

3. ASSESSMENT OF BUDGETARY FORECASTS

KEY MESSAGES

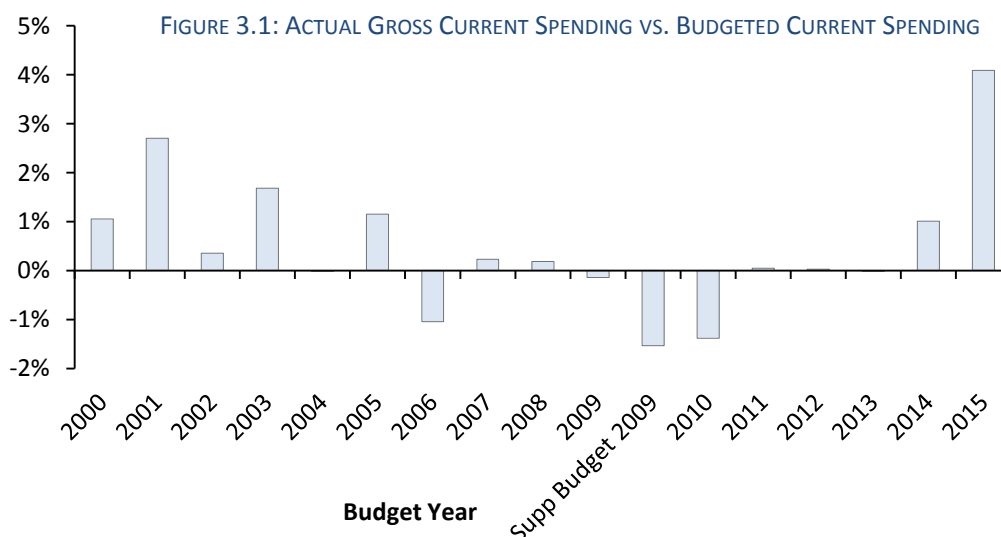
- *Budget 2016* significantly raised public spending for the final months of 2015 relative to earlier plans contained in *Budget 2015* and the April 2015 *SPU*, even after allowing for an overrun in health. However, upward revisions to forecasts for tax revenues and lower debt servicing costs mean that the forecasts for the deficit and debt in *Budget 2016* are more favourable compared to earlier projections in *SPU 2015*.
- Tax receipts in 2015 have benefited from a substantial increase in corporation tax as well as more moderate gains in some other tax heads. While *Budget 2016* attributes the exceptional rise in corporation tax receipts in 2015 to improved trading conditions, there remains uncertainty over the underlying drivers of the strong performance of corporation tax this year. Corporation tax revenues are in excess of what could be explained by ordinary year-to-year improvements in the measure of profitability used by the Department of Finance.
- The forecasts for the public finances in *Budget 2016* are dependent on corporation tax continuing to grow off of its current, higher than expected, base and no further changes to expenditure ceilings set out in *Budget 2016*. Expenditure projections after 2016 explicitly provide for an additional €0.4 billion each year to cover demographic costs but do not fully incorporate the cost of providing current levels of public services in future years or possible tax changes in line with stated Government policy. As a result the projections for the budget balance in *Budget 2016* do not provide a useful picture of the fiscal position over the medium term.
- To illustrate the range of future deficit trajectories, this chapter estimates the deficit that would result from full use of the additional fiscal space available under the Expenditure Benchmark. It also compares the allowable expenditure growth under the fiscal rules to the estimated growth in expenditure necessary to accommodate future expenditure pressures. The analysis illustrates that accommodating spending pressures over the coming years would absorb a large proportion of the estimated fiscal space available after 2016. Further tax cuts would make it very difficult to fund expenditure pressures while complying with the rules.

3.1 INTRODUCTION

As required under the Council’s mandate, this chapter assesses the latest set of budgetary forecasts produced by the Department of Finance. Section 3.2 reviews the accuracy of Department of Finance forecasts for 2015. Section 3.3 assesses the forecasts for revenue and expenditure contained in *Budget 2016*. Section 3.4 examines the sensitivity of the main budgetary aggregates to changes in the economic outlook as well as providing a broader assessment of risks.

3.2 BUDGETARY PROJECTIONS FOR 2015

The deficit for 2015 is projected in *Budget 2016* to be 2.1 per cent of GDP. Revenues in 2015 are supported by exceptionally high corporation tax growth, along with more modest overshoots for the other tax heads. Some of these revenues are being used to reduce the 2015 deficit, but a substantial portion will be used to accommodate spending pressures and to facilitate new spending policies for this year.



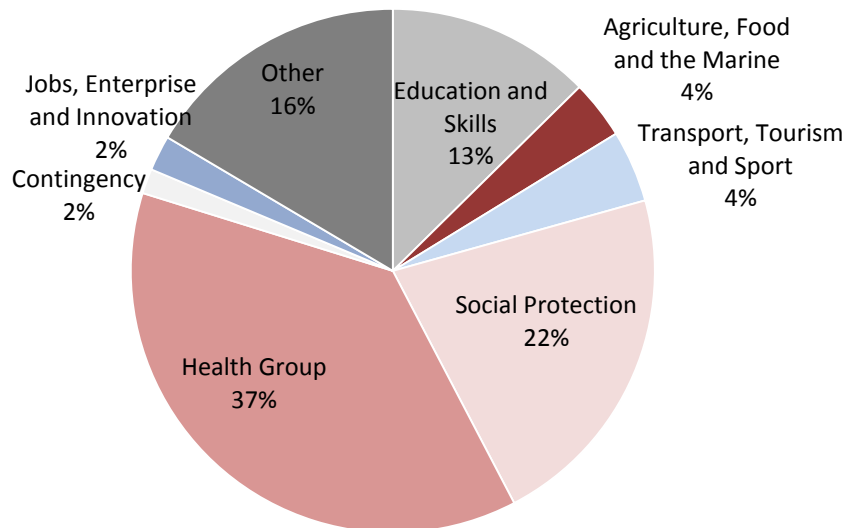
Source: Department of Finance.

Note: The figure compares the budgeted gross voted current expenditure (Exchequer basis) to the actual outturn. The *Budget 2015* gross voted current spending figure is adjusted to reflect the disestablishment of the HSE Vote.

Figure 3.1 shows that under the latest plans, current voted expenditure in 2015 will exceed projections at the time of *Budget 2015* by more than 4 per cent. This is the largest difference in over a decade. In 2014 there was a much smaller overrun of 1 per cent, which was largely as a result of an overrun in the health area. For 2015, health spending will again exceed its initial Budget allocation substantially, but the additional spending in this area will be added to by higher spending in other Departments which had previously stayed below or close to their expenditure ceilings. Capital expenditure was also revised up by €285 million for 2015 (8 per cent). Figure 3.2 shows

which sectors are absorbing the increase in expenditure for 2015 compared to the forecast in *Budget 2015*.

FIGURE 3.2: COMPOSITION OF CHANGE IN GROSS VOTED EXPENDITURE



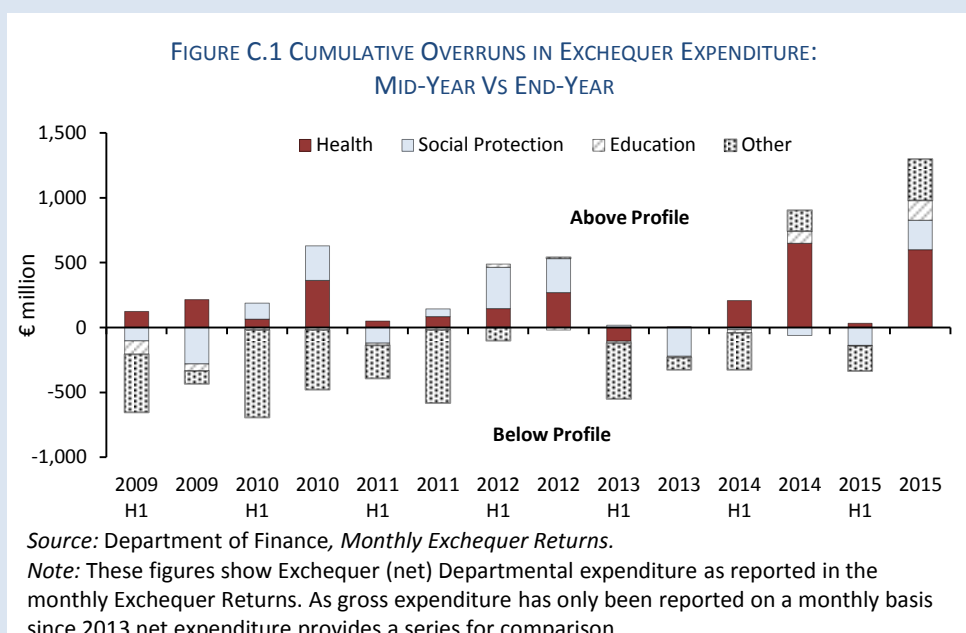
Source: Department of Finance.

Note: The figure compares the Budget 2015 gross voted expenditure (Exchequer basis) to the Budget 2016 estimate. The *Budget 2015* gross voted current spending figure is adjusted to reflect the disestablishment of the HSE Vote.

These spending overruns come just twelve months after the Government renewed its multi-annual expenditure ceilings in the *Comprehensive Expenditure Report 2015-2017 (CER 2015-2017)*, which revised up expenditure ceilings in 2015 and 2016. The scale of the latest revision to the expenditure ceilings, and the upward revision to every expenditure ceiling outlined since the first *Comprehensive Review of Expenditure* in 2012, suggests that ceilings do not provide a reliable estimate of future spending.

