Irish Fiscal Advisory Council

Fiscal Assessment Report

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Table of Contents

Table of Contents 3

Foreword 5

Summary Assessment 7

1. Assessment of Fiscal Stance 14

1.1 Introduction 18

1.2 The Macroeconomic Context 19

1.3 The Recent Fiscal Context 25

1.4 Assessment of the Fiscal Stance for 2019–2023 35

2. Endorsement and Assessment of the Macroeconomic Forecasts 48

Key Messages 48

2.1 Introduction 49

2.2 Endorsement of *SPU 2019* Projections 50

2.3 Assessment of the Macroeconomic Forecasts in *SPU 2019* 55

2.4 Risks and Imbalances 64

3. Assessment of Budgetary Forecasts 74

Key Messages 74

3.1 Introduction 75

3.2 Assessment of 2018 Outturns and 2019 Estimates 77

3.3 *SPU 2019* Forecasts (2019–2023) 91

3.4 Long-Term Prospects 106

3.5 Risks 107

4. Assessment of Compliance with Fiscal Rules 113

Key Messages 113

4.1 Introduction 115

4.2 *Ex-Post* Assessment for 2018 117

4.3 In-year Assessment for 2019 125

4.4 *Ex-Ante* Assessment for 2020-2023 131

4.5 Medium-Term Expenditure Framework 133

Boxes

Box A: Sustainable Growth 22

Box B: Dealing with the Economic and Fiscal Impact of Surging Corporation Tax Receipts 30

Box C: Fiscal Impacts of Hard Brexit Scenarios 43

Box D: Reforms to the European Stability Mechanism (ESM) 45

Box E: Deriving Forecasts for Modified Gross National Income and the Modified Current Account 70

Box F: Capital Project Overruns in Ireland 80

Box G: Sources of Revenue Surprises Over Recent Years 84

Box H: Corporation Tax Concentration and Volatility 88

Box I: Forecasting Tax Revenue: a Reassessment of Elasticities 102

Box J: An Assessment of Ireland's Compliance with the Fiscal Rules for 2018 under EU Methods 122

Box K: The Uncertainty in assessing Compliance with the Fiscal Rules 128

Appendices

Appendix A: Debt Sustainability Analysis 136

Appendix B: Timeline for Endorsement of *SPU 2019* Projections 140

Appendix C: The Council's Benchmark Projections 141

Appendix D: Imbalance Indicators 142

Appendix E: Tax Forecasts Decomposed 151

Appendix F: Summary of the Council's Principles-Based Approach to the Budgetary Rule 154

Appendix G: Assessment of the Budgetary Rule under the EU Methodology 155

Appendix H: Gross Current Expenditure Revisions in Selected Departments 160

Foreword

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

The mandate of the Irish Fiscal Advisory Council is to:

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

The Council is chaired by Mr Seamus Coffey (University College Cork). Other Council members are Mr Sebastian Barnes (Organisation for Economic Co-operation and Development), Mr Michael G. Tutty, Dr Martina Lawless (Economic and Social Research Institute), and Prof. Michael McMahon (Professor of Macroeconomics at the University of Oxford and Tutorial Fellow of St Hugh's College). The Council's Secretariat consists of Eddie Casey, Niall Conroy, Kevin Timoney, Ainhoa Osés Arranz, Friederike Vogler, Killian Carroll, and Karen Bonner. The Council would like to acknowledge the kind help from staff at the CSO, Central Bank of Ireland, ESRI, NTMA and NERI. The Council would also like to thank Máire O'Dwyer for copy editing the report.

The Council submits its Fiscal Assessment Reports to the Minister for Finance and within ten days releases them publicly. This report was finalised on 7 June 2019. More information on the Irish Fiscal Advisory Council can be found at www.FiscalCouncil.ie

Summary Assessment

Summary Assessment

As a result of continuing strong growth, the Irish economy has recovered from a deep crisis and is now operating near capacity. Yet the current outlook is unusually uncertain. Government forecasts assume that the UK makes an orderly and agreed exit from the EU at the end of 2020. However, this outlook is balanced between potential overheating on one side and an exceptional adverse shock in the form of a harder-than-assumed Brexit on the other. Further adverse risks are posed by the possibility of changes to the international tax environment; an escalation of protectionist measures; the onset of a cyclical downturn in major trading partners; and adverse financial developments (including those arising from Italy).

Efforts to turn around a large budget deficit were successful, but debt remains high. The Government's debt burden is on a downward path as a share of national income, creditworthiness has improved, and the budget balance appears to be close to a balanced position when the effects of the cycle are accounted for. Notwithstanding the efforts by successive governments to improve the underlying balance up to 2015—with little progress since then—Ireland's net debt ratio remains the fifth highest in the OECD, when measured appropriately. Reflecting this, creditworthiness is still vulnerable to rapid changes.

Corporation tax receipts in Ireland are now a long way from conventional levels and from what the underlying performance of the economy would imply. This report shows that some €3 billion to €6 billion of the €10.4 billion corporate tax receipts received in 2018 could be considered excess (in other words, beyond what would be projected based on the economy's underlying performance and based on historical/international norms). Unlike typical revenue windfalls, these gains might persist for a number of years before reversals could be expected. They also represent a net injection to the

Irish economy, given that foreign-owned multinational enterprises contribute four-fifths of receipts.

With the public finances still in a relatively vulnerable position, the Government has allowed a pattern of spending drift in recent years. When considering an appropriate measure of government policy spending (excluding one-off items and interest costs and recognising the impact of tax measures), the pace of annual spending growth has risen from 4.5 per cent in 2015 to 6.7 per cent in 2018. Spending increases within the year—over and above what was originally budgeted for—have contributed to a faster-than-planned pace of expansion.

