economy, due to the reaction of public revenue and expenditure to changes in the output gap.

Discretionary fiscal policy: Change in the budget balance and in its components under the control of government. It is usually measured as the residual of the change in the balance after the exclusion of the budgetary impact of automatic stabilisers.

Excessive Deficit Procedure (EDP): A procedure according to which the Commission and the Council monitor the development of national budget balances and public debt in order to assess and/or correct the risk of an excessive deficit in each Member State.

Expenditure rules: A subset of fiscal rules that target (a subset of) public expenditure.

Fiscal consolidation: An improvement in the budget balance through measures of discretionary fiscal policy, either specified by the amount of the improvement or the period over which the improvement continues.

General Government: As used by the EU in its process of budgetary surveillance under the *Stability and Growth Pact* and the excessive deficit procedure, the general government sector covers national government, regional and local government, as well as social security funds. Public enterprises are excluded, as are transfers to and from the EU Budget.

¹⁸⁶ These definitions are taken directly from the European Commission. See European Economy, Occasional Papers 151, May 2013, *Vade Mecum on the Stability and Growth Pact*.

Maastricht reference values for public debt and deficits: Respectively, a 60 per cent General Government debt-to-GDP ratio and a 3 per cent General Government deficit-to-GDP ratio. These thresholds are defined in a protocol to the Maastricht Treaty on European Union.

Medium-term budgetary framework: An institutional fiscal device that lets policy-makers extend the horizon for fiscal policy making beyond the annual budgetary calendar (typically 3-5 years). Targets can be adjusted under medium-term budgetary frameworks (MTBF) either on an annual basis (flexible frameworks) or only at the end of the MTBF horizon (fixed frameworks).

Medium-term budgetary objective (MTO): According to the reformed *Stability and Growth Pact*, stability programmes and convergence programmes present a medium-term objective for the budgetary position. It is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risks to the sustainability of public finances, and is defined in structural terms.

Minimum benchmarks: The lowest value of the structural budget balance that provides a safety margin against the risk of breaching the Maastricht reference value for the deficit during normal cyclical fluctuations. The minimum benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks. They are a lower bound for the medium-term budgetary objectives (MTO).

One-off and temporary measures: Government transactions having a transitory budgetary effect that does not lead to a sustained change in the budgetary position.

Output gap: The difference between actual output and estimated potential output at any particular point in time.

Potential GDP: The level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate.

Primary budget balance: The budget balance net of interest payments on general government debt.

Primary structural budget balance: The structural budget balance net of interest payments.

Pro-cyclical fiscal policy: A fiscal stance which amplifies the economic cycle by increasing the structural primary deficit during an economic upturn, or by decreasing it in a downturn. A neutral fiscal policy keeps the cyclically-adjusted budget balance unchanged over the economic cycle but lets the automatic stabilisers work.

Public debt: Consolidated gross debt for the general government sector. It includes the total nominal value of all debt owed by public institutions in the Member State, except that part of the debt which is owed to other public institutions in the same Member State.

Sovereign bond spread: The difference between risk premiums imposed by financial markets on sovereign bonds for different states. Higher risk premiums can largely stem from (i) the debt service ratio, also reflecting the countries' ability to raise their taxes for a given level of GDP, (ii) the fiscal track record, (iii) expected future deficits, and (iv) the degree of risk aversion.

Stability and Growth Pact (SGP): Approved in 1997 and reformed in 2005 and 2011, the *SGP* clarifies the provisions of the Maastricht Treaty regarding the surveillance of Member State budgetary policies and the monitoring of budget deficits during the third phase of EMU. The *SGP* consists of two Council Regulations setting out legally binding provisions to be followed by the European Institutions and the Member States and two Resolutions of the European Council in Amsterdam (June 1997).

Stability programmes: Medium-term budgetary strategies presented by those Member States that have already adopted the euro. They are updated annually, according to the provisions of the *Stability and Growth Pact*.

Stock-flow adjustment: The stock-flow adjustment (also known as the debt-deficit adjustment) ensures consistency between the net borrowing (flow) and the variation in the stock of gross debt. It includes the accumulation of financial assets, changes in the value of debt denominated in foreign currency, and remaining statistical adjustments.

Structural budget balance: The actual budget balance net of the cyclical component and one-off and other temporary measures. The structural balance gives a measure of the underlying trend in the budget balance.

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