BOX C: HEALTH EXPENDITURE IN 2015 AND IMPLICATIONS FOR FUTURE EXPENDITURE CEILINGS

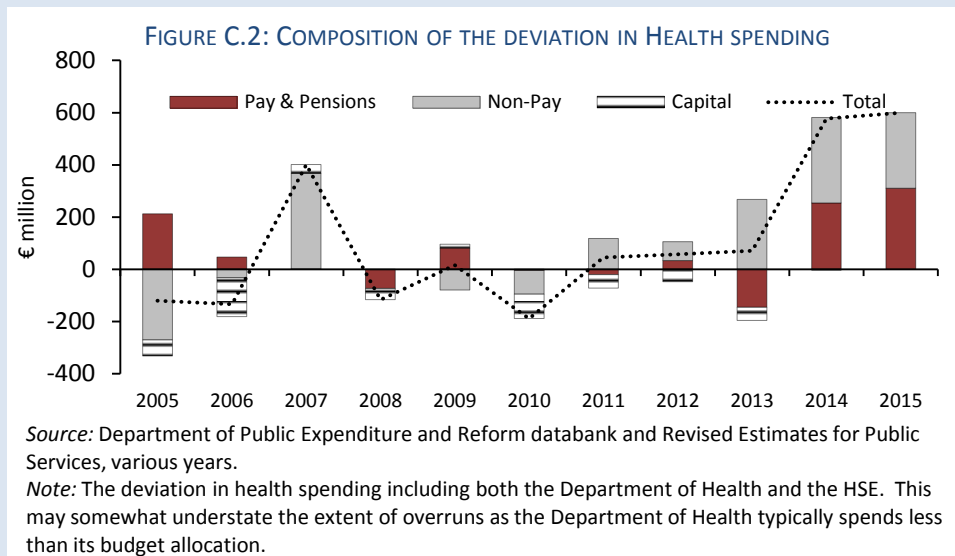
The Council have previously drawn attention to the issue of spending on public health exceeding planned levels (IFAC, 2015). Until 2013, overruns in this area were largely offset at the aggregate level by below budget spending by other Departments (Figure C.1). However, in 2014 and 2015 net spending by all Departments exceeded the budgeted allocations by €0.8 and €1.3 billion.¹ The largest single source of these Exchequer overruns was the Health area, accounting for €647 million (77 per cent) in 2014 and a planned €600 (46 per cent) in 2015.²



For both 2014 and 2015, the overrun is divided broadly evenly between pay and non-pay expenditure, with pensions running slightly ahead of budget and capital spending on target (Figure C.2). Given that over 70 per cent of spending is in the hospitals area, this would indicate that much of the pay issue arises in this area. On the basis of the 2015 forecast outturns, health represents 99 per cent of the total Departmental pay overrun, but only 28 per cent of the non-pay. This seems to indicate specific problems with the Department of Health’s pay budget that have not been resolved through the change in 2015 from a system of limits on staffing levels (the Employment Control Framework) to Departmental pay ceilings. These problems may arise from difficulties in implementing pay related reforms leading to higher average pay than expected, larger than planned staffing or a combination of both.

¹ The gross expenditure figure reflects expenditure by Departments and offices regardless of the source of funding. Exchequer expenditure, or net expenditure, is net of receipts received directly by Departments including the pension-related deduction, certain EU co-funding payments and pension contributions. It also excludes expenditure by the Social Insurance Fund and the National Training Fund financed through the ‘own income’ of the funds. The difference in 2014 is mainly accounted for by higher than expected PRSI receipts that reduce the Exchequer cost. Gross spending has only been reported on a monthly basis since July 2013.

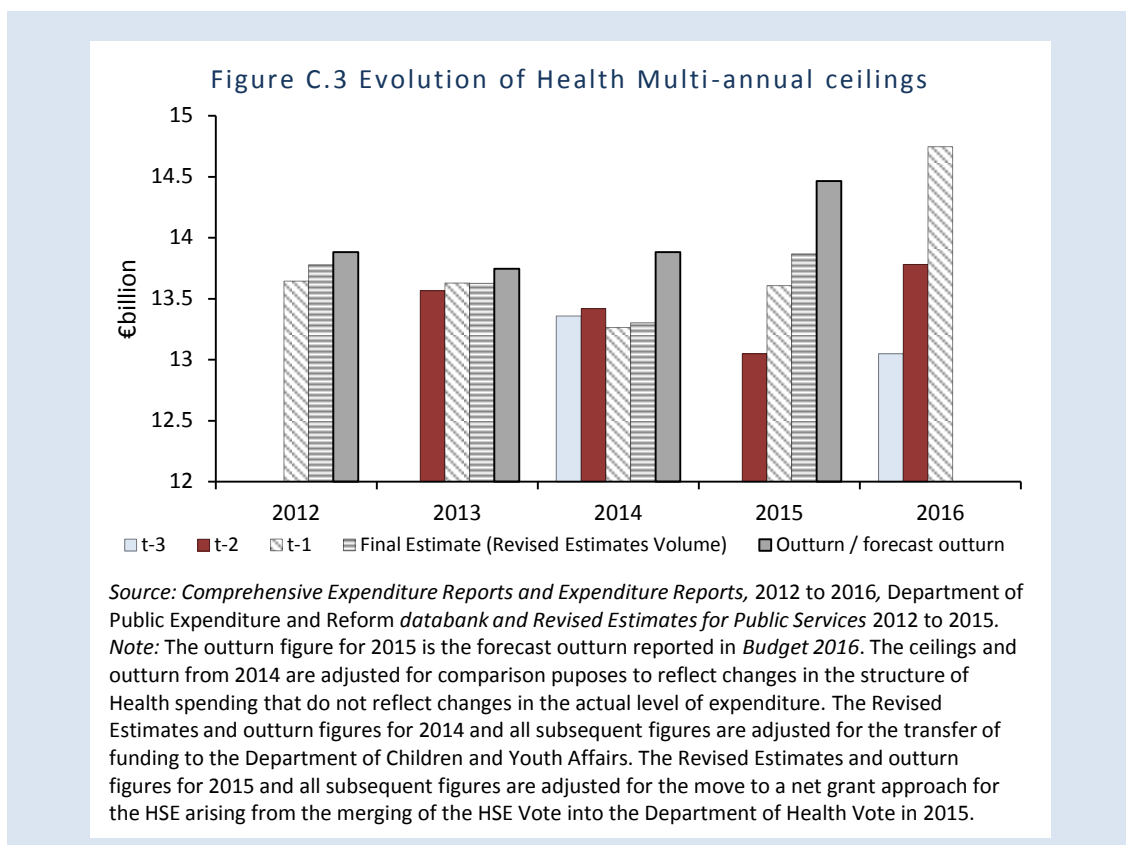
² While the higher than budgeted spending among Departments may, to some extent, represent a policy decision reflecting the position relative to fiscal rules in 2015, it seems unlikely that significant savings will arise across Departments in future given the impact of a reduced base on permitted expenditure the following year (see Section 4.4).



The majority of over-spending in recent years arose mainly in the hospitals and Primary Care Reimbursement Service (PCRS) areas. The latest HSE Monthly Performance Report for end-August shows that the largest deviations are again in these areas: a €122 million overrun in the hospitals area and €68 million in PCRS. The State Claims Agency, which is also under the remit of the HSE, was also running significantly ahead of profile by €61 million.

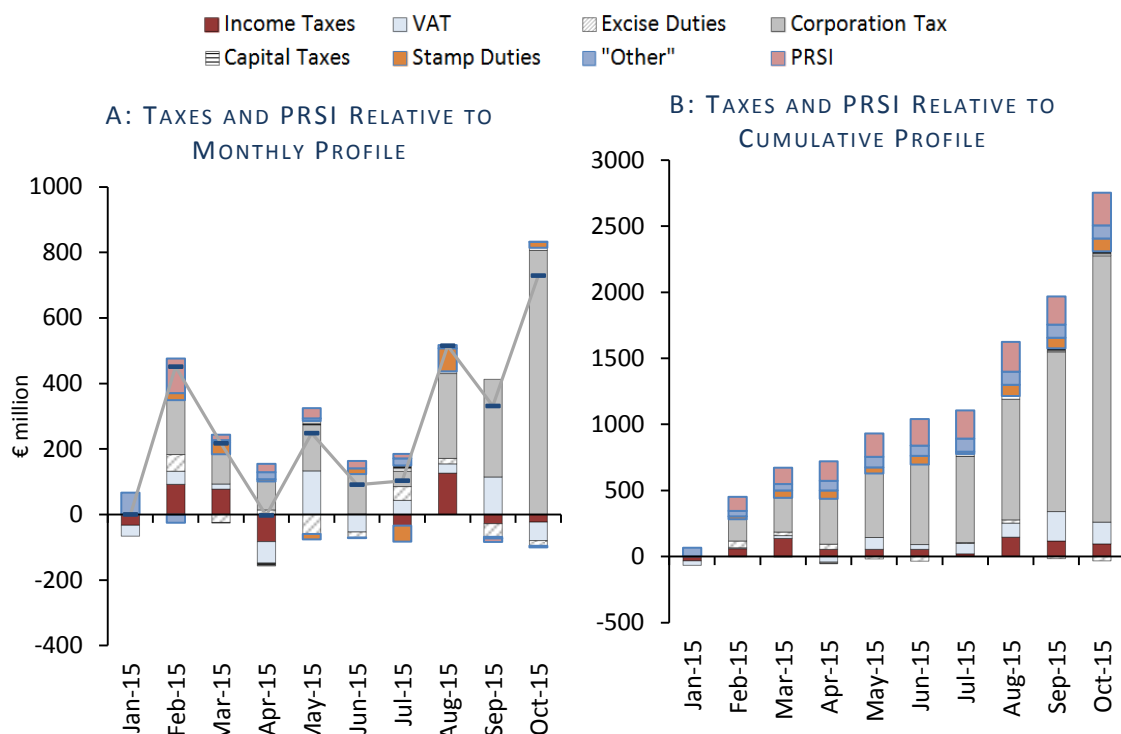
The potential negative feedback between poor budget setting and poor expenditure management now appears particularly marked in the health area, with expenditure overruns leading to significant upward revisions to future multi-annual ceilings.³ In 2015, a €0.6 billion overrun is expected despite an upward revision of €0.8 billion from the initial ceiling for 2015 in *Expenditure Report 2014* (see Figure C.3). A continuation of this trend into 2016 would have implications for planning and managing expenditure within the budgetary framework.