The Council has adopted a new "principles-based approach" for assessing the fiscal rules. The European Commission assesses EU fiscal rules based on their own operational approach and based on estimates of the cycle that have tended to be implausible. The Council has therefore adopted a new principles-based approach that makes the assessment simpler and more robust, including using the Department of Finance's alternative measures of the cycle. On this basis, the Medium-Term Objective (MTO) of a structural balance of no less than –0.5 per cent of GDP was achieved in 2018 as the structural balance was estimated to be +0.2 per cent of GDP. However, there was a significant deterioration in the structural balance in 2018 and government spending breached the Expenditure Benchmark limit in 2018. While net spending is forecast to grow below the limit for 2019, this would be at risk in the event of a large spending overrun occurring again.

Despite a favourable upswing in the cycle and the surge in corporation tax receipts, there has been no improvement in the budget balance excluding interest costs since 2015. The rapid pace of growth in non-interest spending has coincided with fast growth in revenues. These are boosted by recent surges in corporation tax receipts, the sustainability of which is unclear.

As much of the recent improvement in revenues may be cyclical or temporary, this suggests that the structural position (looking through these effects) has deteriorated.

The Government needs to make a credible commitment to not use potentially short-lived corporation tax receipts for long-lasting spending increases. One way to credibly commit to saving unexpected—and potentially risky—corporation tax receipts might be to have a fixed rule under which the government sets aside excess receipts above a certain threshold. An option for saving unexpected corporation tax receipts would be to notionally set aside such receipts through in-year allocations to a "Prudence Account" (Box B). Allocations could be based on the excess between actual and forecast corporation tax receipts. At year end, these notional amounts could then be turned over to the rainy day fund (the "National Surplus (Exceptional Contingencies) Reserve Fund") or set aside elsewhere.

In the near term, a Disorderly Brexit poses profound risks to the public finances. If it materialises, the shock to the economy, revenues, and cyclical spending from a disorderly Brexit could mean that debt ratios begin to rise again (Box C). A relatively more benign Brexit might suggest that policy should allow for a small rise in the debt ratio with limited need for more active policy measures to stabilise the debt path. However, a disorderly Brexit would have much more severe consequences for the public finances. Trade-offs here would be far worse and the Government might need to cut spending or raise taxes to prevent debt ratios from rising indefinitely. Should a more adverse shock materialise, the policy response would need to be carefully assessed. However, the Government should in principle act to support the economy in so far as possible during any period of unusually weak demand.

For 2019, the Government should stick to its existing plans as contained in *SPU 2019*. This means that no additional within-year increases should be introduced without offsetting measures. The fiscal stance initially planned for 2019 signalled an expansion in line with the economy's potential and expected inflationary pressures. Yet the Government ramped up spending beyond its original plans. For 2018, it increased spending by €1.3 billion beyond the planned €3.2 billion increase, with much of the overrun arising in health areas. In addition to the higher base level of spending, the budget package of tax and spending measures for 2019 was €0.3 billion more than had been planned. Much of these unplanned increases were masked by the surge in corporation tax receipts, which could prove temporary.

These slippages imply a looser fiscal stance and contribute to further overheating pressures. There are risks that the pattern of upward revisions to spending estimates could be repeated yet again in 2019. The Government should offset any such unplanned spending increases through savings elsewhere. To stem the increasing reliance on corporation tax receipts, any additional unexpected receipts should be allocated to a Prudence Account during the year and then to the rainy day fund or elsewhere (Box B).

For 2020, the Government should be cautious with the budget. This reflects the risks associated with a hard Brexit, the reliance on corporation tax, possibilities of overheating, and the rapid rise in spending between 2017 and 2019. To limit the possibility of rising debt ratios, loss of creditworthiness, and a need for sizeable correction in the public finances, the Government should stick to its plans as set out in *SPU 2019*. This would allow room for further support to be provided in the event of an adverse shock materialising, and would allow fiscal policy to cushion some of its effects.

Sticking to the *SPU 2019* plans, as the Council advises, would entail some €2.8 billion of budgetary measures for 2020. These amounts are already earmarked for increases in public investment, public sector pay, provision to cater for demographic changes, and for assumed tax cuts in 2020. Public investment alone is planned to more than double from its level six years ago (€8 billion in 2020 as compared to €3.5 billion in 2013). This approach would allow for minimal new tax and spending measures on budget day, taking into account previous announcements. If further discretionary measures are to be introduced beyond the *SPU 2019* plans, then the Government should introduce additional revenue-raising measures to preserve overall sustainability or it should scale back planned spending increases and tax cuts elsewhere. A smaller expansion than the €2.8 billion currently implied by *SPU 2019* plans would also be desirable, again, recognising the severe risks posed by Brexit, the reliance on corporation tax receipts, and the risks of further overheating. This could include not using the €0.6 billion that is currently set aside for assumed tax cuts and unallocated spending increases.

The Government's medium-term plans are not credible. The projections laid out in *SPU 2019* show a budget balance that is set to improve, with surpluses increasing in every year. However, the expenditure forecasts underpinning these projections are not credible. They imply an implausible slowdown in spending growth based on technical assumptions, which do not reflect either likely future policies or the future cost of meeting existing commitments. This also feeds through to the pace of growth shown in the Government's official macroeconomic projections.

For 2021–2023, the Government needs to develop a credible medium-term strategy. The Government's medium-term spending projections are based on technical assumptions that are unlikely to reflect actual policy decisions. A better approach

to budgetary planning could be built around four elements. First, it should start with a clear statement of the sustainable growth rate that net policy spending can grow at. Second, multi-year departmental expenditure ceilings should be framed in the context of this upper limit and more realistic forecasts for spending should be developed. Third, the debt ratio target should be restated as a percentage of modified GNI* with a clear timeframe; it should be clarified whether it is a steady-state target or a ceiling; it should have clear staging posts; and it should be lower to reflect Ireland's volatile growth rates. Fourth, the Government needs to gradually wean itself off the reliance on corporation tax receipts that has built up in recent years.

