1. Assessment of the Fiscal Stance

Key Messages

- A strong, cyclical rebound looks set to continue in the economy in the near term. Looking ahead, overheating could occur if, for example, a sharp supply response to pent-up demand in the housing market were to lead to very strong construction-led growth. However, risks to trend growth could arise if a hard Brexit were to occur with a greater negative impact than currently envisaged.

- Strong growth in the near term would suggest that a further stimulus from fiscal policy is unwarranted. Ireland has few demand management tools available, and the domestic economy looks to be rapidly closing on its potential output. Fiscal policy in the coming years may have to play an important role in leaning against the wind should the domestic economy begin to overheat. The proposed Rainy Day Fund is one tool that could react to changing circumstances. To support countercyclical fiscal policy, the Department should fully develop and communicate its views on the cyclical position of the economy.

- Since a deficit of less than 3 per cent of GDP was achieved in 2015, within-year increases in expenditure and limited compliance with the fiscal rules have meant that improvements in the primary deficit excluding one-off items have slowed. Though breaches of the rules have not been sufficient to trigger potential sanctions thus far, a policy of minimal compliance, or tolerating small breaches of the rules, carries risks. Though individually small, in-year increases like those in 2015 and 2016 are cumulative and long-lasting. If repeated, they can leave the public finances more exposed to future shocks.

- For 2017 and 2018, it would be appropriate not to spend unexpected revenue gains, and to maintain a steady pace of deficit and debt reduction. This would be consistent with full compliance with the fiscal rules, and would allow spending to increase at a relatively modest pace. Medium-term fiscal policy should be cautious, given the need to reduce debt to safer levels in a phased manner, while steering through risks. These include a hard Brexit and potential volatility in Corporation Tax receipts driven by external developments and the concentration of receipts among a small number of firms. Government net debt levels are forecast to fall steadily from a high level of €175 billion (2.4 times total revenue). Recent distortions in the measurement of GDP mean that the 45 per cent debt-to-GDP target gives a misleading view of the debt burden being targeted for the mid-2020s. If more appropriately measured for Ireland by accounting for methodological changes and using a hybrid measure of fiscal capacity, this ratio would be equivalent to 65 per cent.

1.1 Introduction

The Fiscal Council has a mandate under the *Fiscal Responsibility Act (FRA) 2012*, and with reference to the requirements of the *Stability and Growth Pact (SGP),* to assess the Government's fiscal policy stance. The sections below draw upon the analysis provided in later chapters, in assessing the fiscal stance outlined in *SPU 2017*. The Council's assessment is informed by the extent of compliance with the fiscal rules, along with a complementary economic assessment that takes into account the state of the public finances, the stage of the economic cycle, and the growth prospects for the economy. Section 1.2 reviews the current cyclical position of the economy and the backdrop for recent developments in the public finances. Section 1.3 reviews the fiscal stance relevant to 2017 and 2018*,* while Section 1.4 discusses issues relating to the medium-term fiscal stance.

1.2 The Recent Macroeconomic and Fiscal Context

1.2.1 Recent Macroeconomic Context

Demand-side Developments

Assessing recent developments in the Irish economy with a high level of precision has proven challenging, given a variety of distortions related to the activities of foreign-owned multinational enterprises in Ireland. To develop a greater insight into Irish economic activity, the Central Statistics Office (CSO) will produce alternative indicators such as Gross National Income* (GNI*), which adjust for these distortionary activities on an ongoing basis from June 2017 (Chapter 2, Box D).

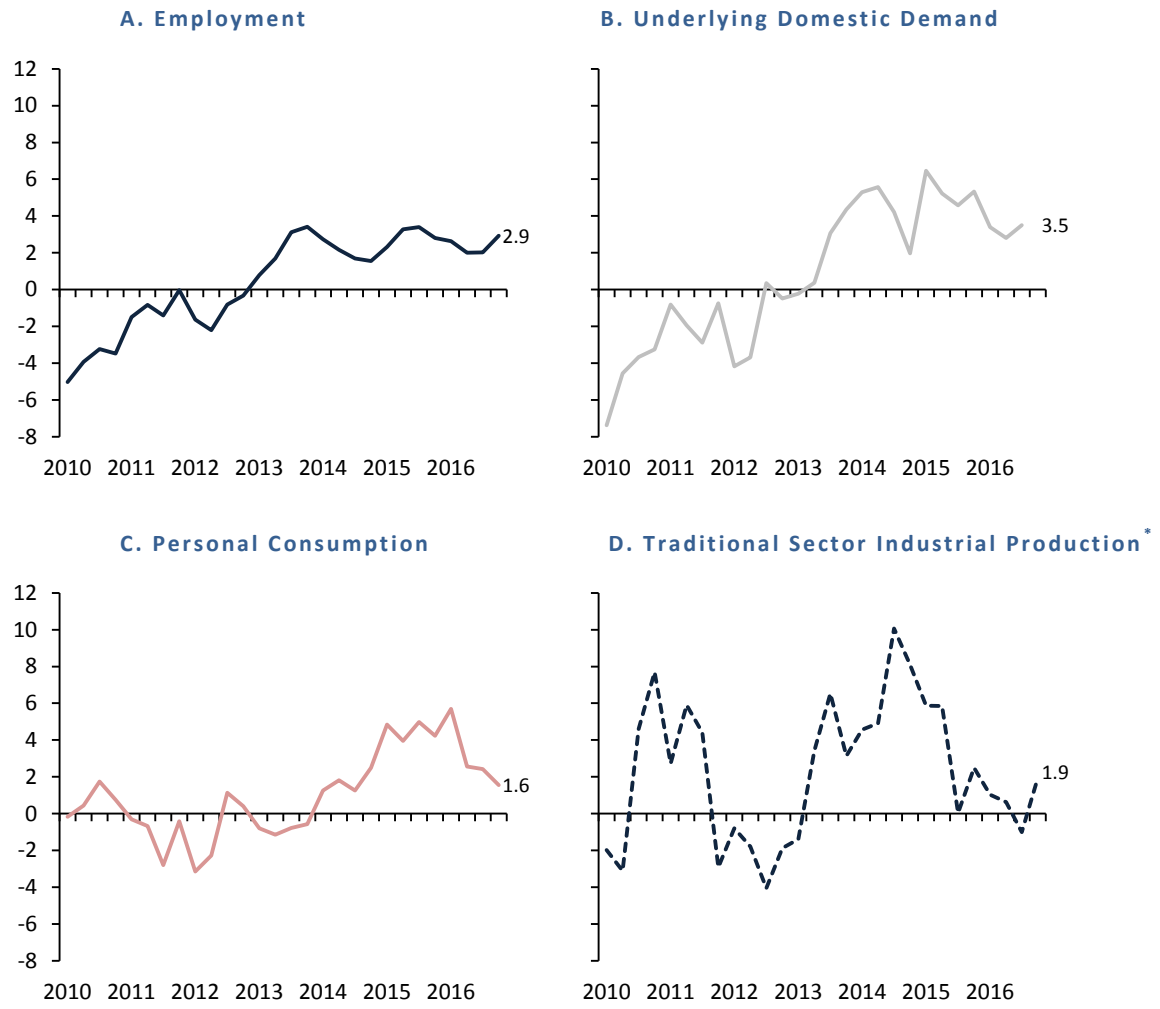
Another way to overcome the distortions driven by foreign-owned multinational enterprises is to examine a range of alternative measures which provide some signal as to trends in the domestic economy. The focus on domestic economy activity is warranted, given that it is typically more tax-rich and, hence, of greater significance for the setting of appropriate fiscal policy.

A range of alternative measures of economic activity show that the Irish economy has grown at an exceptional pace in recent years. Figure 1.1 shows year-on-year growth in employment, underlying domestic demand, consumer spending, and estimates of traditional sector industrial production excluding the other foods sector.[1] For all of these measures, a rapid recovery is evident from at least 2014. Preliminary information suggest that growth in 2016 appears to have also been strong, albeit with growth in consumer spending, traditional sector industrial production (excluding other foods), and underlying domestic demand moderating during the year. The timing of the softening in the industrial production and consumer spending measures appears to have coincided with the impact of the UK referendum decision to leave the EU. The UK's importance as an export

[1] The other foods sector is understood to be quite volatile given the influence of foreign-owned multinational enterprises that operate in the sector.

destination means that exchange rate developments are likely to have weighed on domestic industry, while uncertainty may have played a role in dampening consumer spending.

Figure 1.1: Indicators of Economic Activity
Volumes, Percentage Change, Year-on-Year



Sources: CSO; and internal Irish Fiscal Advisory Council (IFAC) calculations.
Note: Underlying Domestic Demand strips out intangibles and aircraft investment in full as these are, in the main, imported, with little impact on real GDP.
*Traditional Sector industrial production is adjusted to strip out estimated contributions of the "other foods" subsector is strongly influenced by foreign-owned multinational enterprises.