³ In relation to budget implementation, IFAC (2015) identified the ‘soft budget constraint’ (SBC) as a possible structural difficulty in managing health expenditure within the budget year. This theory posits that, notwithstanding *ex ante* threats to impose a hard constraint, the budget constraint is soft where the decision maker in control of day-to-day expenditure anticipates that the constraint is likely to be relaxed *ex post* if the original constraint is not met. Where the budget setting process is weak, this may further ‘soften’ the constraint as the manager – knowing plans are poorly set – has less of an incentive to adhere to them. The existence of a SBC may also weaken the budget planning process where budget allocations have been persistently exceeded in the past and led to ambitious targets being set.



Despite the significant additional spending in 2015, the deficit will likely be better than expected at the time of *SPU 2015* in April due to very high growth in tax revenues this year. Figure 3.3A shows how taxes have performed relative to the expected tax take in *Budget 2015* in each month, while Figure 3.3B shows how persistent overperformances each month have accumulated to leave taxes and PRSI for the year to end October €2.7 billion ahead of expectations. What is striking is the degree to which the tax overshoot is dominated by corporation tax – accounting for around 74 per cent of the overperformance in the year to date. Indeed if the corporation tax overperformance by end-October is maintained, corporation tax will likely exceed the revised *Budget 2016* expectation with implications for next year’s forecast. Without this surge in corporate taxes, the tax overrun would be much more modest and would not have covered the extra spending announced for 2015.

FIGURE 3.3



Source: Department of Finance.
 Note: These overruns are relative to Budget profile.

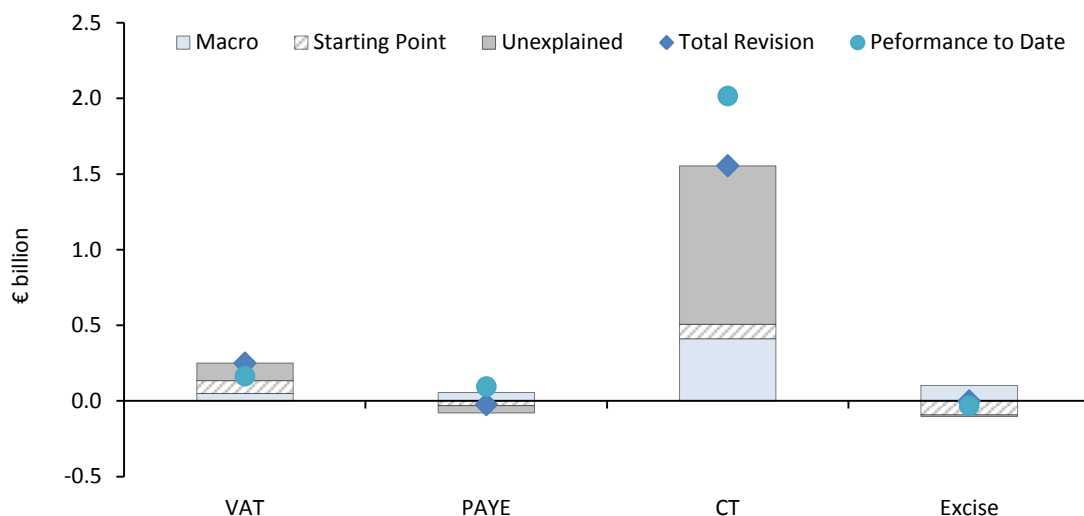
Source: Department of Finance.
 Note: These overruns are relative to Budget profile.

Figure 3.4 shows how the four largest tax heads have been revised since *Budget 2015* and how much of this revision can be explained by either the Department of Finance’s revised view of the economy (macro), or by the mis-estimation of the 2014 tax take in *Budget 2015* (starting point error). What remains is referred to as the ‘unexplained’ error.⁴

While the *Budget 2015* estimates for three of the four tax heads in Figure 3.4 look likely to have been broadly accurate, corporation tax was significantly underestimated in *Budget 2015*. Most of the revision to corporation tax cannot be explained by the revision to the macroeconomic aggregate used to forecast corporation tax (namely, gross operating surplus or ‘profits’) or the starting point error. The corporation tax overrun in 2015 is discussed further in Box D.

⁴ These sources reflect the form of the tax forecasting equation. In general, the equation used is: $T_{t+1} = [(T_t + \text{Carryovers from previous budgets})(1 + \text{CPI})] + \text{New Measures} + \text{One-offs} + \text{Judgement}$. It is errors arising from the three latter terms that cannot be identified *ex post*.

FIGURE 3.4: SOURCE OF REVISION TO 2015 TAX FORECAST FROM BUDGET 2015 TO BUDGET 2016



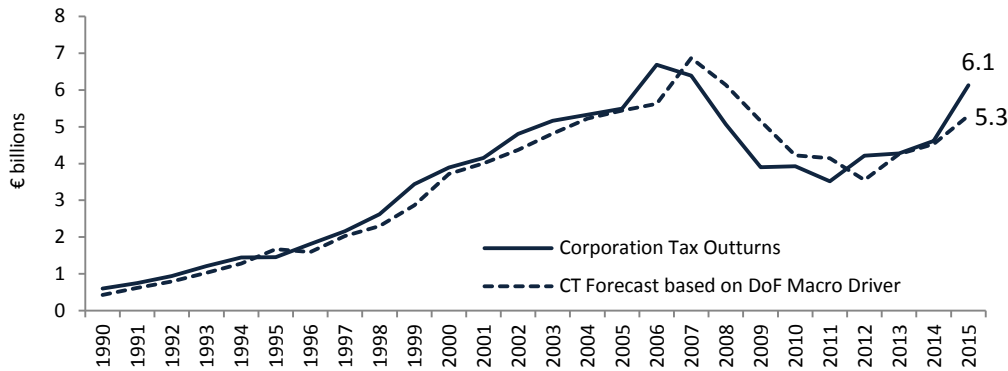
Source: Internal IFAC Calculations.

BOX D: CORPORATION TAX IN 2015

The latest Exchequer returns show that by the end of October 2015 receipts from corporation tax were just over €2 billion higher than expected by the Department of Finance in *Budget 2015*. The better than expected performance of this single tax heading accounts for three-quarters of the overall tax overperformance in 2015. This box examines the nature of the large forecast error for corporation tax in 2015.

One of the inputs used by the Department of Finance to forecast corporation tax receipts is Gross Operating Surplus (GOS) (or profits) from the National Income and Expenditure Accounts. The Department assume that annual changes in corporation tax receipts move in line with changes in GOS, before accounting for various one-offs and judgement factors that could impact the tax take. Figure D.1 shows the actual outturn for corporation tax receipts compared to the predicted outturn based on the Department of Finance’s assumed relationship between trends in GOS and tax receipts before any judgmental/one-off issues are accounted for. The chart shows that although tax receipts predicted by GOS broadly track actual receipts, divergences between the two series are also evident over time. For 2015, the predicted outturn for corporation tax based purely on GOS is significantly lower than the expected actual outturn in *Budget 2016*. In *Budget 2016*, the Department revised up its estimate of the increase in GOS in 2015 to 15 per cent; however, this still leads to a predicted corporation tax outturn for 2015 around €0.8 billion lower than forecast in *Budget 2016*.

FIGURE D1: CORPORATION TAX OUTTURNS AND BASIC FORECASTS

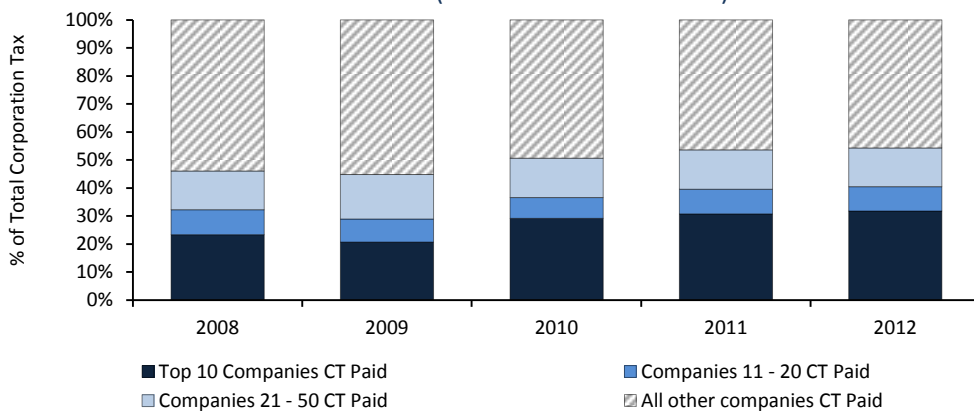


Source: Department of Finance; internal IFAC calculations.
 Note: Outturn for 2015 is taken from Budget 2016.