Chapter 1

Assessment of Fiscal Stance

1. Assessment of Fiscal Stance

Key Messages

- The Council assesses that the outlook for Ireland's economy is unusually uncertain. The Government's forecasts assume a scenario in which the UK makes an orderly and agreed exit from the EU at the end of 2020. However, the outlook is balanced between potential domestic overheating on one side and an exceptional adverse shock in the form of a harder-than-assumed Brexit on the other as noted in *SPU 2019*. Other adverse risks are posed by the possibility of changes to the international tax environment; an escalation of protectionist measures; the onset of a cyclical downturn in major trading partners; and adverse financial developments (including those arising from Italy).

- The Government's debt burden is on a downward path as a share of national income, creditworthiness has improved, and the budget balance appears to be close to a balanced position when the effects of the cycle are accounted for. Notwithstanding the efforts by successive governments to get to this position, Ireland's net debt ratio remains the fifth highest in the OECD when measured appropriately, and creditworthiness is still vulnerable to rapid changes.

- Underlying improvements in the primary budget balance have stalled since 2015, despite a favourable upswing in the cycle and the surge in corporation tax receipts. There has been no improvement in the budget balance excluding interest costs: non-interest spending has increased at an accelerating pace of growth. As much of the recent improvement in revenues may be cyclical or temporary, this suggests that the structural position has deteriorated. Importantly, the budget balance is boosted by recent surges in corporation tax receipts, which are not likely to be permanent.

- Part of the reason for the lack of improvement since 2015 has been unplanned spending increases (beyond what was budgeted for). For 2018, the Government raised spending levels by €1.3 billion more than planned compared to *SPU 2018* last April. This was largely due to health overruns.

The Government expected spending overruns to be €1 billion in *Budget 2018*, but post-budget spending turned out to be a further €0.3 billion higher than planned again (in terms of gross voted spending). For 2019, there is a risk of further slippages. Health spending overruns could be repeated (averaging some €0.5 billion in recent years), and provision has again not been made for the Christmas bonus (€0.3 billion).

- New analysis in this report (Box B) suggests that corporation tax receipts in Ireland are now a long way from conventional levels and from what the underlying performance of the economy would imply. It finds that some €3 billion to €6 billion of the €10.4 billion of corporation tax receipts in 2018 could be considered "excess" (i.e., beyond what would be expected and beyond what historical and international norms would suggest). Unlike typical revenue windfalls, these gains might persist for a number of years before reversals could be expected. Yet the receipts remain volatile and vulnerable to change, possibly in line with the global business cycle. They also represent a net injection to the Irish economy, given that foreign-owned multinational enterprises contribute four-fifths of receipts. This is different from conventional tax receipts on domestic incomes, which are available to the government yet have a counterpart in taxes paid out of domestic activity. The Council therefore advises that further surprises in corporation tax receipts should not be used to finance additional government spending. This would protect the public finances from being vulnerable to future reversals and it would avoid adding further stimulus to the economy. The Government should also seek to gradually reduce the extent to which spending programmes are dependent on these receipts.

- One way to credibly commit to saving unexpected—and potentially risky—corporation tax receipts might be to have a fixed rule under which the government sets aside excess receipts above a certain threshold. An option would be to notionally set aside such receipts through in-year allocations to a "Prudence Account". Allocations could be based on the excess between actual and forecast corporation tax receipts. At year end, these notional amounts could then be turned over to the rainy day fund (the "National Surplus (Exceptional Contingencies) Reserve Fund") or used to reduce debt.

- For 2019, the Government should stick to its existing plans. This means that no additional within-year increases should be introduced without offsetting measures. To stem the increasing reliance on corporation tax receipts, any additional unexpected receipts should be allocated to a Prudence Account during the year and then to the rainy day fund or elsewhere (Box B).

- For 2020, the Government should be prudent with the budget. This reflects the risks associated with a hard Brexit, the reliance on corporation tax, possibilities of overheating, and the rapid rise in spending from 2017–2019. The risks posed by a disorderly Brexit are particularly severe (Box C shows how it could lead to a return to rising debt ratios). To limit the possibility of rising debt ratios, loss of creditworthiness, and a need for sizeable correction in the public finances, the Government should postpone any additional discretionary increases in expenditure or tax cuts beyond those already provided for in *SPU 2019*. This would allow for further support to be provided in the event of an adverse shock materialising, and would allow fiscal policy to cushion some of its effects. A smaller expansion than the €2.8 billion currently implied by *SPU 2019* would also be desirable, again, recognising risks posed by Brexit, the reliance on corporation tax receipts, and the risks of further overheating. This could include not using the €0.6 billion currently set aside for tax cuts and unallocated spending increases.

- For 2021–2023, the Government needs to develop a credible medium-term strategy. The Government's medium-term projections are based on technical assumptions that ignore likely policy decisions. A better approach could be built around four elements. First, it should start with a clear statement of the sustainable growth rate that net policy spending can grow at. Second, multi-year departmental expenditure ceilings should be framed in the context of this upper limit and more realistic forecasts for spending should be developed. Third, the debt ratio target should be restated as a percentage of modified GNI* with a clear timeframe; it should be clarified whether it is a steady-state target or a ceiling; it should have clear staging posts; and it should be lower to reflect Ireland's volatile growth rates. Fourth, the Government needs to gradually wean itself off the reliance on corporation tax receipts that has built up in recent years.

Table 1.1: Summary Table

% GNI* unless stated, general government basis (based on *SPU 2019* forecasts)

Figures in grey indicate that the Council assesses these forecasts as largely the result of technical assumptions about expenditure, which are unrealistic (see Chapter 3).