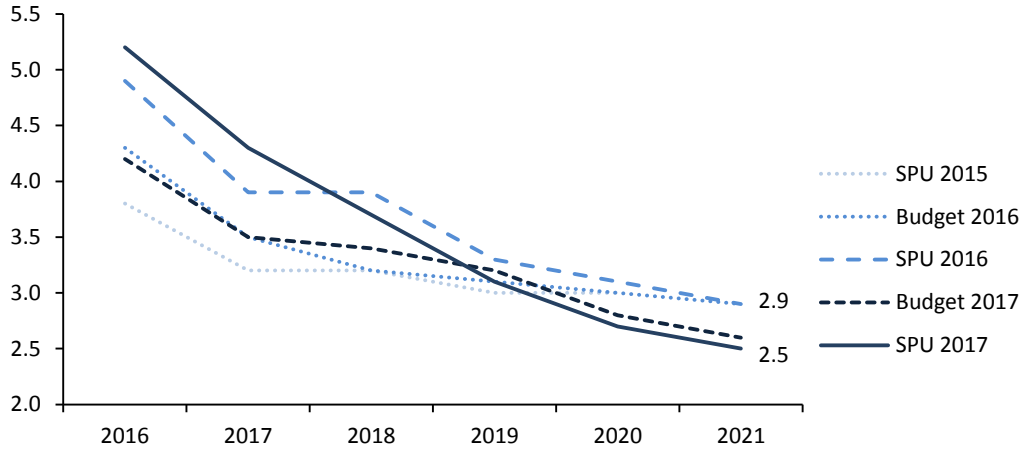
Notwithstanding the need for balance sheet repair and the impact of the UK referendum decision, the strength of recent dynamics would appear to be consistent with the "bounce-back" model of a recovering economy. This model would see a sharp, post-crisis rebound in growth that would

eventually give way to an expansion phase marked by more moderate growth rates. [2] If applicable to Ireland's recovery over recent years, the rapid growth observed in recent domestic economy trends might be unlikely to be sustained, and one would anticipate that the economy would eventually return to trend growth rates. Moreover, it would suggest that much of the recent improvement in revenues and falling cyclical expenditures would therefore be related to a cyclical upswing, as the economy rebounds from the recent crisis.

The view that growth will moderate in coming years, and revert to trend growth rates, is also consistent with the demand-side forecasts produced by the Department of Finance (hereafter referred to as "the Department") in *SPU 2017*. The Department is anticipating a substantial slowing of recent growth to below 3 per cent annual average real GDP growth from 2019 onwards. This is partly informed by an anticipated reversion to trend growth rates. However, the assumed moderation is now expected to be steeper than previously thought, given the strength of recently realised growth outturns, and the expectation that the UK exit from the EU will negatively impact medium-term real GDP growth prospects (Figure 1.2).

Figure 1.2: Recent Forecasts for the Medium-term Show a Steeper Decline in Growth

Real GDP, % change (year-on-year)



Sources: Department of Finance (various publications).

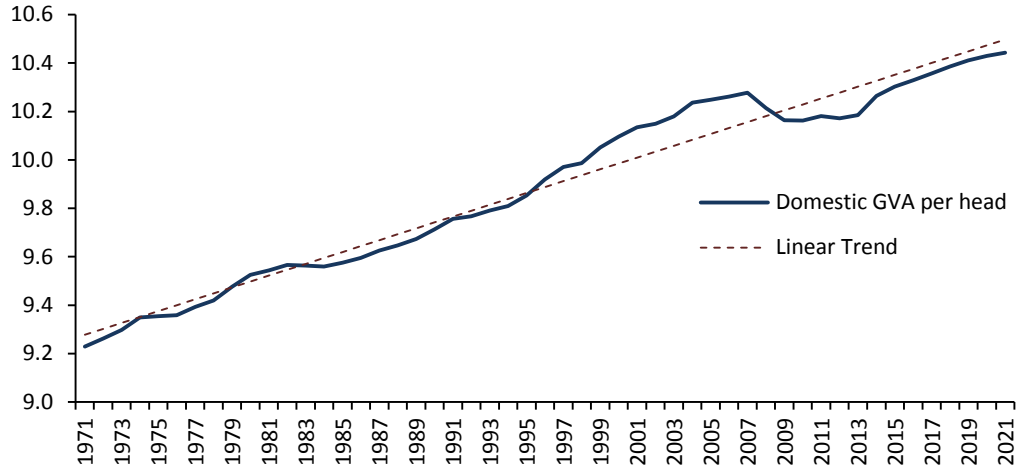
This steepening of the trajectory for future growth rates, if realised, could entail a permanent shock to Ireland's level of output relative to long-run trends to date. Taking Domestic Gross Value Added (GVA) per head (i.e., the output of sectors other than those that are dominated by foreign-owned multinational enterprises), one can examine developments relative to a simple linear trend over

[2] An example of a model with discrete economic phases is provided in Sichel's (1994) three-regime model, which allows for distinct expansion, recession, and recovery phases. Kim *et al.* (2005) extend the analysis, arguing that relating the strength of the recovery to the preceding recession mirrors actual business cycle features better than standard models. Applying the model to international data, they find the bounce-back effect to be typically smaller outside of the US, corresponding to larger permanent effects of recessions. Additional support is provided in Galvão (2002); Beaudry and Koop (1993); Friedman (1964; 1993); and Wynne and Balke (1992; 1996).

time. The results are a simple illustration of the recent experience. Figure 1.3 shows the above trend activity observed during the 2000s, which reversed sharply as the property/credit bubble collapsed after 2008. The domestic economy has recovered from 2014 onwards, and is ahead of pre-crisis levels, though it has not converged on its linear trend shown below. It also appears to indicate that the economy may adjust to a slower pace of trend growth compared to previous decades.

Figure 1.3: Irish Domestic GVA per Head against Trend

Domestic GVA per Head (Constant Prices) in Log-Levels, Linear Trend



Sources: CSO; Department of Finance (*SPU 2017* forecasts); and internal IFAC calculations.
Note: Domestic GVA data are available from the CSO for the period 1995-2015. Earlier and forecast years are estimated by exploiting the relationship between growth in underlying domestic demand (including *SPU 2017* forecasts) and domestic GVA. While underlying domestic demand data are not available prior to 1998 due to the lack of data on intangibles and aircraft investment, which are thought to be small and so are not corrected for in the earlier period. The linear trend is estimated by regressing domestic GVA per head (in logs) against a constant and a time trend. This trend implies per capita growth of 2½ per cent per annum.

The central scenario for growth in coming years is one of seemingly strong growth that moderates sharply to weaker-than-previously-expected trend growth rates, but there are also a number of risks surrounding this central scenario.

Risks to Growth

For the near term, annual GDP growth may be stronger than the Department currently expects, due to (i) the substantial carryover into 2017 from 2016; and (ii) the possibility of a stronger-than-expected cyclical recovery in coming years, particularly stemming from the residential property sector.

As noted in Chapter 2, if the latest national accounts data were taken at face value, and the economy were to stand still in 2017, growth would still be 4 per cent for the year. This reflects the pace of quarter-on-quarter growth recorded in late 2016. Taken at face value, the Department's 2017 forecasts imply close to no quarter-on-quarter growth this year. This feature of the forecasts

could be explained by assumed revisions to last year's profile of quarterly growth. Though the quarterly national accounts data are subject to large revisions, the direction of such revisions is not found to be biased in any one direction over time (Casey and Smyth, 2016). In light of this, one might reasonably assume that annual growth for 2017 could be faster than indicated by the Department's central scenario.

Near-term risks of a stronger cyclical upswing are particularly evident in relation to residential construction activity. There is reason to suggest that significant pent-up demand in the residential property sector may have emerged in recent years (Box C, Chapter 2). A potential supply response could see employment and output in the sector increase rapidly, as in the 2000s, such that output in the sector temporarily exceeds annual demand in order to address any backlog.[3] How the housing sector might then return to more normal levels of activity, thereafter, would have a significant bearing on the cyclical position of the economy.

In the medium term, more persistent downside risks are visible. Principal among these is the possibility that the outcome of negotiations on the UK's departure from the EU could lead to a more sustained negative impact on Irish economic growth than is currently estimated. Additional risks are posed by the appropriateness of wider Euro Area monetary policy for Ireland over the medium term, as well as by a variety of potential external demand and exchange rate shocks. Changes in US and EU policies, particularly in relation to Corporation Tax, could also negatively impact on foreign direct investment (FDI) flows into Ireland.

The *SPU 2017* forecasts assume a hard Brexit as the most likely outcome of negotiations – an outcome wherein a World Trade Organisation-based tariff regime is adopted by the UK from the end of the first quarter of 2019. While a hard Brexit would previously have been considered an extremely adverse scenario, recent developments suggest that this is the most likely outcome of negotiations. The expected impact of a hard Brexit may be understated in COSMO simulations (Bergin *et al.,* 2016), which inform the Department's views on the medium-term impact on the Irish economy. The COSMO estimates assume that the impact on the Irish labour market from a shock to UK output is equivalent to a shock to an average trading partner. However, it is likely that UK-destined exports attract a much higher labour intensity than exports destined for markets further afield. Of course, by assuming a hard Brexit as the central scenario, there would be some upside risk to medium-term growth forecasts in *SPU 2017*, should negotiations result in a less severe outcome for Irish trade activity.