Figure D.2 shows that around half of corporation tax is dependent on the profits of a relatively small number of companies. In 2012 – the latest year for which such data are available – 54 per cent of corporation tax was paid by the top 50 companies and this proportion has increased over time. It appears that a large proportion of the corporation tax overperformance in 2015 is due to Multinational Corporations (MNCs).⁵ As a result of this concentration of tax receipts among a small number of companies, it is possible for growth in corporation tax to diverge from the broader National Accounts measure of profits (GOS) used by the Department of Finance to forecast corporation tax, as appears to have occurred in 2015. The Department believe that the return to pre-crisis levels for corporation tax in 2015 primarily reflects improved trading conditions and that the higher level of corporation tax receipts in 2015 will be carried forward into the tax base for 2016 and later years.

The highly concentrated nature of corporation tax receipts on its own raises risks to the Exchequer as company specific factors can impact the overall corporation tax yield. While the Revenue Commissioners have stated that the majority of the increase in corporation tax in 2015 is not due to one-off or windfall factors, further analysis of what is driving the apparent increase in the taxable profits of Irish resident companies for 2015 is necessary to determine the sustainability of the increase in corporation tax revenues this year.

FIGURE D.2: CORPORATION TAX: TOP 10, 20 & 50 CORPORATE GROUPS (% OF TOTAL PAYMENTS)

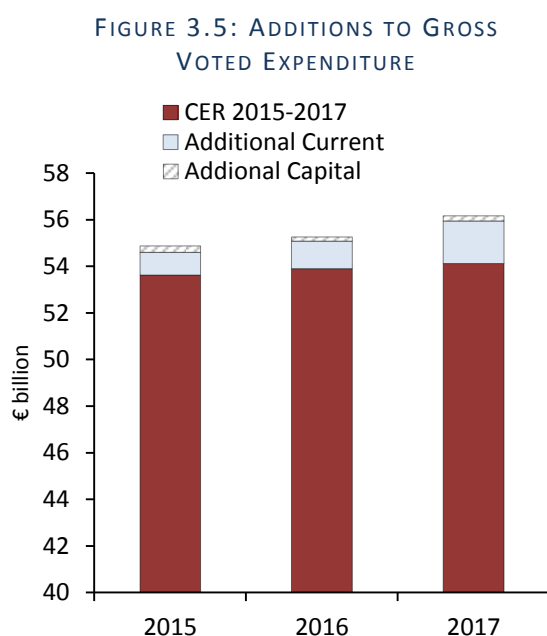


Source: Pigott and Walsh (2014); authors' analysis of Revenue data.

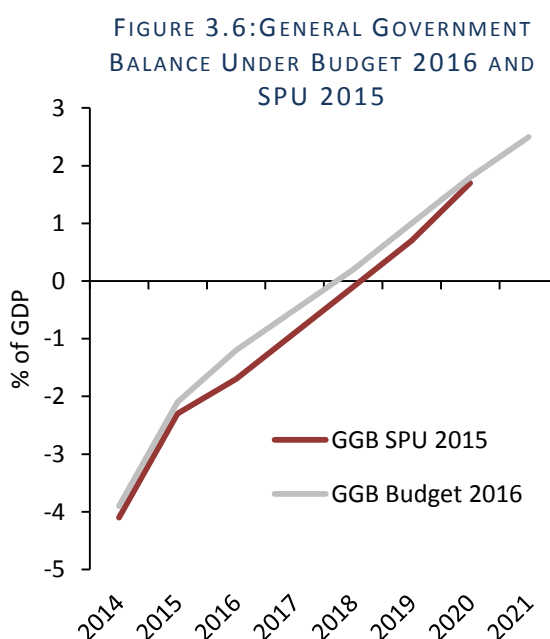
⁵ <https://www.kildarestreet.com/wrans/?id=2015-11-10a.316>

3.3 BUDGET 2016 FORECASTS

Despite expenditure being considerably higher over the period 2015-2021 compared to earlier projections (Figure 3.5), the forecast deficit path in *Budget 2016* has improved relative to the projections in *SPU 2015*. There are a number of factors driving the improved forecast for the budget balance over the forecast horizon. Cyclical revenue gains from strong economic growth will improve the balance, supported by lower than expected debt servicing costs. Department of Finance tax revenue forecasts are also boosted by the assumption that tax rates are not reduced after 2016 (despite commitments to reduce some taxes in *Budget 2016*), along with the assumption that the recent increase in corporation tax represents a permanent upward level shift to corporation tax receipts in 2015.



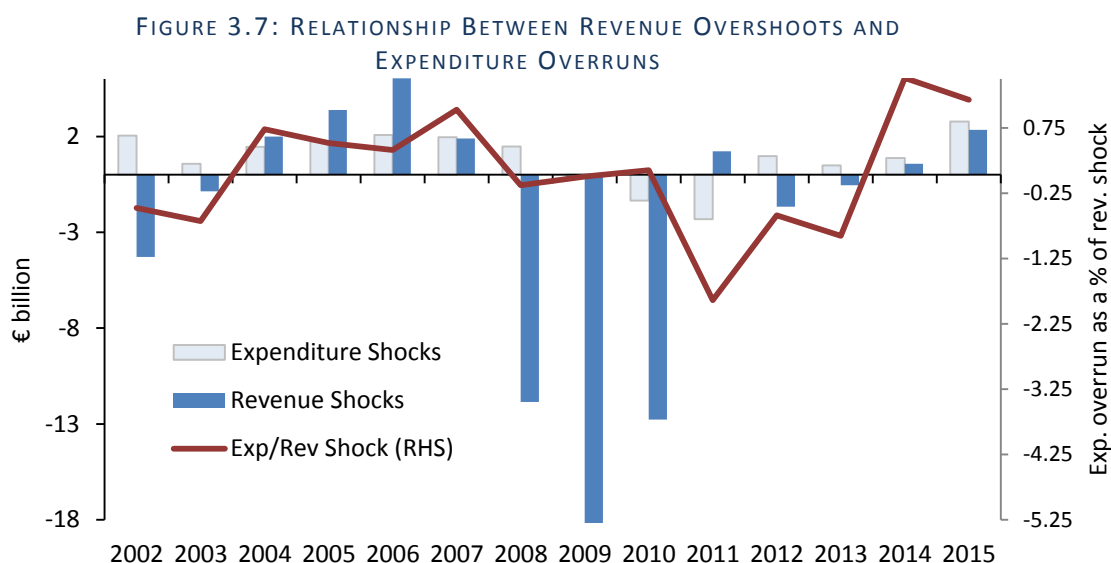
Source: Department of Finance.
 Note: CER refers to the Comprehensive Expenditure Report published alongside *Budget 2015*.



Source: Department of Finance.

A further issue for forecasts of the budget balance is the credibility of expenditure ceilings and the fact that, for the outer years in particular, the projections do not accommodate known expenditure pressures or other policy commitments. The forecast for the General Government balance after 2016 assumes adherence to expenditure ceilings. However, as discussed in Chapter 4, the system of expenditure ceilings is not being operated effectively and the ceilings have been revised upwards continuously since their introduction. Unless the problem of continuous upward revisions to previously announced expenditure ceilings is addressed, the forecasts in *Budget 2016* likely overstate the improvement in the deficit as expenditure overruns are likely to re-occur.

Based on past experience in Ireland, higher expenditure over the medium term is more likely when revenue exceeds expectations. The red line in Figure 3.7 shows the proportion of unexpected revenue (relative to the forecast in the Budget for the previous year) that is used to fund expenditure overruns in the current year, while the bars show the nominal amounts of expenditure overruns. The graph shows that large expenditure overruns tend to correlate with positive unexpected revenue gains. However, it is important to note that this likely understates the true degree of procyclicality, given that the automatic stabilisers imply that spending falls as tax revenues rise.

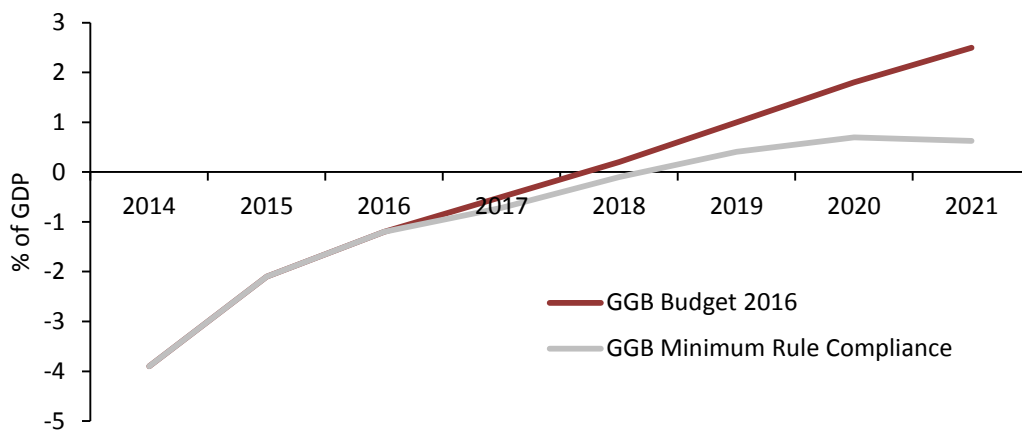


Source: Internal IFAC calculations

Note: Expenditure and Revenue Shocks are taken as the difference between the outturn in a given year t , and the forecast in the Budget for year $t-1$. For example, shocks in 2014 are calculated as the outturn for 2014 minus the forecast for 2014 contained in *Budget 2013*. For 2015, the *Budget 2016* expectation is treated as an outturn.

The deficit projections in *Budget 2016* imply overcompliance with the requirements of the fiscal rules despite the stated Government intention to target minimum compliance (see chapter 4). As a result, the fiscal forecasts in *Budget 2016* leave room for spending increases or tax reductions while meeting the minimum requirements of the rules. *Budget 2016* outlines how much fiscal space (as defined by the Expenditure Benchmark rule) will be available to the Government for additional budget measures in each year from 2017-2021. Figure 3.8 illustrates an alternative path for the government balance based on a scenario where the Government uses all the available fiscal space in each year, keeping all other forecasts and assumptions unchanged. In this scenario the budget surplus in 2021 reaches 0.6 per cent of GDP as opposed to the 2.5 per cent surplus projected in *Budget 2016*.