	2017	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*
General Government							
Revenue [1]	42.2	42.5	42.6	42.0	42.0	42.1	42.2
Expenditure [1]	42.6	42.5	42.3	41.4	40.8	40.4	40.0
Balance [1]	-0.4	0.0	0.3	0.6	1.2	1.7	2.2
Interest Expenditure	3.2	2.7	2.4	2.0	1.9	1.9	1.9
Primary Expenditure [1]	39.4	39.8	40.0	39.4	39.0	38.5	38.0
Primary Balance [1]	2.8	2.7	2.7	2.6	3.0	3.6	4.2
Revenue Growth (%) [1]	4.9	6.7	5.2	3.4	3.8	4.2	4.5
Primary Expenditure Growth (%) [1]	3.4	7.2	5.3	3.3	2.8	2.7	2.8
Real Net Policy Spending Growth (%) [2]	4.5	5.0	3.4	1.4	0.9	-0.7	-0.1
Structural Balance (% GDP) [3]	1.3	0.2	0.1	-0.1	0.2	0.2	0.4
Structural Primary Balance (% GDP) [3]	3.3	1.9	1.5	1.1	1.3	1.4	1.5
Change in Structural Primary Balance (p.p.) [3]	0.7	-1.4	-0.4	-0.4	0.2	0.1	0.2
Debt							
Gross Debt (€bn)	201.4	206.2	205.1	196.7	203.6	203.5	206.0
Cash & Liquid Assets (€bn)	25.5	28.6	27.8	19.2	24.4	23.3	24.4
Net Debt (€bn)	175.8	177.6	177.3	177.5	179.2	180.2	181.6
Equity and Investment Fund Shares (€bn) [4]	42.6	37.0					
Gross Debt Ratio (% GNI*)	111.1	107.3	101.7	93.0	92.7	89.1	86.7
Net Debt Ratio (% GNI*)	97.1	92.4	87.9	83.9	81.6	78.9	76.4
Output							
Real GDP Growth (% Change)	7.2	6.7	3.9	3.3	2.4	2.5	2.6
Potential Output (% Change) [3]	7.4	4.1	3.1	2.6	2.2	2.0	2.2
Output Gap (%) [3]	-2.9	-0.5	0.2	0.8	1.0	1.4	1.8
Nominal GDP Growth (% Change)	7.6	8.3	5.5	5.1	4.1	4.1	4.3
Nominal GNI* Growth (% Change)	3.0	6.1	4.9	4.9	3.9	3.9	4.1
Nominal GDP Level (€bn)	294.1	318.5	335.8	352.9	367.3	382.5	399.1
Nominal GNI* Level (€bn)	181.2	192.2	201.7	211.5	219.7	228.3	237.6
Miscellaneous							
Expenditure One-Offs (€m) [1]	178	213	0	0	0	0	0
Revenue One-Offs (€m) [1]	0	350	0	0	0	0	0
Net One-Offs (€m) [1]	-178	137	0	0	0	0	0

Sources: CSO; Department of Finance; and internal IFAC calculations.

[1] One-off/temporary measures are excluded to obtain the underlying fiscal position and are those assessed as applicable by the Council. These comprise water charge refunds for 2017 (€178 million), €350 million of corporation tax received in 2018, and €213 million for a settlement of pay arrears for medical consultants.

[2] This measure is outlined in Box A (IFAC, 2018e). It represents total general government expenditure less interest costs and less estimated cyclical unemployment benefits, while discretionary revenue measures are also accounted for (that is, discretionary revenue-reducing measures raise the measured expenditure growth).

[3] These estimates are based on the Department of Finance's preferred GDP-based alternative estimates of the output gap as published in *SPU 2019*.

[4] This comprises the value of government holdings in equity (shares and other equity) and investment fund shares (F5), including the value of bank shares held by the State.

1.1 Introduction

The 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 stance.

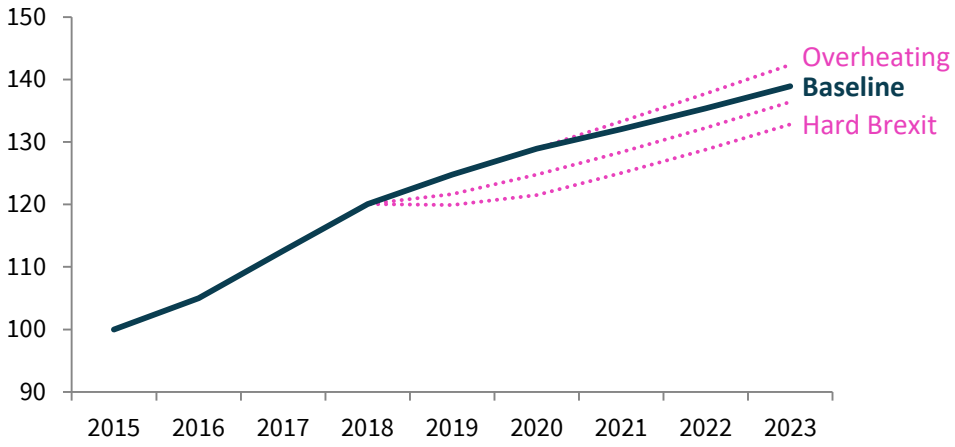
This chapter draws on analysis in the rest of the report in assessing the fiscal stance in *SPU 2019*. The Council's assessment is informed by: (1) an economic assessment that takes into account the state of the public finances, the stage of the economic cycle, and the growth prospects for the economy; and (2) the extent of compliance with the fiscal rules.