[3] Demand is typically determined by expected changes in demographics, new household formation and headship rates (i.e., the proportion within each age group identified as capturing heads of households).

Uncertainties surrounding future growth are relatively large for the Irish economy in normal circumstances, but the range of possible outcomes to Brexit negotiations casts further doubt on the trend growth rates to which the economy may revert in future years.

As discussed in IFAC (2016b), there are a number of possible channels through which UK potential output growth could be lowered as a result of Brexit. The degree of openness of an economy to trade, capital and labour market flows is an important determinant of a country's long-run potential growth rate. Reduced openness post-Brexit could limit opportunities in the UK to increase productivity through the adoption of new processes either encouraged by FDI or by trade and competition with foreign competitors. A reduction in the size of the market available to UK firms could also hinder firms' ability to exploit areas of comparative advantage, lowering aggregate productivity. Furthermore, potential growth could be reduced through the labour supply channel. The size of the labour force is influenced by migration flows, the outlook for which appears more constrained following Brexit.

Lower potential output growth in the UK would bode poorly for the Irish economy if other export markets failed to pick up resulting demand shortfalls. Reduced Irish trade activity could, in turn, hamper long-run potential growth in Ireland. Brexit is expected to weaken trend growth in the UK – a major export market for the domestic Irish economy. A failure to offset this by diversifying into other markets could weaken Irish productivity growth through the same channels described above.[4]

Irish exporters face significant challenges in diversifying to other export markets, and there is a possibility that increased FDI inflows may not offset other productivity losses. Using gravity model approaches applied to Irish data, Lawless (2010) identifies that strong negative effects on exports are evident for geographical distance to markets, while a commonly shared language and well-developed communications infrastructures are factors found to be supportive of exports. Barrett *et al.* (2015) observe that Ireland may attract additional FDI projects including some relocation of FDI from the UK. However, based on patterns of the location choice of new FDI projects in Europe over the past ten years, the Economic and Social Research Institute (ESRI) research finds that the expected additional attractiveness of Ireland to new FDI projects is likely to be small.

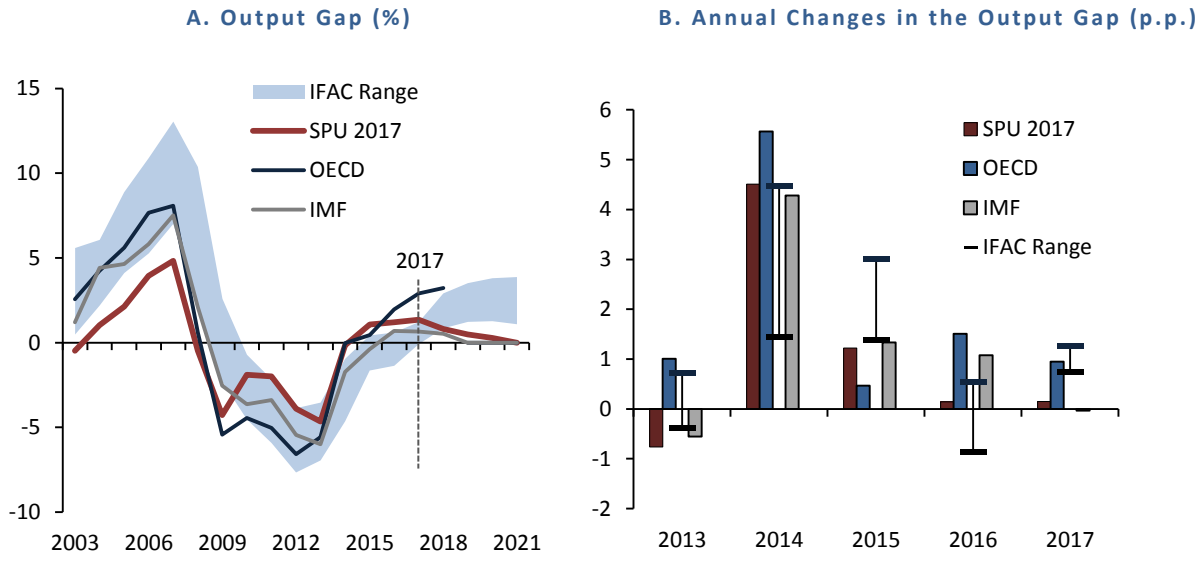
[4] It is worth noting again in this context that, while a "hard Brexit" is now the central scenario in the *SPU 2017* forecasts, there remain substantial uncertainties involved in determining the likely outcome and impact.

Developments in Trend Growth and Cyclical Activity

To understand what might be considered a sustainable level of output and pace of growth for the economy, the Council uses a variety of approaches. As well as producing estimates of potential output growth based on conventional production function and uni/multi-variate filter approaches, the Council uses a modular approach to assess cyclical developments in the economy. This involves assessing key sources of imbalances that can help explain the deviation of the economy from its level of potential output (Chapter 2).[5]

Figure 1.4 shows a range of measures of the output gap and changes in this from year to year. A consistent finding is that a large negative output gap is likely to have opened up from 2008, as economic output fell well below what could be sustainably be produced (i.e., if all resources in the economy – human and capital – were fully utilised, and if productivity grew at its trend pace). Since 2013, however, estimates have shown a conflicting picture. Some estimates, including those produced by the Department of Finance using the EU Commonly Agreed Methodology (CAM) and the OECD, suggest that the economy swiftly rebounded and exceeded sustainable output levels as early as 2015. International Monetary Fund (IMF) estimates – though more plausible – also suggest that the output gap closed as early as last year. This is unlikely to be the case, given the absence of other clear signs of imbalances/overheating.

Figure 1.4: Indicators of Cyclical Activity
% of Potential Output



Sources: Department of Finance, *SPU 2017;* IMF *World Economic Outlook* (April 2016)*;* OECD *Economic Outlook* (Nov 2016); and internal IFAC calculations.
Note: The IFAC range is produced using the maxima and minima of results from a variety of approaches. These are outlined in Box A of the November 2015 Fiscal Assessment Report and Box B of the June 2015 Fiscal Assessment

[5] Estimates of the output gap are subject to a high degree of uncertainty, as they require knowledge of the economy's potential growth rate, which is unobservable and must be estimated. The openness of the Irish labour market and the importance of migration mean that estimates of the output gap for Ireland are subject to particular uncertainty.

Report. Given the distortions to standard measures like GDP and GNP, the range currently focuses on measures produced by using measures of domestic economic activity.

Official output gap estimates in *SPU 2017* based on the CAM, with a positive output gap of close to 1.4 per cent for 2017, appear to overstate the size of any output gap. The *SPU 2017* estimates are also inconsistent with other indicators of imbalances in the economy such as the current account and labour market (Chapter 2). Estimates from the IMF and the Council's own estimates attempt to strip out the activities of multinational enterprises, and focus on domestic economic activity. The Council's estimates suggest that the output gap is likely to be near closed in 2017. If still negative – as other indicators of imbalances such as credit, labour market indicators and housing might suggest – then the output gap is still likely to close quickly, given the pace of growth envisaged in *SPU 2017*. On the face of it, the model estimates point to some risk that overheating could occur in the medium term, given the pace of growth currently projected.

SPU 2017 estimates for the path of the output gap in later years also seem at odds with other indicators. The *SPU 2017* estimates show that an initially positive output gap will gradually close by 2021 (i.e., such that the economy cools from a position of overheating). The medium-term closure of the output gap produced under the CAM by the Department is achieved by assumption (Chapter 2) and is a common approach among other agencies that produce medium-term forecasts. Looking at a range of imbalance indicators and alternative models of potential output, it seems unlikely that there is substantial overheating in the Irish economy at present.

Overheating could become an issue in future years, if recent strong growth were to continue, however. A more plausible path for the output gap would be that it is closed or slightly negative this year, with potential overheating arising in future years should recent strong demand growth persist. The risk of overheating occurring in coming years is significant as noted in Box C, Chapter 2. This is particularly so if a sharp supply response to possible pent-up demand in the housing market were to contribute to unsustainable construction-led growth.

Despite being the official methodology for fiscal surveillance by the European Commission, the CAM has many problems when it comes to estimating the cyclical position of the Irish economy (Chapter 2). A reliance on the CAM for medium-term forecasting has been an area of concern in the Council's previous endorsement exercises when assessing the Department's forecasting methodology. The Department has, to date, based its official estimates of the cyclical position of the economy on the CAM, because this is required for fiscal surveillance. However, the Department and the Council believe that the estimates produced do not accurately represent the cyclical position of the economy. One feature of the CAM that may prove especially unrealistic for future

years is the mechanical closure of the output gap over the medium-term such that CAM estimates, by construction, do not show an output gap that is opening up (i.e., overheating by the end of a medium-term forecast horizon), even if there are legitimate reasons to believe this could happen.

The Council welcomes the Department's commitment to progress on developing and reporting alternatives to the CAM, as part of their medium-term forecasts in the coming 12 months. While still continuing to produce CAM estimates to meet legal requirements, an alternative set of estimates that develops and communicates the Department's analysis should help to ensure that potential signs of overheating are communicated publicly and acted upon if necessary.[6] The quality of the methodologies used is one factor considered by the Council in the endorsement of macroeconomic forecasts (see Chapter 2). The Council notes that future endorsement of the forecasts will be at risk if progress is not achieved in developing a better basis for the Department's view of medium-term growth and the cyclical position of the economy.