FIGURE 3.8: DEFICIT SCENARIO WHERE ALL FISCAL SPACE IS USED



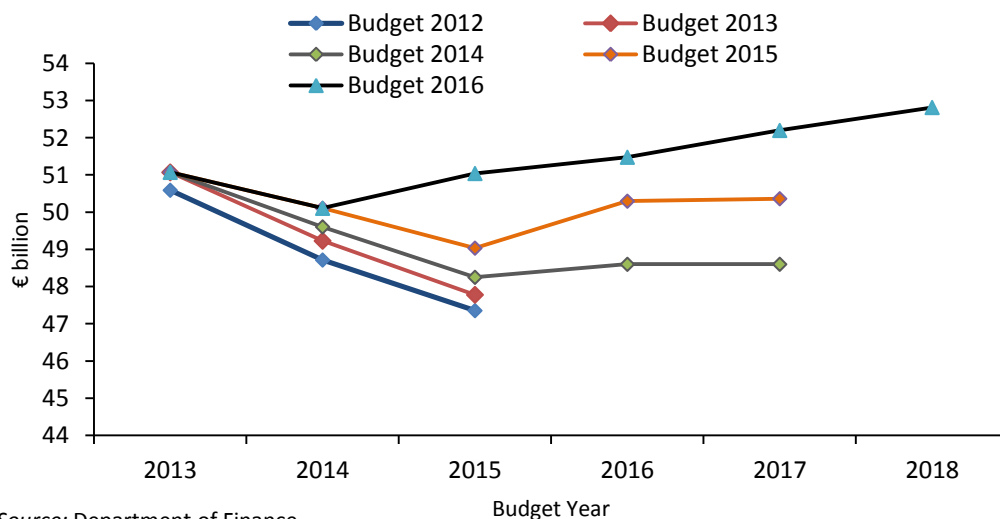
Source: Budget 2016 and internal IFAC calculations.

Note: "GGB Budget" is the General Government Deficit in Budget 2016. "Minimum Rule Compliance" shows the adjusted deficit assuming the fiscal space under the EB as identified in Budget 2016 is used.

EXPENDITURE

The introduction of expenditure ceilings does not appear to have constrained spending, particularly for spending more than one year ahead. The importance of proper implementation of expenditure ceilings and the consequences of persistent upward revisions to the ceilings has been discussed in the Council's previous Fiscal Assessment Reports (IFAC, 2015b, 2014b). Figure 3.9 shows how expenditure ceilings have consistently been revised upwards as the year in question draws nearer.

FIGURE 3.9: CHANGES TO CURRENT EXPENDITURE CEILINGS



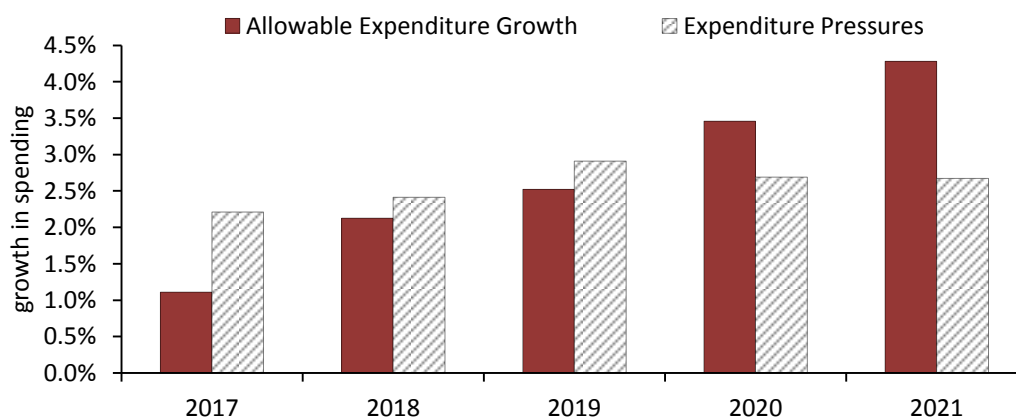
Source: Department of Finance.

Since the forecasts imply overcompliance with the rules, the profile for spending in Budget 2016 is below the maximum allowable spending level under the Expenditure Benchmark rule. Under the

rules, this fiscal space can be used for either tax cuts or increased expenditure. The Council has previously raised concerns over the extent to which the Government’s medium-term expenditure plans incorporate foreseeable expenditure pressures.

The *June 2015 Fiscal Assessment Report* provided an illustrative scenario showing how expenditure may need to rise faster than Government projections in order to maintain the existing level of public services and accommodate likely spending pressures. Figure 3.10 updates this scenario (see Box E) and compares the estimated expenditure growth necessary to accommodate spending pressures to the allowable expenditure growth when there are no new tax changes and all of the space under the rules is used for additional spending. The analysis illustrates that meeting likely future expenditure needs would absorb the majority of the estimated fiscal space available after 2016. Further tax cuts would make it very difficult to fund these expenditure pressures while complying with the rules.

Figure 3.10: Estimated Expenditure Pressures Compared With Allowable Expenditure Growth



Source: Internal IFAC calculations.

Note: Expenditure pressures are estimated under the assumptions outline in Box E. Allowable expenditure refers to expenditure growth that would be compliant with the Expenditure Benchmark. The calculation of allowable expenditure growth assumes indexation of the income tax system. If the Government decides not to fully index income tax bands, this would create additional fiscal space.

BOX E: ILLUSTRATIVE MEDIUM-TERM EXPENDITURE SCENARIO

This Box updates the medium-term scenario for government expenditure contained in IFAC's June 2015 *Fiscal Assessment Report*.⁶ In order to construct a medium-term scenario, government expenditure is split into five headline components: health, education, social payments (including social welfare pensions), national debt interest and other. The assumptions used in generating the scenario are set out below.

HEALTH AND EDUCATION

For health and education, pay and non-pay spending are modelled separately. The volumes of both pay and non-pay spending are linked to expected service demand arising from demographic changes. Price changes for pay and non-pay spending are indexed to relevant deflators. For health, service demand is proxied by the change in the number of under-65 equivalents in the population while for education demand is proxied by the change in the population of potential students. The pupil-teacher ratio is assumed to remain unchanged at its current level. Pay rates until 2018 in the public sector are assumed to grow in line with the increases contained in the June 2015 *Lansdowne Road Agreement*. Thereafter, public sector pay is assumed to grow in line with non-agricultural wages. The volumes of non-pay expenditure in health and education are assumed to grow in line with expected demand linked to demographics. Prices are indexed to the GDP deflator.

SOCIAL PAYMENTS

This element of expenditure can be split into four broad components:

- i. Old age payments: These are assumed to grow in line with the change in the population aged over 65 with payment rates indexed to growth in prices.
- ii. Child related payments: The volume is estimated using the change in the population aged under 17. Payment rates are assumed to grow in line with prices.
- iii. Unemployment benefits are linked to macroeconomic dynamics rather than directly to demographics. The approach used is broadly the same as that applied by the Departments of Public Expenditure and Reform and Social Protection. This approach translated changes in unemployment to movements in the Live Register and then applies an average cost per individual.⁷ The average cost term is indexed to price increases over the projection period.
- iv. Other payments: these include disability payments, back to education allowance, back to work allowances and other social payments. This category is assumed to grow in line with the change in the total population and prices.

CAPITAL EXPENDITURE

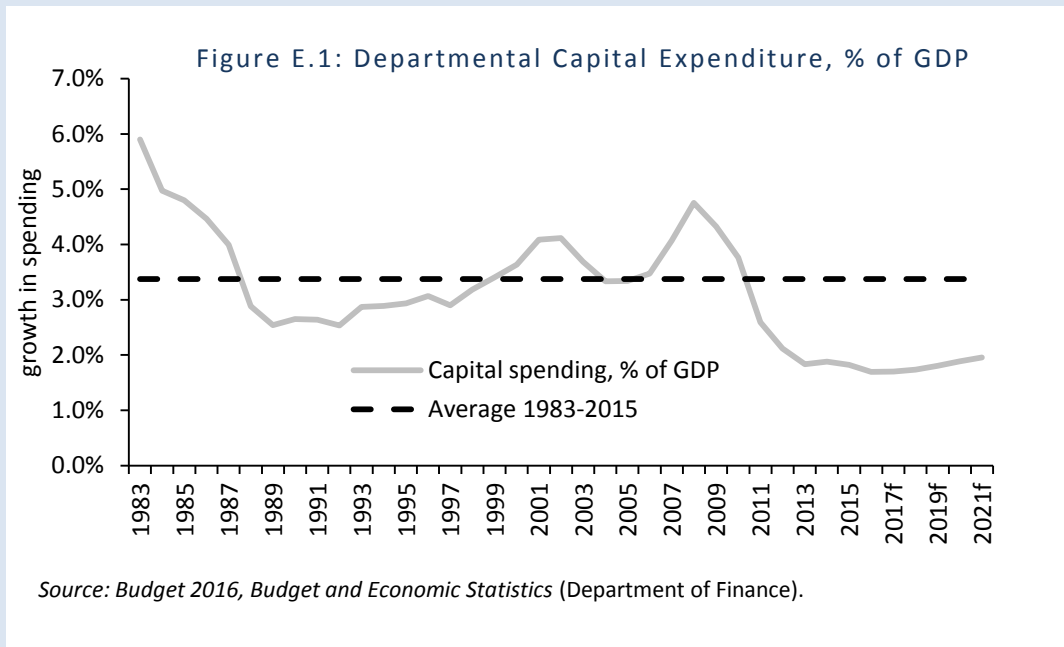
⁶ The construction of this scenario broadly follows the methodology set out in Barrett (2006).