1.2 The Macroeconomic Context

Domestic Economic Activity

Having recovered in the past five years from a deep recession, the current outlook for Ireland's economy is now unusually uncertain. The Government's forecasts assume a scenario in which the UK makes an orderly and agreed exit from the EU. However, this outlook is balanced between potential overheating on one side and an exceptional adverse shock posed by Brexit on the other as noted in *SPU 2019.* Figure 1.1 examines the uncertain outlook based on recent scenarios from other bodies and based on an illustrative assumption for overheating.

Figure 1.1: The Economic Outlook is Exceptionally Uncertain
Index (2015=100), real GDP volumes



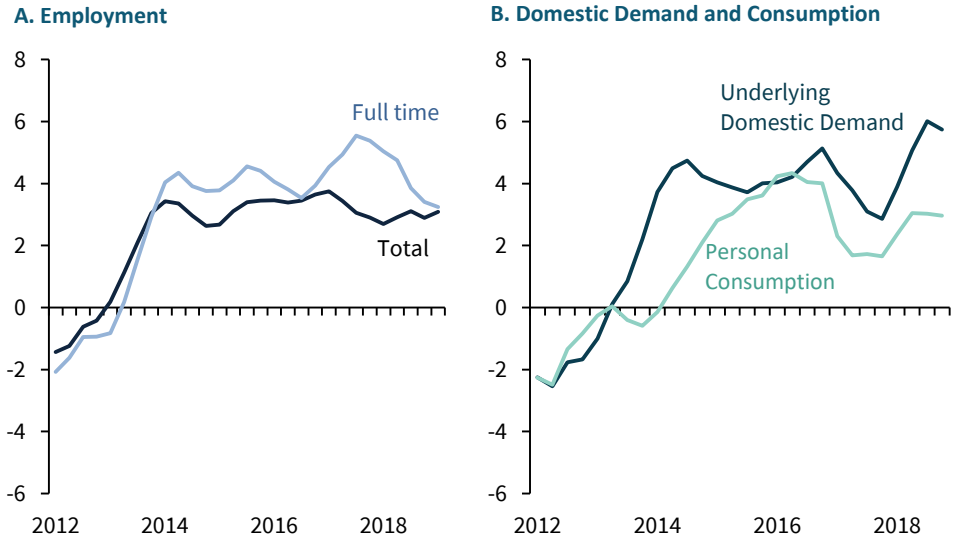
Source: Internal IFAC calculations; CSO; Central Bank of Ireland; and ESRI.
Notes: The "Overheating" scenario is one in which growth does not slow from its pace in the baseline after 2020. The two "Hard Brexit" scenarios shown are based on the ESRI (Bergin et al., 2019) and Central Bank of Ireland (2019) scenarios for a disorderly Brexit.

Short-term indicators of the domestic economy's performance highlight the pace of the cyclical turnaround since about 2013. Figure 1.2 shows that year-on-year growth rates for underlying domestic demand, employment (both full-time and total), and personal consumption have been rapid. Employment growth has averaged close to 3 per cent year-on-year and is still growing at this pace. Full-time employment has moderated a little having grown at an even faster pace. Other useful indicators of domestic activity such as Modified Gross National Income (GNI*) and Domestic Gross Value Added (GVA) also reinforce the strength of the rebound in recent years.[1]

[1]Modified GNI* is a better measure of national income growth than GDP and GNP, but it is currently only available in nominal terms and only becomes available for the previous year when the National Accounts are published (CSO, 2018). Domestic GVA is a measure of the domestic economy that strips out the activities of sectors dominated by foreign-owned multinational enterprises.

Figure 1.2: Indicators of Domestic Economic Activity

% change (year-on-year), four-quarter moving averages



Sources: CSO; and internal Irish Fiscal Advisory Council calculations.
Note: Figures show four-quarter moving averages. Underlying Domestic Demand strips out intangibles and aircraft investment in full as these are—in the main—imported, with little impact on real GDP aside from subsequent use of assets.

Though growth is expected to moderate in coming years, the Department of Finance's baseline forecasts for these indicators nevertheless suggest continued expansion (Table 1.2).

Table 1.2: Official Baseline Forecasts for the Irish Economy

% change year-on-year, volumes unless stated

	2019	2020	2021	2022	2023
Underlying Domestic Demand	3.8	3.1	2.5	2.7	2.9
Personal Consumption	2.7	2.5	2.1	2.3	2.5
Employment	2.2	2.1	1.5	1.6	1.7
Modified GNI* (nominal)	4.9	4.9	3.9	3.9	4.1
Output Gap (% potential) [1]	0.2	0.8	1.0	1.4	1.8

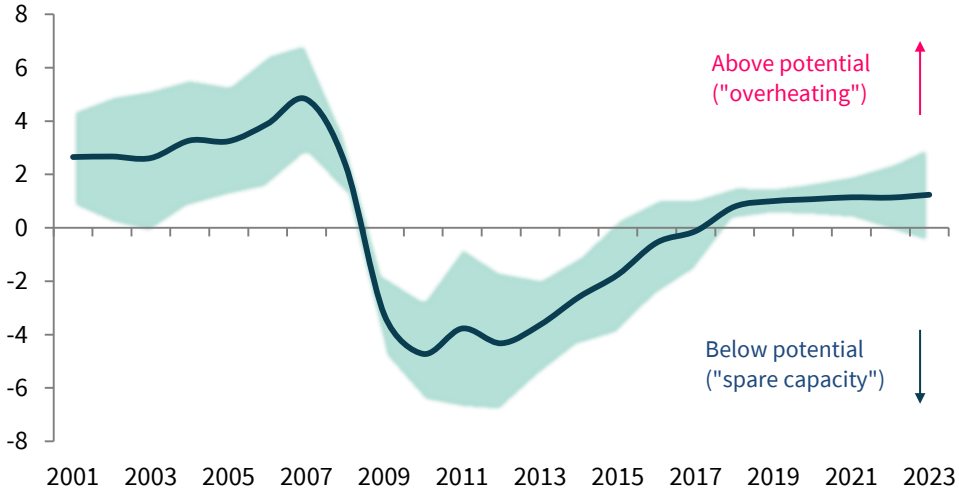
Sources: Department of Finance; and internal IFAC calculations.
[1] This is the Department of Finance's preferred measure of the output gap, which is based on GDP.