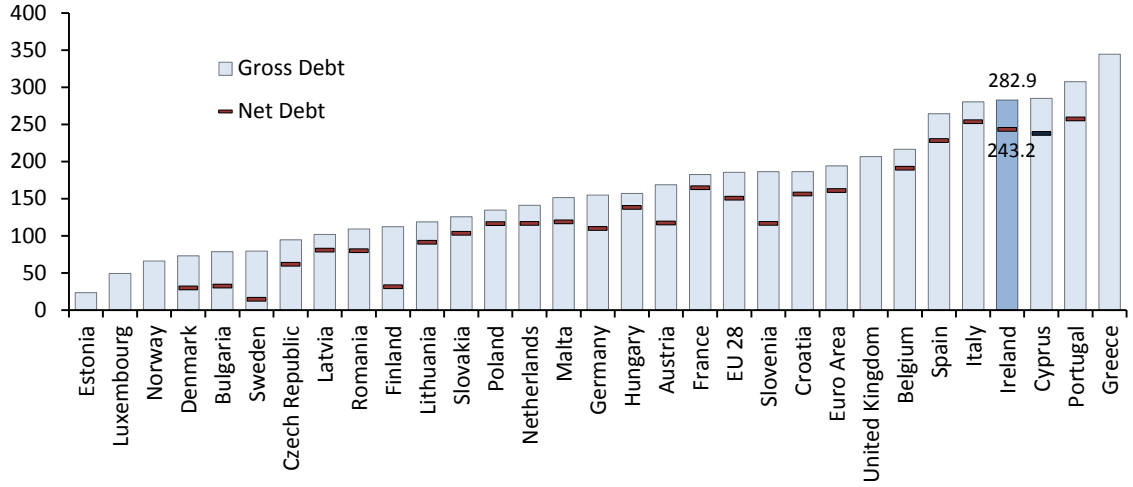
1.2.2 Recent Fiscal Context

Following a remarkable correction in the public finances, Ireland has exited an emergency programme of financial support with the IMF and has seen its government deficit below 3 per cent of GDP since 2015.

However, the crisis has left Government debt levels at still very high levels. Government debt, net of liquid assets, remains at close to €175 billion (2.4 times total revenue), as compared to just €26 billion before the crisis in 2006 (0.4 times total revenue). Debt levels also remain high in comparative terms, with Ireland displaying among the highest government debt levels recorded in Europe, relative to revenues (Figure 1.5).

Figure 1.5: Comparison of Debt-to-Revenue Ratios
Percentage of Total General Government Revenue (Q3 2016)

[6] Box B of the *November 2015 Fiscal Assessment Report* highlighted how other Finance Ministries in Europe routinely present alternative output gaps as opposed to those produced under the CAM for the purposes of fiscal surveillance.



Sources: Eurostat; and internal IFAC calculations.
Note: Net debt from Eurostat Government Finance Statistics calculated as gross consolidated debt less excessive debt procedure (EDP) debt instrument assets (F2: currency and deposits; F3: debt securities; and F4: loan assets). Total General Government revenue = 4 quarter sum.

The distortions to national accounts measures, such as GDP and GNP, arising from the activities of foreign-owned multinational enterprises, have meant that standard debt ratios are no longer meaningful for Ireland. Instead, the relative debt burden may be better understood by using measures of net debt as a share of General Government revenue, given the propensity for GDP and GNP figures to seriously distort the fiscal position. This approach is not unproblematic, as the ratio captures actual revenue (including surges in Corporation Tax receipts), rather than the potential revenue base. However, until a better estimate of the size of the economy is published (such as GNI* - see Box D), the ratios based on government revenue arguably give a more informative picture of the fiscal position.

Box A highlights how the Government's new 45 per cent debt ratio target would, in historical terms, and using a hybrid measure that more appropriately captures fiscal capacity, be broadly equivalent to a 65 per cent debt ratio. The target is to be achieved by the mid-part of the next decade. A specified debt ratio can serve as a useful fiscal target (Portes and Wren Lewis, 2014). However, a target equivalent to a 65 per cent debt ratio is high, compared with pre-crisis levels and international norms. Government debt, net of liquid assets, was equivalent to just 0.4 times total revenue prior to the crisis, as compared to 2.4 times now, while the EU average is currently 1.5 times revenue (and closer to 1.3 when Ireland, Italy, Portugal, Spain, Cyprus and Greece are excluded). A 45 per cent ratio should not be considered a low/prudent debt burden, and needs to be considered alongside a number of other factors, including long-term pension commitments and spending pressures. It should be clarified as to whether the commitment is a fixed target, or a

ceiling, or a steady-state target to be achieved on average over the cycle, and whether it is intended to be maintained permanently.[7]

[7] The *SGP* sets out a limit for the debt ratio of 60 per cent of GDP rather than a target. Also it is not clear if the 45 per cent target is intended to have any impact on policy or whether it is simply a forecast expected to materialise. The fiscal rules, if adhered to fully, would also ensure that debt levels gradually fall to lower levels regardless of the specification of a debt ratio target.

Box A: Standard Debt Ratios and a 45 Per Cent Target

This Box examines recent developments in standard denominators used to understand debt sustainability. It examines recent debt levels in the context of a variety of methodological changes to how GNP and GDP are measured. In this context, the government's new 45 per cent debt ratio target, as set out in *SPU 2017*, is discussed. Correcting for the recent addition of Research and Development (R&D) investment to GDP/GNP, and the 2015 balance sheet reclassification, debt-to-GDP ratios – and, by extension, the 45 per cent target – look lower than would have been case before these revisions, with little or no actual improvement in the fiscal situation.

Evolving Denominators

The standard base used to assess debt sustainability internationally is GDP. This has traditionally been well understood as a poor measure for Ireland given the unusual gap between GDP and GNP arising from a relatively high level of multinational activity and subsequent repatriation of profits. For most countries, there is little difference, but in Ireland GNP has tended to be some 85 per cent of GDP due to the outward flows of profits.

As noted in IFAC (2012b), debt sustainability judgements are coloured by whether it is believed GDP or GNP provides the most appropriate measure of Ireland's fiscal capacity. Recognising the limitations of both measures, the Council at the time developed a "Hybrid" measure that put differential weight on the fiscal capacity of a euro of GNP and a euro of the GDP-GNP excess.[8]

Recent developments, both methodological and economic, have led to substantial changes to how both GDP and GNP are calculated. In 2015, a level shift was observed, as both measures were boosted by a dramatic rise in net exports that resulted from corporate restructuring (Box A, IFAC, 2016b). In 2014, the adoption of new international standards for national accounting saw both measures boosted by the recognition of investment in R&D (Casey, 2014). While the former level shift was more clearly an artificial boost to measured GDP/GNP levels, the inclusion of R&D asset flows was arguably a sensible recognition of previously unrecognised activities that had some value added. However, given that R&D activities do not contribute very strongly to the tax base, and that, in the Irish context, these activities are exceptionally large by international standards, and predominantly conducted by foreign-owned multinationals, there is a good case for disregarding them when assessing debt sustainability. Both innovations have the effect of making debt ratios appear less onerous in the context of the historical understanding of relative debt burdens.

Implications for Debt Burden Assessments

To understand the implications of the recent changes to denominators, Figure A.1 traces through their impact on the 45 per cent target (with 2015 as the base year for comparison). The SPU notes that this target is to reflect "the still-high levels of public debt and the need to build up a safety buffer", and that it is to be achieved "by the mid-part of the next decade". The first bar shows the Government's new 45 per cent debt-to-GDP target as noted in *SPU 2017*.

Using GNP as a denominator rather than GDP, the 45 per cent target would be equivalent to a 57 per cent ratio (using 2015 GNP). Assuming that nominal GNP growth in 2015 was at the Net National Product (NNP) growth rate of 6½ per cent rather than the 24 per cent outturn published, the debt target rises to an equivalent ratio of 66 per cent.