⁷ This approach can be summarised as follows:

$$UB_{t+1} = UB_t + (LR_{t+1} - LR_t) * LRC_t + (\text{New policy measures}) + J_{t+1}$$

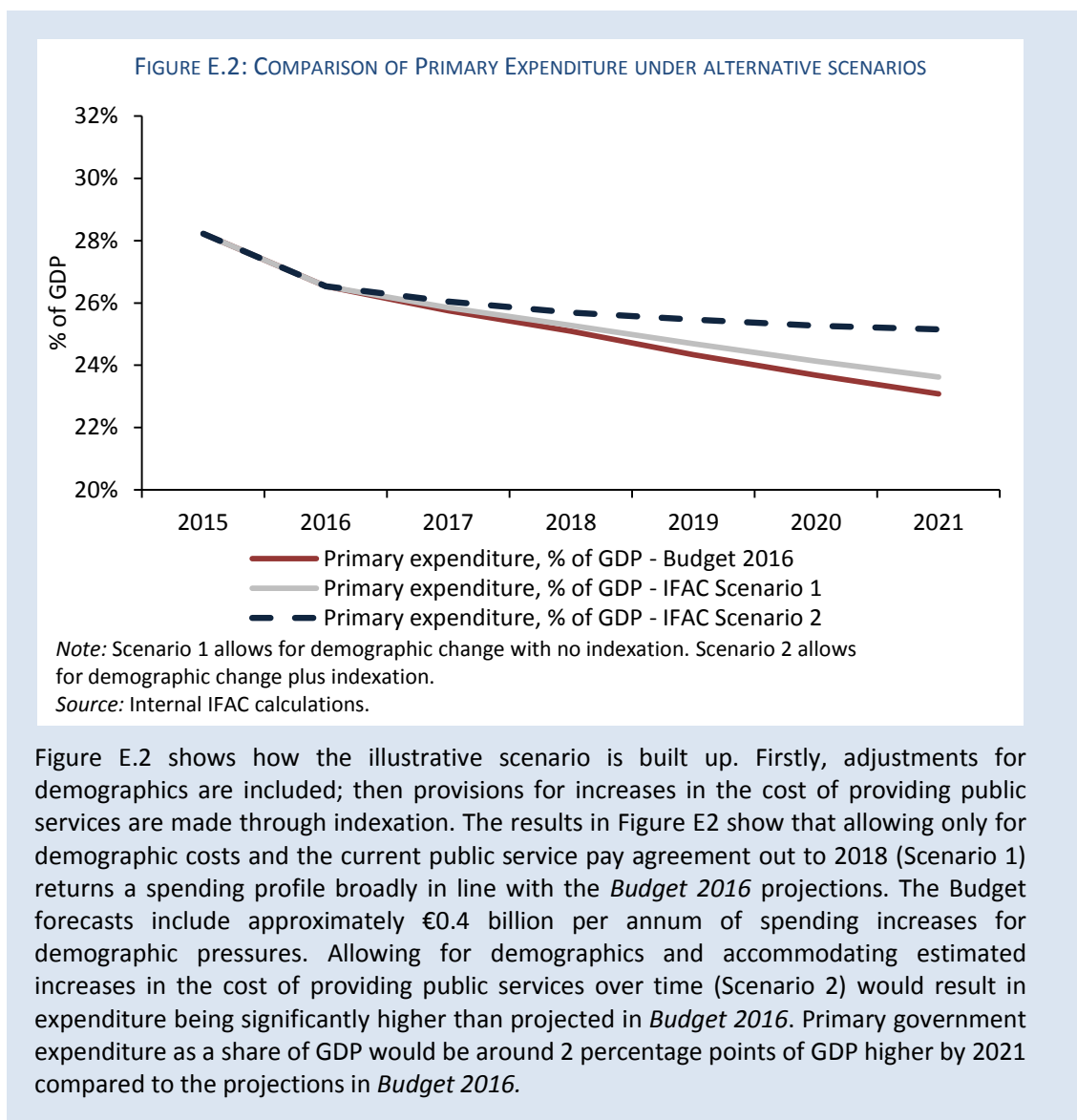
where, UB is the nominal sum of Jobseeker's Allowance and Jobseeker's Benefit, LR is the average annual number of persons on the Live Register, LRC is the average cost per Live Register Claimant and N is the net impact of new measures introduced in this area in the budget. The final term is assumed to be zero in the post 2016 period for this exercise.

The scenario uses the projections for capital spending over the medium term as set out in *Budget 2016*. The forecasts for capital spending in the Budget are based on the Government’s *Infrastructure and Capital Investment Plan 2016-2021* announced in September 2015. Figure E.1 shows the path of capital expenditure as a share of GDP under the new plan. The forecasts imply a small rise in capital spending by the end of the decade; however, the chart shows that capital spending is projected to remain at very low levels by historical standards over the forecast horizon.



NATIONAL DEBT INTEREST

The Exchequer deficit is given by the gap between expenditure and revenue. National debt interest is calculated as the difference between the Exchequer balance projected in this scenario and the relevant figure underpinning *Budget 2016*, multiplied by the average interest rate. The gives the additional interest payments for a given year which is added to the interest bill on the outstanding stock of debt for the previous year to arrive at the figure for total national debt interest.

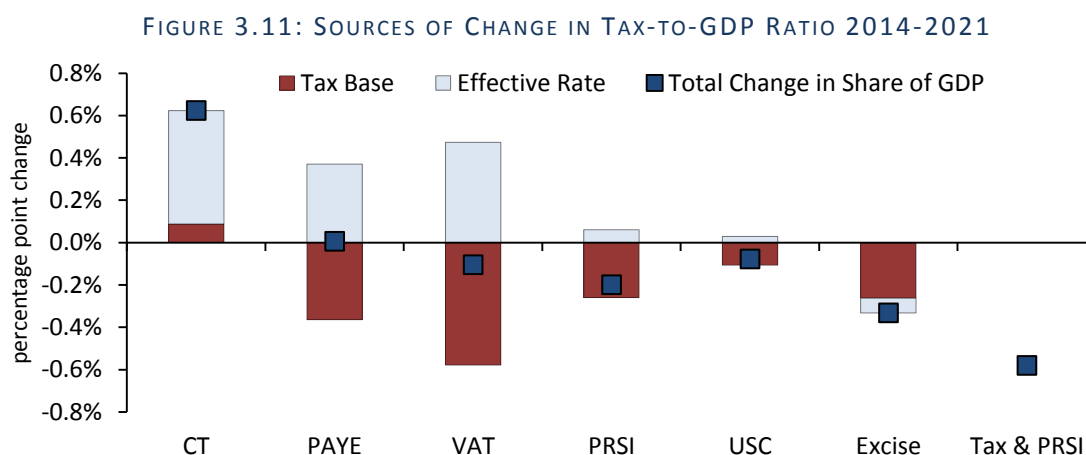


REVENUE

Reflecting the improved macroeconomic environment, tax revenues have been revised upwards in *Budget 2016* and are expected to grow broadly in line with nominal GDP from 2015-2021. Figure 3.11 shows how the tax-to-GDP ratio is expected in *Budget 2016* to evolve between 2014 and 2021. The chart decomposes the forecast changes into shifts in the implied effective rate of tax and the impact of the tax base growing faster or slower than GDP. The chart shows that corporation tax is the only tax heading that is forecast to grow as a share of GDP. This is only partially explained by growth in profits (as measured by gross operating surplus). Since corporation tax is growing faster than profits, this implies that the effective rate is increasing.⁸

⁸ Where tax revenues grow faster than their tax base, the effective rate of tax on that base is said to increase, even where no change in policy has occurred.

For all other tax heads, tax bases are forecast to grow more slowly than GDP which, all else being equal, will cause the tax-to-GDP ratio to fall. Low projected growth of PAYE revenues reflects low wage growth relative to GDP in the short term. In some cases, such as PAYE, this effect is partly offset by a rising implied effective rate. Since this suggests that PAYE is growing faster than wages, it is consistent with some level of fiscal drag as nominal wages rise and individuals drift into higher tax brackets. However, as discussed below, the *Budget 2016* forecasts for PAYE assume that the tax bands are indexed to growth in non-agricultural wages.



Source: IFAC internal calculations.

Note: Chart shows change in share of GDP due to performance of tax base relative to GDP growth, and due to changes in the effective rate of tax. Although not strictly a tax, PRSI is included in the calculation.