The Cyclical Position

Best-available estimates of where the economy is relative to "normal" levels of activity (its potential) suggest that the economy is currently operating at or above its potential in 2019 and is expected to continue to run somewhat above potential for the period 2020–2023 (Figure 1.3). This modest degree of overheating may be sustainable for some time, but a more significant overheating would carry greater risks. In the absence of Brexit-related effects, it is likely that the Irish economy would be forecast to be on a path to more significant overheating.

Figure 1.3: The Economy is Forecast to Overheat

% potential, output gap (gap between actual and potential output)



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: The figure shows a range of output gap estimates (the shading) and the mid-range estimates (the line). Estimates are produced using a variety of methods based on the Council's models and Department forecasts. Given the distortions to standard measures like GDP and GNP and the relative importance of domestic activity to fiscal outcomes, the range currently focuses on measures produced by using measures of domestic economic activity, including Domestic GVA (see Casey, 2018).

It is important to note that macroeconomic forecasts of demand tend to be constructed in such a way as to assume that the economy reverts to its equilibrium over the medium term. This means that the Department's forecasts could well understate the degree of overheating possible over the medium-term. Chapter 2 examines a series of plausible alternative scenarios where the output gap becomes more positive if net inward migration continues to rise, consistent with overheating, and if credit and prices pressures are less subdued than the Department expects.

Risks to the Outlook

While the outlook remains reasonably strong, major risks are evident in both directions and a slowdown is inevitable.

Overheating could be much more severe in coming years if the pace of growth in the domestic economy does not moderate as expected. The Department of Finance's baseline forecasts already assume that the economy will be above its potential this year and that overheating will accentuate over the coming years. It is possible that this overheating could be further fuelled by a necessary and welcome rise in housing construction: one that is faster than the Department currently expects (unless space is made in the economy to accommodate this additional activity). For comparison, annual housing completions increased by an average of 9,000 units per

annum at peak over 2003–2006, whereas the Department forecasts increases of 6,000 per annum (2019–2023).

Based on Ireland's previous experiences as a member of the Euro Area, overheating could coincide with rising wage and price pressures, rapidly rising debt, a deterioration in Ireland's current account balance, and/or faster inflows of labour from abroad (Box A). It is possible that new factors that coincide with overheating could include inflows of foreign capital into the Irish construction and property sectors and the injection of foreign-company sourced Corporation Tax receipts into domestic demand. Importantly, any above-potential growth in incomes and government revenues during this period would not be expected to be sustainable.

Adverse risks also confront the outlook for the economy, chief among them a hard Brexit. Estimates of the medium-term impacts on Ireland's real output are 1.1 per cent to 2.8 per cent for a so-called "soft Brexit" and 3.1 per cent to 7 per cent for a "hard Brexit" according to various studies (IFAC, 2018e). Other risks include changes to the international tax environment; the possibility that protectionist measures adopted by the US and other nations escalate further, thus dampening global trade; the possible onset of a wider cyclical downturn in Ireland's major trading partners; and adverse financial developments (including related to Italy).

Box A: Sustainable Growth

"Sustainable growth" in economic activity is a challenging concept to pin down. It is typically defined as an economy's medium-term potential output growth, but this definition is fraught with measurement problems and potential output growth rates may not adequately reflect an economy's sustainable pace of growth. In light of the importance of such a concept to fiscal policy and to identify an appropriate pace at which net Government spending should grow over the medium term (absent policy changes), this Box explores the concept of sustainable growth more closely.

A key question when discerning the sustainable growth rate of an economy is the basis on which this is founded. There are three standard approaches: (1) those based on purely statistical approaches; (2) those based on Phillips curve concepts that identify potential output with reference to states where inflationary pressures are non-existent or unchanging; and (3) production function approaches that appeal to Phillips curve concepts as well as to the growth rates that would prevail given full usage of factor inputs like capital and labour and the efficiency with which they can be combined (total factor productivity).

Each of these definitions is subject to a number of overlapping shortcomings, which can weaken their value in terms of determining measures of sustainable output growth. First, small and open economies that are converging on more advanced economies' level of infrastructure and technology may experience potential output growth rates that prove to be temporarily higher than the stable growth path that they eventually tend toward. Second,

unsustainable booms in investment (such as that which happened in Ireland in the mid-2000s) can contribute to inflated measures of potential output growth if the definition of potential is determined by the full use of capital in the economy (as in the Commonly Agreed Methodology). Third, credit expansions can also lead to faster growth rates that are above the sustainable rate for a prolonged period of time and can inflate measures of potential output if the financial cycle is not adequately controlled for. Fourth, statistical tools typically used to identify trend or potential growth rates can exhibit tendencies toward "end-point bias" meaning that the most recent actual or forecast growth rates may exert undue influence on the potential growth rates being estimated (leading to procyclical bias: an especially dangerous feature for the purposes of determining appropriate fiscal policy). Fifth, forecast bias might further aggravate end-point bias. This can happen if, for example, it is assumed that recent momentum in the economy will continue over the forecast horizon. Sixth, a serious issue with small open economies with mobile factors of production is the possibility of multiple equilibria (multiple states in which the economy may stabilise).

A better definition of sustainable output growth for fiscal policy

For the purposes of assessing potential output in a monetary union a different conceptualisation may be warranted, especially for the purpose of assessing fiscal sustainability. A monetary union like the Euro Area may have different macroeconomic dynamics relevant for potential output, given the presence of a fixed exchange rate and the openness to trade—both of which are important for price changes—and given the increased mobility of capital and labour.