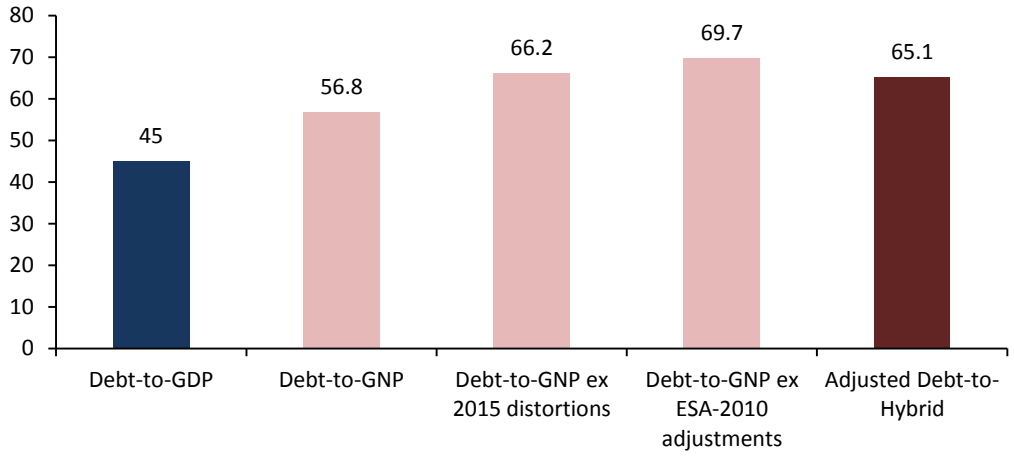
If one was to exclude the European System of National and Regional Accounts (ESA) 2010 innovations such as newly added R&D investment activities, the target would rise to an

[8] IFAC (2012b) notes that taking either of the extremes of GDP or GNP is problematic. GDP is problematic as a measure of fiscal capacity because a euro of the excess of GDP over GNP (which is dominated by multinational profits) is likely to provide less revenue capacity than a euro of GNP. On the other hand, going to the other extreme of using just GNP puts zero weight on the revenue potential of the excess component.

equivalent ratio of 70 per cent. Since GNP places zero weight on the revenue potential of the gap between it and GDP, the Council considers a Hybrid measure as a more appropriate measure of fiscal capacity. One way to construct this is to assume that GNP remained at the relatively stable historical level of 85 per cent of GDP for 2015. On that basis, a Hybrid measure would indicate that the 45 per cent debt ratio target would be equivalent to a government debt target of 65 per cent, when the effect of methodological issues is taken into account and when using a hybrid measure that more appropriately captures fiscal capacity for Ireland.

Figure A.1: Irish Debt Ratios Mask Sustainability Questions

General Government Gross Debt Ratio Target with Different Denominators, 2015 (% Denominator)



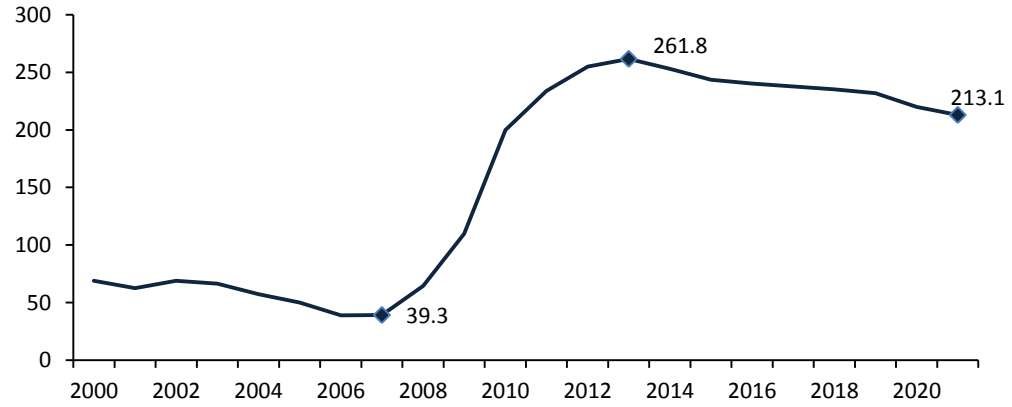
Sources: CSO; and internal IFAC calculations.
Note: Adjustment for 2015 distortions shown is based on the CSO's stated growth in NNP of 6.4 per cent applied to the 2014 nominal GNP level. R&D investment was capitalised as a part of ESA-2010's methodological changes and is excluded along with other smaller ESA-2010 adjustments in the second last bar based on their 2014 impact so as to facilitate historical comparisons. The final bar uses a hybrid measure of output and assumes that GNP is equivalent to 0.85 times GDP (its historical ratio over 1995-2014). The Hybrid 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: Hybrid = GNP + 0.4(GDP – GNP). For more detail, see IFAC (2012b).

With the stock of debt still high by historical and international norms, it is worth considering the flows that will determine developments in this over the coming years, and whether current debt levels can be expected to return to safer levels with a reasonable probability. Figure 1.6 shows the Department's central view of the net debt-to-revenue ratio for the forecast horizon.[9] By 2021, it is envisaged that debt will still be more than twice annual total General Government revenue.

[9] Note that for the purposes of determining the implied path for the net debt ratio, changes in EDP debt instrument assets for forecast years are assumed to be in line with the official projections of changes in cash balances.

Figure 1.6: Evolution of Ireland's Net Debt-to-Revenue Ratio

Net Debt as % of Total Revenue, General Government Basis



Sources: CSO; Department of Finance (*SPU 2017*); and internal IFAC calculations.
Note: Net debt from Eurostat *Government Finance Statistics* calculated as gross consolidated debt less EDP debt instrument assets (F2: currency and deposits; F3: debt securities; and F4: loan assets). Total General Government revenue = 4 quarter sum.

Debt Sustainability

The key factors that will determine developments in the debt-to-GDP ratio in coming years can be elaborated using the standard "debt snowball" equation:

$$\Delta D_t = \left(D_{t-1} * \frac{i_t - g_t}{1 + g_t}\right) - PB_t + SF_t$$

…where the change in the debt ratio for this year 'ΔD_t' is defined as the previous year's debt ratio times the difference in average interest costs (i_t) and nominal GDP growth (g_t) less the primary balance as a share of GDP (PB_t), plus any "stock-flow" changes as a share of GDP (e.g., changes in cash balances or asset disposals). Table 1.1 summarises *SPU 2017* expectations for some of these key drivers of debt developments.

As shown in Figure 1.6, these drivers imply a steady pace of debt reduction from 240 per cent of revenue at end-2016 to 213 per cent by 2021. In considering the appropriate fiscal stance for the coming period, it is important to bear in mind the sensitivity of this debt trajectory to alternative assumptions.

Table 1.1: Summary of Key Debt Drivers in the SPU 2017 Baseline Scenario

% GDP in 2016 Unless Stated, General Government Basis

	Value	Details
Net Debt Stock	66.0	While falling to ostensibly lower levels, this is a less informative measure given recent GDP distortions.
Net Debt Stock (% Revenue)	240.3	Debt as a share of total revenue has proven a more informative measure of Ireland's debt burden of late, albeit one that reflects actual rather than potential tax base. This remains very high compared to international and historical norms, e.g., compared to below 40% in 2007; and compared to an EU average of 150%.
Nominal GDP Growth Rates Expected over 2017-2021 (avg.)	4.7	The *SPU 2017* central scenario envisages nominal GDP growth at the upper range of expectations for advanced economies, but incorporates a hard Brexit scenario which is expected to lower trend growth over the medium term.
Primary Balance excluding one-offs	1.6	Ireland's primary surplus is high by historical standards and should help facilitate a steady pace of debt reduction, though *SPU 2017* envisages limited changes in the 2016 balance by 2018 (rising to 1.9%).
Average Interest Rate Expected over 2017-2021	2.8	Average interest rates are expected to remain low by historical standards, given the assumed interest rates and large share (*c.* 92%) of interest payments at fixed rates. The scale of debt implies a substantial share to be rolled over during 2018-2021 (some €50 billion, 16% GDP) and interest rates are expected to rise from multi-century lows.
Stock-Flow & Other Changes (cumulative, 2017-2021)	+4.5	Other debt developments are expected to add 4.5 percentage points of GDP to the debt ratio over the forecast period, though *SPU 2017* does not incorporate disposals of state-owned banking sector assets estimated to be worth some 5% GDP (or 18% total general government revenue).[a]

Sources: Department of Finance; and internal IFAC calculations.

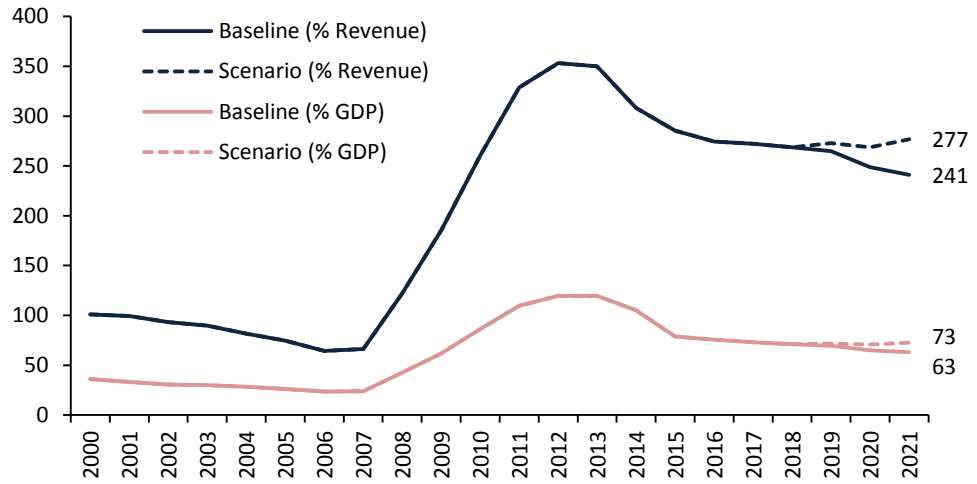
[a] Estimates of asset disposals are taken from end-2016 estimates of the Irish Strategic Investment Fund's directed portfolio, comprising investment values of €11.3 billion for Allied Irish Banks and €1.1 billion for Bank of Ireland, as well as an estimated PTSB shareholding value of approximately €1 billion.