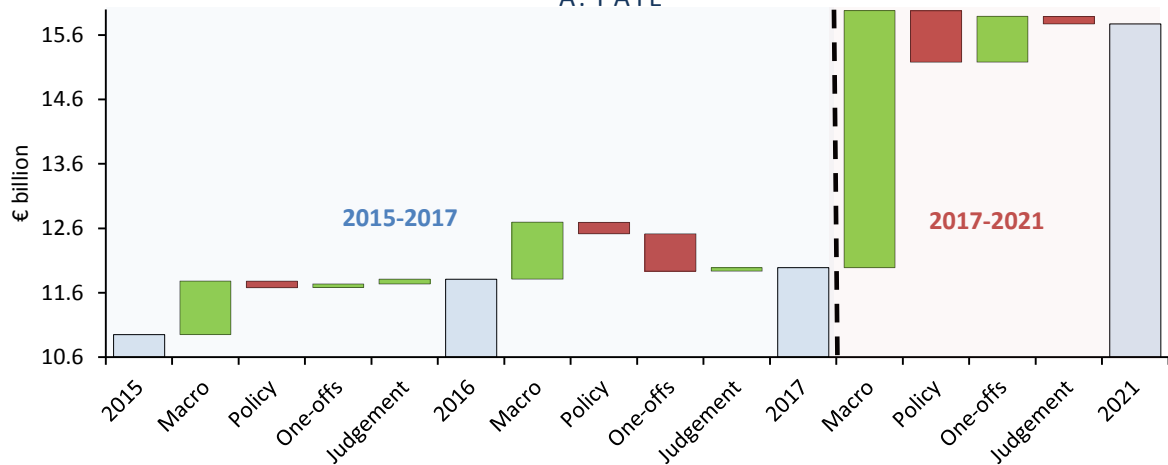
Figure 3.12 shows the most important factors influencing the *Budget 2016* forecasts for the four largest tax heads. In each case, the forecasts for 2016 and 2017 are shown separately while the forecasts for 2017-2021 are shown cumulatively. The floating bars show the size of the increase in taxes due to that source. For each tax head the ‘macro’ component – the rise in taxes due to growth in the tax base – is the largest source of tax growth. In the case of PAYE, the chart shows that policy - here in the form of assumed indexation of tax bands to wages - reduces the tax take in all years. As shown in Figure 3.11, however, this has not been sufficient to stop the apparent rise in the effective rate, suggesting that some level of fiscal drag is still present in the forecasts.

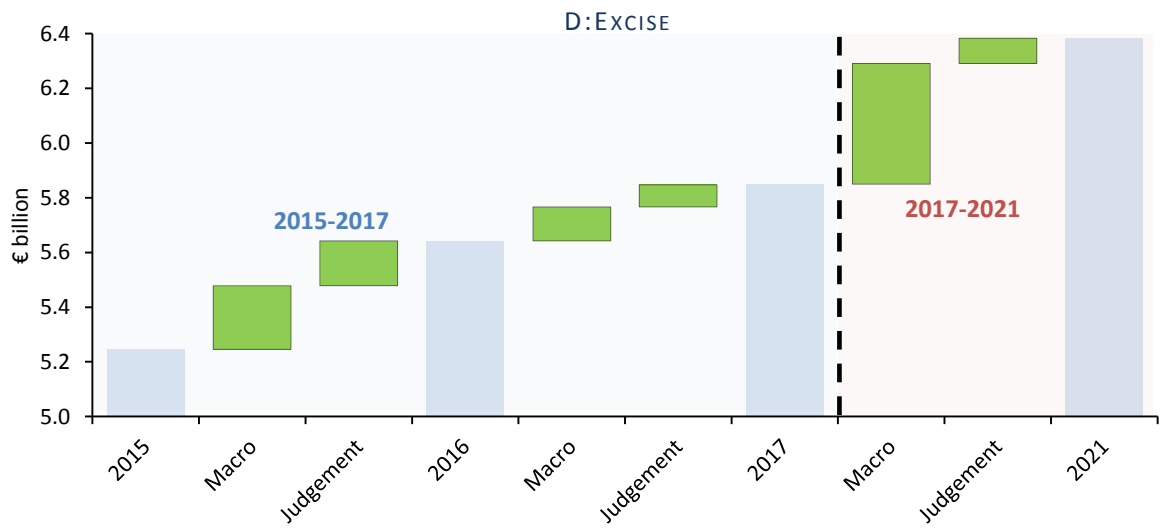
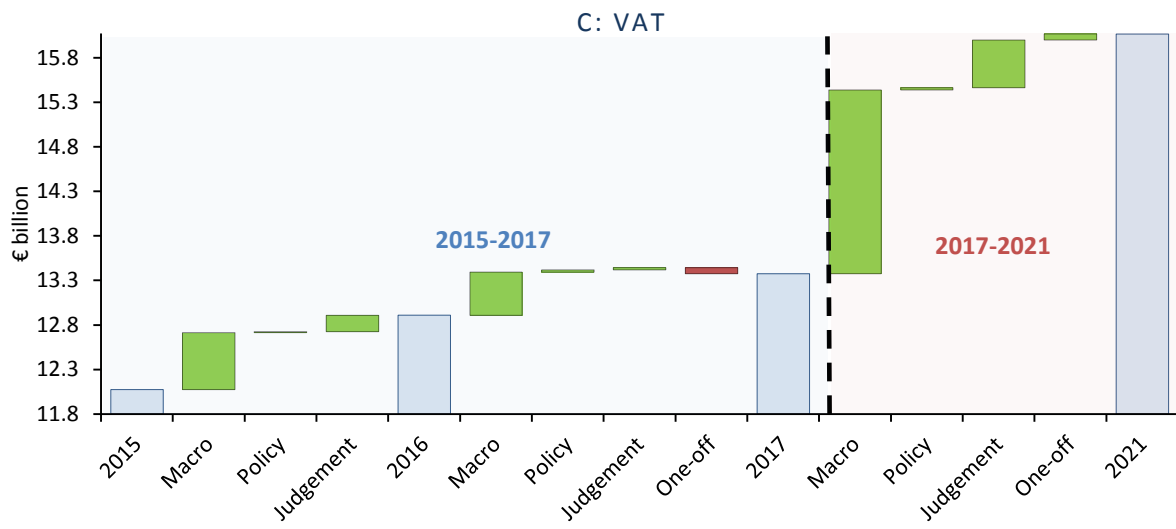
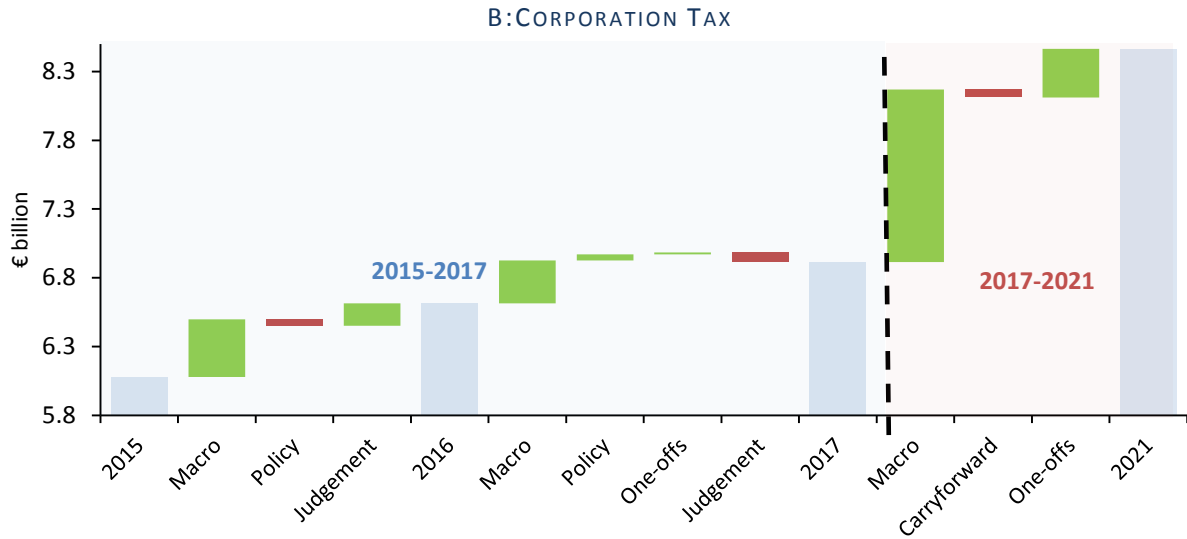
One key assumption used in these forecasts is that the response of taxes to growth in the macro/tax base does not change over time. If it is the case that certain taxes are more responsive during cyclical upswings, then it may be appropriate to use judgement to boost the tax forecast over and above what is expected on the basis of growth in the tax base alone.

For corporation tax, the Department of Finance have used judgement to increase their forecast for this tax head over the projection period. This reflects an assumption that while taxes will again

grow faster than implied by the growth in profits in 2016, the divergence will be much smaller than in 2015. The forecast for 2016 and later years assumes that the large rise in corporation taxes in 2015 will not be reversed in 2016 so that there has been a level shift upwards in tax revenue this year. It should also be noted that the sources of growth shown in Figure 3.12b are built on top of the estimated 2015 tax take. As noted above, however, it is likely that the *Budget 2016* estimate of tax revenues for 2015 will be exceeded.

FIGURE 3.12 A-D
A: PAYE





Source: Department of Finance and IFAC internal calculations.

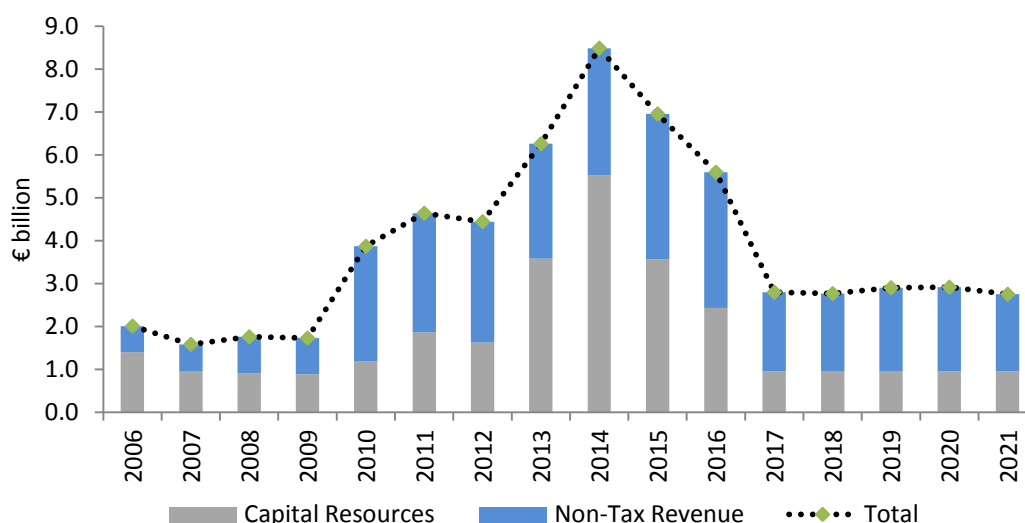
Note: Floating bars show transition from the tax take between years specified. Green implies a positive contribution from that source, red implies a negative contribution.