With this in mind, the Network of EU Independent Fiscal Institutions (2018) has developed a useful working definition that considers an economy's potential as the:

> *maximum level of output sustainable in the medium to long run, where "sustainable" implies that output, when at its potential, is not unduly influenced in any particular direction by imbalances in the economy, be they external, internal or financial.*

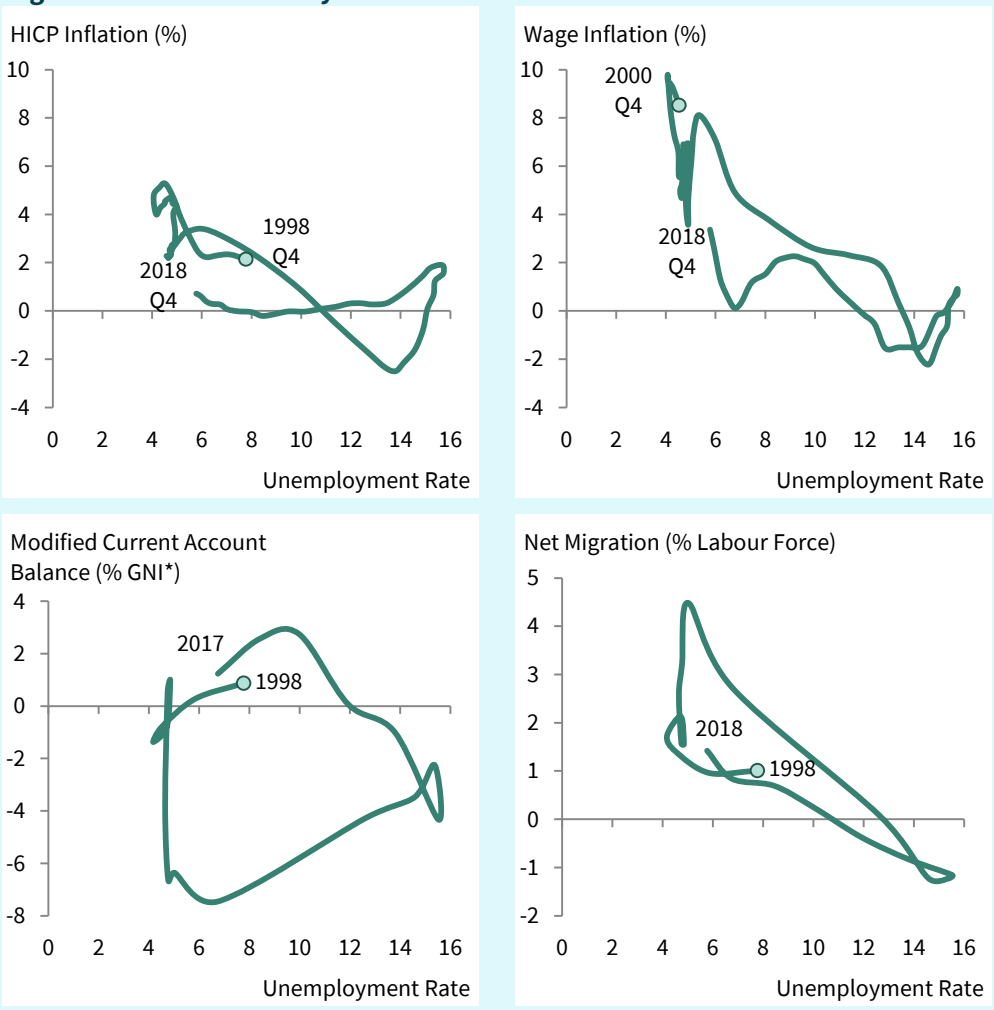
This working definition of potential output has certain advantages over alternative definitions. First, it recognises that standard approaches may not adequately incorporate important information. This could relate to absorption cycles, the financial cycle, and/or any other temporary phenomena that inflate or depress growth conditions but which are not captured sufficiently by production functions or other standard approaches. Second, this definition accepts that multiple disequilibria can coexist in an economy. In other words, a boom in commercial property spurred by external capital might inflate potential output growth, but this might be offset by weaker-than-normal domestic credit conditions. It thereby forces the user to consider current economic conditions more broadly, recognising that there are multiple drivers of overall economic imbalances that can distort current output growth relative to its potential. Third, it moves beyond purely inflation-dependent concepts of potential output, which may be less useful outside of a central-banking context and for small open economies, especially where migration flows, for instance, can dampen the relationship between labour usage and inflationary pressures.

One motivation for moving to beyond-inflation concepts of potential output is given by the pre-crisis experiences in Ireland and Spain (Cuerpo, Cuevas, and Quilis, 2018), among others. While it is now widely accepted that the run-up to the crisis was characterised by highly unsustainable growth rates, this was not reflected to a similar extent in corresponding price pressures. One explanation for this is that—in a monetary union—other channels can matter more, including the current account balance (a measure of an economy's net exports, income and transfer flows with the rest of the world) and net migration flows. Figure A.1 highlights this feature by plotting unemployment rates against general inflation and hourly wages, but also against the current account balance and net migration. In Ireland's case, the relationship between unemployment rates and general HICP inflation has been relatively muted since 1998. Wage inflation—though high in the mid-2000s—was not especially different to earlier

rates (in part due to convergence). This meant that, as the economy strengthened prior to the crisis, the usual expectation underpinning many definitions of potential output that price pressures would emerge proved incorrect. By comparison, accumulating imbalances were clearly evident from a deepening current account deficit, and growing net migration inflows.