Illustrative Risks to Baseline Gross Debt Scenario

The baseline scenario is one that suggests a steady pace of debt reduction over the coming years. This is reinforced by plans to keep spending growth rates within those expected for government revenues, as well as by relatively low interest rates that are, to a large extent, fixed.

However, a number of alternative scenarios are plausible, and it is worth considering one such scenario for coming years. Figure 1.7 illustrates what might happen if the risk of a sharp and sustained reduction in nominal GDP growth rates forecast in *SPU 2017* were to materialise from 2019 onwards (equivalent to growth rates 2 percentage points lower for each of these years). This could happen if, for example, the impact of a Brexit-related shock were much harder than currently envisaged, or if the scale of the multinational enterprise sector operating in Ireland were to shrink, with coincident impacts on Corporation Tax and output. This scenario suggests that, were such a shock to occur, the debt-to-revenue ratio could rise to 277 per cent, as compared to the 241 per cent suggested by SPU figures, and in the absence of any policy response. In a situation where debt is already at high levels, the impact of such shocks on creditworthiness can be more pronounced.

Figure 1.7: Illustrative Shock Scenario from 2019 Onwards
Gross Debt as % of GDP or Total Revenue, General Government Basis



Sources: CSO; Department of Finance (*SPU 2017*); and internal IFAC calculations.
Note: Using the Council's Fiscal Feedbacks Model, the scenario shows the debt ratio path for an illustrative shock equivalent to a typical forecast error on nominal GDP growth (-2pp relative to baseline growth rates) in each of the years 2019, 2020 and 2021. Revenue is assumed to have an elasticity with respect to nominal GDP of 0.9, which is applied only to the deviation in nominal GDP from its baseline.

There are other considerations that could offset the rise in debt portrayed in this scenario, as well as some plausible risks to the upside. A stronger near-term cyclical recovery, as discussed in Section 1.2.1, could also lessen/offset any shock in later years, while any disposal of banking sector assets – if used for debt reduction – could limit the extent to which an adverse shock would raise the debt ratio in later years.

1.3 Assessment of the Fiscal Stance in 2017 and 2018

Given the macroeconomic and fiscal context currently evident, this Section assesses the appropriate fiscal stance for Ireland in 2017 and 2018.

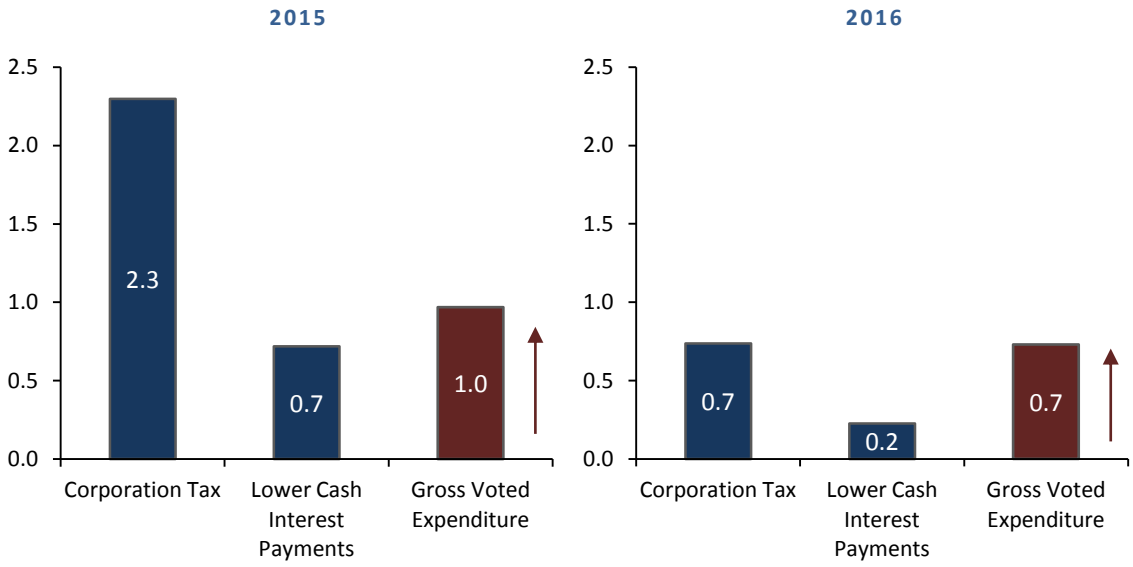
With the economy expected to expand at a stronger-than-trend growth rate in the near term, and debt levels still high, it would be appropriate to allow spending to increase at a relatively modest pace, and not to spend any unexpected revenue gains. From a demand management perspective, there is little need for an expansionary fiscal stance, given the strength of the recent cyclical recovery, which is expected to continue through 2017, 2018 and beyond. Moreover, the pace of growth suggests that any remaining negative output gap is likely to close rapidly in the short term, with unemployment expected to fall below 6 per cent by the first quarter of next year (with the latest estimate already 6.4 per cent).

There are also uncertainties related to the eventual outcome of Brexit negotiations. These could weigh on Ireland's future trend growth rates. If government spending levels were grown at a faster pace than ultimately proved to be sustainable following the outcome of these negotiations, then it could be difficult to unwind spending from higher levels. There may also be a need to support demand following any negative shock.

The post-crisis budgetary framework should be fully implemented to ensure that procyclical increases in spending are not undertaken if cyclical revenues are stronger than expected. A repeat, over several years, of the pattern of in-year spending increases evident in 2015 and 2016 has the potential, alongside upward revisions to planned spending in future years, to undermine the public finances, and would not be conducive to prudent economic and budgetary management.

The past two years saw in-year spending increases and a far looser than planned budgetary stance on the back of revenue surprises. In-year gross voted spending increases of €1 billion in 2016 and €0.7 billion in 2015, compared to budget-time projections, absorbed the majority of better-than-expected tax revenues during the two years. Such a policy is especially risky when the source of the additional revenue is, to a large extent, Corporation Tax (Figure 1.8).[10]

Figure 1.8: Use of Unexpected Gains for In-Year Expenditure Increases
€ Billions, Actual Outturn Less Budget for Respective Year (2015 and 2016)



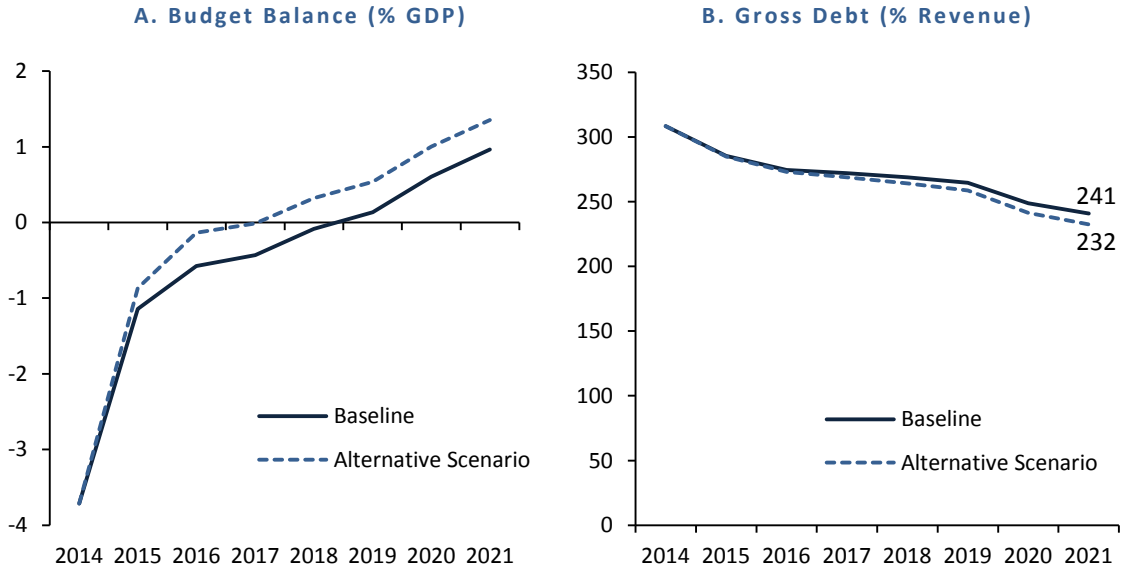
Sources: Department of Finance; and internal IFAC calculations.

[10] Revenue Commissioners noted that the majority of the Corporation Tax over-performance in 2015 was not due to one-off factors, but there was little certainty as to the sustainability of the gains observed at the time. Moreover, there remain concerns about the decision to use unexpected Corporation Tax revenues to increase expenditure given that Corporation Tax represents the most volatile of the main Irish tax heads; is difficult to forecast accurately; is especially concentrated; and is acutely prone to exogenous risk factors such as international tax policy developments (Casey and Hannon, 2016).

As assessed by the Council in recent Fiscal Assessment Reports, a more appropriate policy would have been to use these unexpected funds to reduce the deficit. This would have left the public finances less exposed in the event of future shocks, such as a reversal in Corporation Tax receipts.