In relation to non-tax revenue, Central Bank surplus income is expected in *Budget 2016* to fall by €130 million in 2016. In addition, the portion of Central Bank income considered 'non-entrepreneurial' will increase so that the contribution of Central Bank surplus income to General Government revenue is expected to fall by over €400 million.⁹ However, these non-entrepreneurial incomes will still reduce the Exchequer Borrowing Requirement (EBR). The Exchequer is projected to benefit from the dividends of semi-states over the forecast horizon. Dividends are expected to rise modestly in 2016 but this is on foot of income from Ervia which is considered non-entrepreneurial and so does not benefit General Government revenues. Non-tax revenues are expected to decline after 2016 as these exceptional incomes are expected to be smaller from 2017 (Figure 3.13).

Income from capital resources is also forecast to fall after 2016 as a result of the assumption that no further disposals of bank assets occur. This assumption in *Budget 2016* is made on the basis of uncertainty over the precise timing of the disposals. However, the disposal of bank assets is likely to continue over the forecast horizon. The value of the State's various holdings in AIB, BoI and PTSB is estimated in *Budget 2016* at €15 billion (or c.5 per cent of 2021 GDP), although this is subject to market conditions. If this amount was realised, it could reduce the debt-to-GDP ratio compared to the projections in *Budget 2016*. Additional upside risks emanate from possible surpluses from the IBRC liquidation and the wind-down of NAMA (currently estimated to be €1.75 billion) which could be used to reduce the debt GDP ratio in the coming years.

⁹ Entrepreneurial income excludes the proceeds of sales of assets or the distribution of revaluation gains.

FIGURE 3.13: NON-TAX REVENUE AND CAPITAL RESOURCES, 2006-2021



Source: Finance Accounts and Budget 2016, Department of Finance.

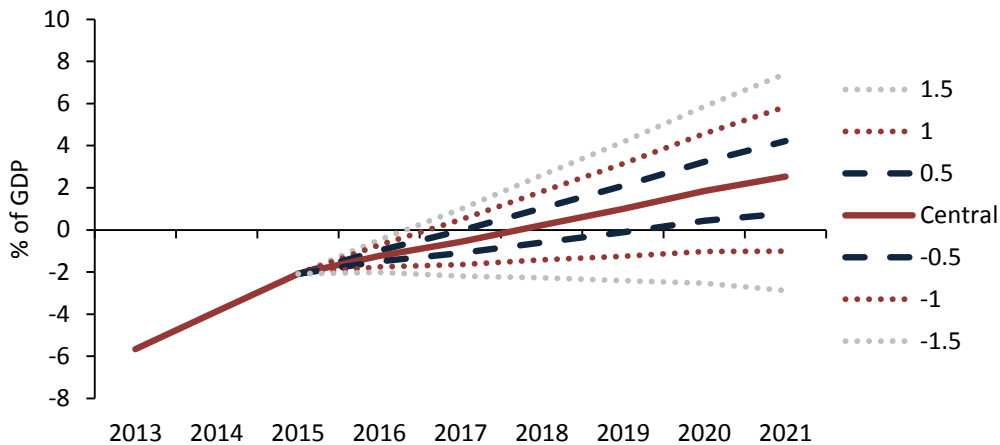
3.4 RISKS

GROWTH

Over the medium term, the attainment of a zero deficit by 2018 and surplus from 2019 onwards remains dependent on economic growth. The Council’s Fiscal Feedbacks Model can be used to estimate the affects of different future growth assumptions on the deficit and debt level for given spending and tax plans. The results of assuming growth of plus or minus 1.5 per cent, 1 per cent and 0.5 per cent are shown in Figures 3.14A and 3.14B, below. Typical errors around the Department of Finance’s nominal GDP growth rates are just under 2 percentage points.¹⁰

¹⁰ Typical forecast error refers to the Root Mean Square Error of the Department of Finance’s forecast for the current year.

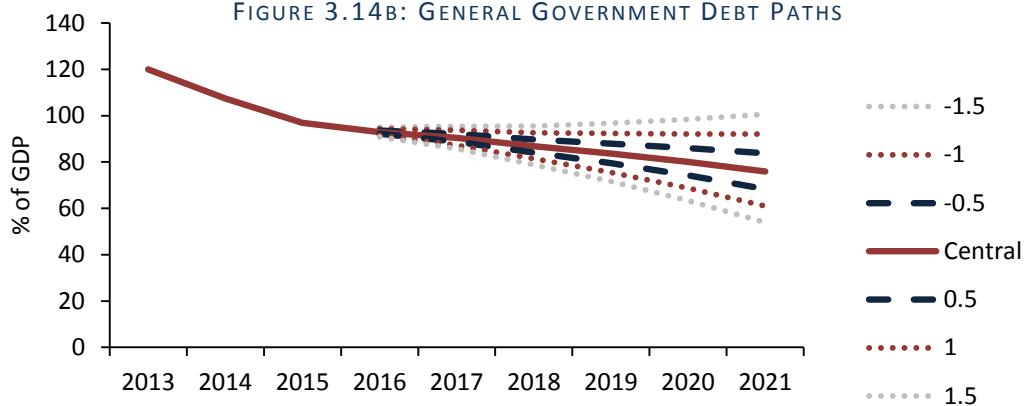
FIGURE 3.14A: GENERAL GOVERNMENT BALANCE PATHS



Source: Department of Finance, internal IFAC calculations based on the Council's Fiscal Feedbacks Model.

Note: The Figure shows alternative projections of the General Government Balance based on GDP growth forecasts that deviate from *Budget 2016* projections by 0.5, 1.0 and 1.5 percentage points in either direction.

FIGURE 3.14B: GENERAL GOVERNMENT DEBT PATHS



Source: Department of Finance, internal IFAC calculations based on the Council's Fiscal Feedbacks Model.

Note: The Figure shows alternative projections of the General Government Balance based on GDP growth forecasts that deviate from *Budget 2016* projections by 0.5, 1.0 and 1.5 percentage points in either direction.

Under the assumption of no change in policy, the model indicates that in a mildly adverse scenario of growth disappointing by 0.5 percentage points each year, the attainment of a surplus would be delayed until 2019 without some scaling back of commitments and the size of the surplus in 2021 is considerably smaller. As a result, debt levels do not fall as quickly and the debt-to-GDP ratio remains above 80 per cent in 2021. In a scenario where growth disappoints by 1.5 percentage points over the medium term, the deficit does not close and actually begins to widen slightly. The corresponding path for debt shows the debt-to-GDP ratio returning to 100 per cent of GDP by 2021. These scenarios illustrate how what are, in the context of past forecast errors, relatively minor disappointments in growth, but if sustained over a number of years, can lead to the public

finances being returned to a much more fragile position or more difficult policy choices having to be made.

On the other hand, while current projections already envisage strong economic growth from 2016, forecasts for growth in the Irish economy in recent years have proven to be too pessimistic. Faster growth than projected in *Budget 2016* would see the deficit eliminated by 2017 with larger surpluses and reductions in the debt than contained in *Budget 2016* from 2018-2021. In the most optimistic growth scenario shown in Figure 3.14b, debt levels fall below 60 per cent of GDP by 2021.

TABLE 3.1: RISK ASSESSMENT MATRIX FOR MAIN DOWNSIDE RISKS

Risk	Relative Likelihood	Impact
Corporation Tax Risk	H	The dependence of Ireland on a small number of MNCs with large corporation tax contributions has increased. The significant unanticipated increase in corporation tax receipts in 2015, coupled with the decision to boost the level of spending in 2015 on foot of this increase, raises risks to the public finances.
Expenditure Control	H	Cost management problems and budgetary overruns remain in the health area. Without an effective system of domestic expenditure ceilings, there is a risk of a return to continuous upward revisions to spending based on positive short-term macroeconomic and fiscal developments. If this risk materialised, the expenditure projections in <i>Budget 2016</i> would likely prove to be an underestimate of actual future spending levels.
Contingent Liabilities	L	As measured, contingent liabilities have declined considerably in recent years, now standing at 13.3 per cent of GDP in 2014. Most of this relates to the Eligible Liabilities Guarantee on deposits and remaining exposure to NAMA. Other contingent liabilities do exist, however, in the form of implicit guarantees to support the banking sector and callable collateral in various international organisations. The most significant is the obligation to contribute additional capital in the case of a default on the European Stability Mechanism by a programme country.
Interest Rate Risks	L	While the interest rate environment remains benign, the recent past has demonstrated how quickly this can change due to events that may be outside of the State's control. Shocks to the interest rate facing the Irish State could aggravate the risk of the state slipping into a "bad equilibrium" where higher interest costs can trigger default fears that are self-fulfilling in that they lead to an increased risk premium, pushing interest rates higher still until the State is 'locked out' of bond markets. Mitigating this risk is the fact that 92 per cent of Ireland's current debt is at fixed interest rates and that a budget surplus is expected to emerge in 2018. ¹¹ Nonetheless, another global recession or financial crisis could have the potential to disrupt Ireland's economic recovery, widen the deficit and see a return of the dangerous debt dynamics of the recent past.

¹¹ Comptroller and Auditor General, (2015).