The budget would have been already in balance in 2016, had unexpected Corporation Tax revenues and interest savings been used for deficit reduction, rather than to part-fund within-year spending increases in 2015 and 2016. This is roughly two years earlier than now projected by the Government (Figure 1.9). Furthermore, the structural balance would have been brought to its MTO this year (a year earlier than planned), and the debt level would have been estimated to be just over €8 billion lower by 2021 (or €4 billion lower at end-2018, just in advance of the expected conclusion of Brexit negotiations).

Figure 1.9: Scenario without 2015 and 2016 in-Year Spending Increases
% of Respective Denominator (GDP or Total General Government Revenue)

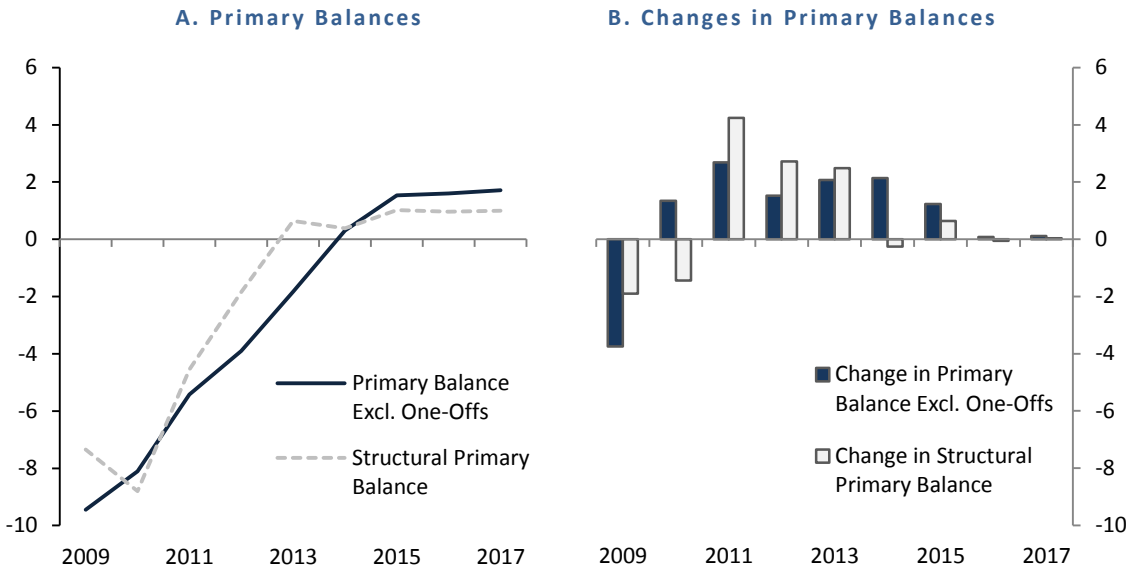


Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: The alternative scenarios depicted show the path for the deficit and debt-to-revenue ratios where the €1 billion (2015) and €0.7 billion (2016) additional in-year expenditure increases were instead used for deficit reduction. The fiscal feedbacks model is a model used by the Council to simulate the effects of alternative assumptions for economic growth, interest rates and paths for discretionary fiscal adjustments. Its key parameters (e.g., its *ex-ante* multiplier assumption and automatic stabiliser coefficients) are consistent with those used by the Department of Finance. The model is described in detail in the September 2012 *Fiscal Assessment Report*.

Using unexpected tax revenues for long-lasting spending increases goes against the spirit of the new budgetary framework, and is especially risky when the source of the additional revenue is Corporation Tax. In addition, this policy response keeps the deficit and debt higher than could have been achieved, and provides an unnecessary stimulus to an already fast-growing economy. Using unexpected revenues to fund permanent increases in expenditure at a time of strong economic growth has worrying echoes of past fiscal policy errors.

Since bringing the deficit to below 3 per cent of GDP in 2015, changes in the underlying primary balance (the budget balance excluding interest expenditure and one-offs) have slowed (Figure 1.10). The measure shows limited improvements after 2015, with these averaging just 0.1 percentage points each year (over 2016 and 2017). The structural primary balance (the same measure with a correction for cyclical developments) suggests that there is no change over the same period. This comes despite government revenue increasing at an annual average rate of 3.2 per cent over the same period.

Figure 1.10: Primary Balance Improvements Have Slowed
% GDP (General Government Basis)



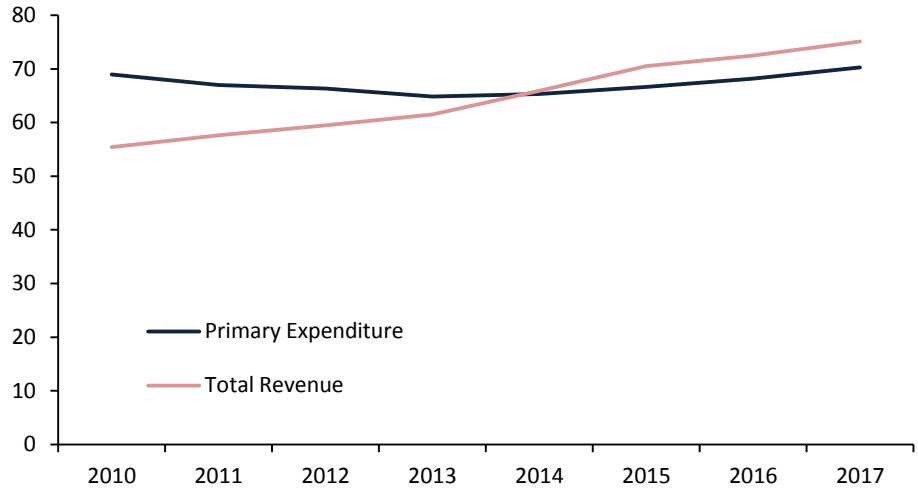
Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Data are adjusted to exclude one-offs identified by the Department of Finance and assessed as applicable by the Council.

Figure 1.11 shows recent developments in primary expenditure (i.e., total spending less interest costs) and government revenue. One-off items are excluded as before. While primary expenditure fell over the period to 2013, it has begun to rise since 2014 and in more recent years (2016-2017) is likely to rise at a pace just slightly below that of revenue growth (2.8 per cent as compared to 3.2 per cent, when using annual average growth rates, excluding one-offs). This drives the observed slowdown in the changes in the primary balance shown above.

A key safeguard for fiscal policy introduced after the crisis is a system of enhanced fiscal rules. Ireland now falls under the Budgetary Rule requirements of the domestic *FRA* (2012) as well as the EU Preventive Arm. These requirements are intended to guide government debt towards safer levels in a phased manner, while ensuring that government expenditure is sustainably financed by government revenues over the course of the business cycle. This would also assist prudent economic management.

Full compliance with the fiscal rules would allow for moderate increases in spending in 2017 and 2018 while reinforcing the credibility of the government's ability to achieve its stated objectives.[11] This has additional benefits, in that it can reinforce the government's creditworthiness, thus helping to insulate the government from pressures related to the cost of borrowing, should an external shock occur in the near future.

Figure 1.11: Recent Primary Expenditure and Revenue Developments
€ Billions, Excluding One-Off Revenue and Expenditure Items



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Data are adjusted to exclude one-offs identified by the Department of Finance and assessed as applicable by the Council.

As well as being consistent with reducing the deficit and debt to safer levels, strong adherence to the fiscal framework can help avoid repeats of past policy mistakes, including a tendency toward aggravating boom-bust cycles. To avoid undermining the integrity of the new framework, the Council is strongly of the view that the government should aim to fully meet all the rules in 2017 and later years, when the MTO is expected to be exceeded.[12] This would include the Expenditure Benchmark, for which compliance does not have to be assessed as long as the MTO is maintained.

In this context, the Council is concerned about the observed breach of the fiscal rules for 2016 as well as a planned breach for 2017 signalled in *Budget 2017* and *SPU 2017* (discussed in detail in Chapter 4). As 2016 and 2017 are the first two years in which Ireland is subject to the new SGP Preventive Arm and domestic Budgetary Rules, the observed and planned breaches of the fiscal

[11] If additional spending is required, it is allowable under the fiscal rules as long as discretionary revenue-raising measures are introduced to provide sustainable funding for the increases.

[12] According to the reformed *SGP*, stability programmes and convergence programmes present a Medium-Term Objective for the budgetary position. It is set as an objective for the structural balance and 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.

rules – even in cases where these may not be sufficient to trigger potential sanctions – present sources of concern. If repeated, such breaches could leave the public finances more vulnerable to adverse shocks. Incorporating an anticipated breach of the rules into plans also aggravates risks of a significant deviation, given the potential for expenditure overruns or unexpected changes in the inputs and parameters applicable for the rules (e.g., following revisions to input data for the Expenditure Benchmark).[13]

Looking ahead to the period beyond 2018, there is more scope under the rules for fiscal policy to expand spending more in line with the economy's sustainable pace of growth, while still reducing debt levels at a gradual pace.

1.4 The Medium-Term Fiscal Stance (2019-2021)

With a structural deficit of 0.5 per cent of GDP – Ireland's MTO – expected to be achieved in 2018, there is scope for moderate spending growth in the coming years.

Attaining the MTO will mark an important milestone in the recovery from Ireland's latest fiscal crisis, but the scale of debt still outstanding, and Brexit/US policy-related uncertainties looming suggest that complacency should be avoided. The challenge for Ireland now is to re-build the capacity to withstand future shocks, and ensure that the economy does not overheat, thus avoiding repeats of the policy mistakes that have contributed to multiple economic crises in recent decades.

The fiscal rules present a reasonable framework under which policy could be navigated prudently in future years. Continuing to adhere to the Expenditure Benchmark after the MTO of a 0.5 per cent of GDP structural deficit has been achieved – a position that goes beyond the formal requirements of the SGP – would go some way towards achieving this. Notwithstanding tendencies for the pace of allowable growth in real expenditure net of discretionary revenue measures to exhibit procyclical tendencies (i.e., rising as real GDP growth rises), it would help to limit the risk of cyclical or other transitory revenue gains being used to fund permanent increases in expenditure.

Prudent economic and budgetary management would see a planned expansion in public services over the medium term that is consistent with a reasonably cautious and well-founded view of sustainable trend growth. At the current juncture, the outcome of Brexit negotiations looks set to weigh on Ireland's trend growth rates, with the Department of Finance viewing a hard Brexit as the

[13] "Significant deviations" are defined in the EU framework as referring to any deviation in structural balance adjustments toward MTO where the deviation is equivalent to at least 0.5 percentage points of GDP in a single year or at least 0.25 percentage points on average per year in two consecutive years. The same thresholds apply for the Expenditure Benchmark (i.e., for deviations in expenditure developments net of discretionary revenue measures impacting on the government balance). When assessed, significant deviations can lead to a Significant Deviation Procedure, which itself can result in sanctions.

most likely scenario. As well as slowing the pace at which the economy can sustainably grow, such an outcome is expected to soften that pace of revenue growth and debt reduction over the medium term.

A prudent view of trend growth is unlikely to be consistent with the CAM-based estimates produced by both the Department of Finance and the European Commission for Ireland. These estimates have a known tendency toward procyclicality (i.e., estimated rates of potential output growth tend to rise as cyclical output growth rises). This was a feature of the pre-crisis period that helped to mask the sustainability of the public finances. It is also unlikely that conventional models will account for any permanent shock to trend growth rates experienced by the Irish economy, were Brexit to be more damaging than currently expected.

One way to mitigate the procyclical tendencies of trend growth estimates would be to simply limit real growth in primary spending (net of discretionary revenue measures) to a more prudent pace than is determined by the fiscal rules by default. This could for example be set as the growth rate to which the economy is expected to converge by the end of the forecast horizon in *SPU 2017* (e.g., to a real GDP growth rate of 2.5 per cent).

Operating fiscal policy over the medium term in this way would see net debt reduced in a phased manner, while steering through an uncertain period for the economy. Future spending reviews (of the kind outlined in Box E) provide an opportunity for the Government to examine existing schemes, in terms of rationale, efficiency and effectiveness, and will enable them to identify both areas of expenditure pressure and areas for potential savings.

The *SPU 2017* plans suggest that growth in real net primary spending will be kept within the above growth rates for the period 2017 to 2021 (averaging 1½ per cent per annum). This is in large part achieved by the assumed non-use of the fiscal space in later years for tax cuts or spending increases. Much of the available fiscal space is to be set aside for a proposed Rainy Day Fund, on the basis of current plans.

Rainy Day Fund

As part of *Budget 2017*, the Minister for Finance announced plans to set aside €1 billion every year from 2018 to a fund reflecting the "need to build up a safety buffer". The Rainy Day Fund should act as a countercyclical buffer and a tool for shock absorption. The Council's *Fiscal Assessment Report June 2016* considers examples of rainy day funds internationally and proposes a countercyclical fund. Coffey (2015) proposes a fund that accumulates by setting aside 5 per cent of

the difference between GDP and GNP annually, based on the rationale that the amount set aside is roughly half of the benefit attained from Corporation Tax revenues paid by multinational enterprises every year.

Due to the high concentration among a small number of multinational enterprises, associated Corporation Tax revenues can be both volatile in the short run and uncertain in the long run. Given the higher volatility and risks associated with this tax head, the Council has repeatedly cautioned against implementing within-year permanent increases to expenditure when facilitated to a large extent by Corporation Tax increases. When any tax receipts display unpredictable and volatile patterns, such as in the case of Corporation Tax, greater caution is warranted. A number of options could mitigate associated risks, including the use of windfall receipts to reduce public debt to safer levels, or diverting receipts to a Rainy Day Fund.

It is important to consider the trade-off implicit in the establishment of such a fund. By investing in the fund, the State will forego alternate uses of the cash: for example, reducing debt and hence lowering national debt interest payments. It will be important to consider the rate of return on the fund in comparison to the interest rate being paid on the national debt.

SPU 2017 does not outline the details of the operation of the fund, and the rules regarding the Rainy Day Fund's governance should be specified. Any outline should also consider the implementation of safeguards to ensure appropriate use; the criteria for access to the fund's resources; whether amounts to be allocated each year are to be fixed or variable, according to estimated cyclical/windfall revenues; and whether other structural issues (such as for addressing the accrued liability of public service occupational pensions) will also be addressed by this or other funds.[14]

[14] Box B of the June 2016 Fiscal Assessment Report explores rainy day funds in more detail. The current estimated accrued liability of public service occupational pensions is €98 billion and represents the present value of all expected future payments to current staff and their spouses in respect of service to December 2012, plus the liability for all future payments to current and preserved pensioners and their spouses.

Table 1.2: Summary of Key Aggregates for the Public Finances in *SPU 2017*

% GDP Unless Stated, General Government Basis

	2015	2016	2017	2018	2019	2020	2021
Revenue [1]	27.6	27.3	26.8	26.5	26.2	26.2	26.1
Expenditure [1]	28.7	28.0	27.2	26.6	26.1	25.6	25.1
Balance [1]	-1.1	-0.7	-0.4	-0.1	0.1	0.6	1.0
Interest Expenditure	2.7	2.3	2.1	2.0	1.9	1.7	1.6
Primary Expenditure [1]	26.0	25.7	25.0	24.6	24.2	23.8	23.5
Primary Balance [1]	1.5	1.6	1.7	1.9	2.0	2.3	2.6
Real Expenditure net of DRMs (% change) [2]	2.5	1.6	2.1	1.1	1.2	1.5	1.1
CAM Structural Balance [3]	-1.7	-1.4	-1.1	-0.5	-0.1	0.4	1.0
Change in CAM Structural Balance (pp) [3]	1.9	0.3	0.2	0.6	0.4	0.6	0.6
CAM Structural Primary Balance [3]	1.0	1.0	1.0	1.5	1.7	2.1	2.6
Change in CAM Structural Primary Balance (p.p.) [3]	0.6	-0.1	0.0	0.5	0.3	0.4	0.4
Gross Debt	78.7	75.4	72.9	71.2	69.5	65.2	62.9
Net Debt	67.2	66.0	63.7				
Gross Debt (% Revenue)	285.5	274.6	272.1	268.9	265.0	249.2	241.3
Net Debt (% Revenue)	243.7	240.3	237.7				
Real GDP Growth (% change)	26.3	5.2	4.3	3.7	3.1	2.7	2.5
Nominal GDP Growth (% change)	32.4	3.9	5.5	5.0	4.6	4.4	4.2
CAM Potential Output (% change) [3]	24.8	5.1	4.2	4.3	3.5	3.0	2.8
CAM Output Gap (% potential GDP) [3]	1.1	1.2	1.4	0.8	0.5	0.3	0.0
Expenditure One-offs [1]	-0.8	-0.1	0.0	0.0	0.0	0.0	0.0
Revenue One-offs [1]	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Aggregate One-offs [1]	-0.8	0.1	0.0	0.0	0.0	0.0	0.0

Source: Department of Finance (*SPU 2017*).

[1] One-offs/temporary measures are as assessed by the Council to be applicable for 2015-2016; Department of Finance one-offs thereafter. These one-offs are removed from variables to get a sense of the underlying fiscal position. The main one-offs assessed by the Council to be applicable include the AIB transaction in 2015 (€2.1 billion); an amount related to the contribution to the EU Budget prompted by GNI revisions for 2016 (€0.17 billion) and the European Financial Stability Facility (EFSF) pre-paid margin in 2016 (€0.55 billion).

[2] This refers to the aggregate modified expenditure aggregate used in the Expenditure Benchmark assessment (Chapter 4). It is net of any Discretionary Revenue Measures (DRMs) introduced relative to previous years, which are the estimated current year impact of any discretionary revenue raising/decreasing measures (e.g., tax increases/cuts). Measures that yield additional (or reduced) revenues allow equivalent excess (or lower) expenditure growth relative to the benchmark rate set by the fiscal rules.

[3] For 2015, the Department of Finance estimates that one-off factors relevant to calculating the change in the structural balance amount to 0.5 per cent of GDP. Rounding may affect totals.