The failure of standard definitions of potential output to capture unsustainable growth developments prior to the last crisis is one reason why the Council favours broader assessments of sustainable growth like that formulated by the Network of EU Independent Fiscal Institutions. It is also one reason why the Council favours a "suite of models" approach to estimating potential output rather than reliance on any single estimation approach. And it is a reason why the Council emphasises the importance of a "modular" approach to assessing the economy. This involves a systematic examination of a range of economic indicators for signs of economic imbalances including in the labour market; housing and investment; credit; and external balances.

Figure A.1: How the Cycle Relates to Prices and External Channels



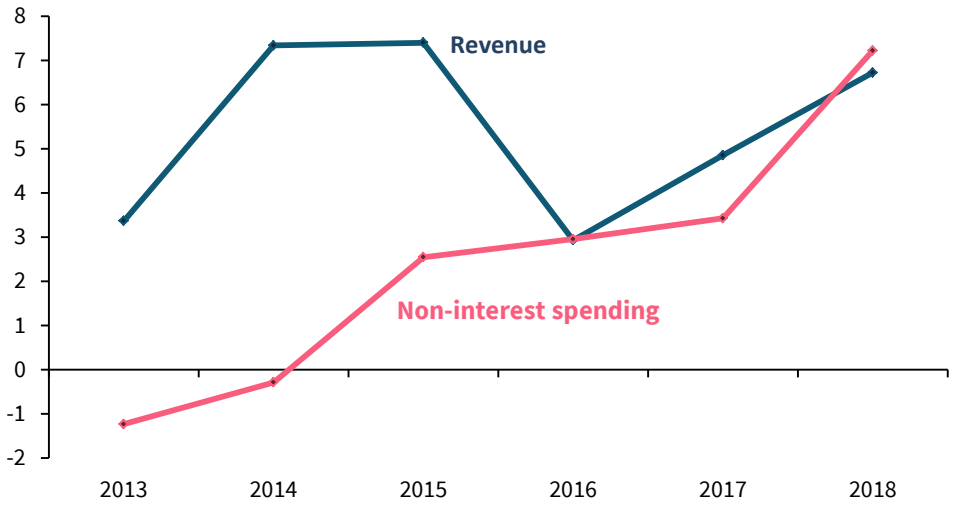
Sources: CSO, internal IFAC calculations.
Notes: Wage inflation is hourly wage inflation and is based on the National Accounts data for "compensation of total employees", combined with the LFS definitions of employees and average weekly hours.

1.3 The Recent Fiscal Context

A useful—though imperfect—measure of the budget stance is the balance excluding interest costs (the "primary balance") and one-offs.[2] On this measure, progress toward improving the budgetary position has stalled since 2015. This is despite a number of factors working in the government's favour including a strong cyclical recovery boosting revenues and reducing unemployment-related expenditure and surges in corporation tax receipts.

These favourable factors should have resulted in a stronger improvement in the underlying budgetary position. Instead, stronger cyclical tax revenues, surging corporation tax receipts, and interest cost savings have been offset by faster-than-planned increases in government spending. Government spending (excluding spending on interest payments) has been accelerating in recent years and in 2018 exceeded the strong growth rate of revenue (Figure 1.4).

Figure 1.4: Spending is Rising as Fast as Strong Revenues
% change year-on-year in revenue and non-interest spending



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Data are on a general government basis and are adjusted to exclude one-offs as in Table 1.1.

The Department of Finance tends to refer to spending growth in terms of central government gross voted cash spending. This measure of spending is less robust than general government measures. The gross voted measure ignores close to one quarter (almost €20 billion) of total spending. About half of this is non-voted

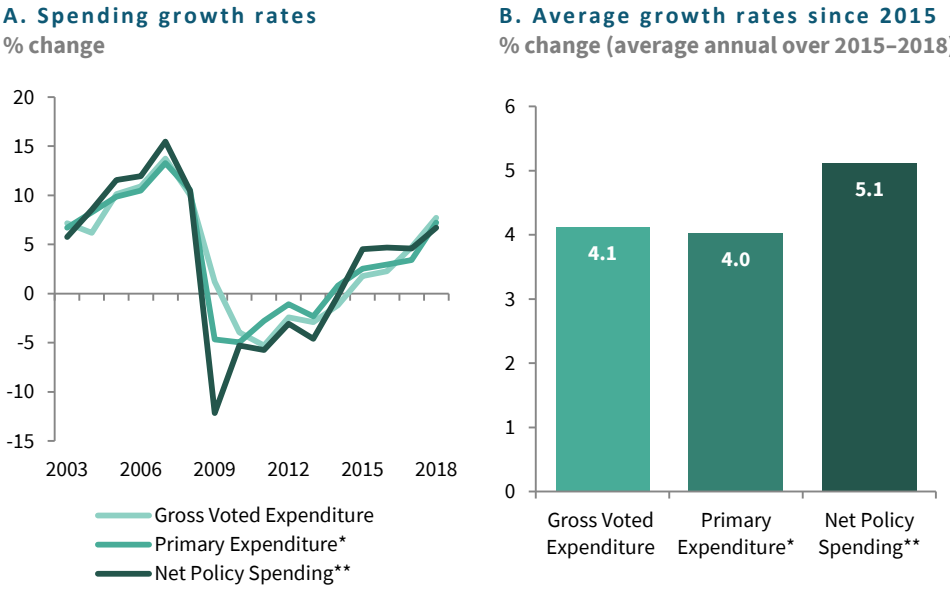
[2] Removing interest costs is useful when these: (i) reflect past decisions (i.e., the debt stock) rather than current policies; (ii) are volatile or unpredictable; (iii) are important from an economic perspective (in Ireland's case, interest payments on government debt securities traditionally flow more to non-residents than residents); and (iv) might be overstated in times of high-inflation compared to low-inflation environments (given prevailing interest rates).

spending in parts of central government, with the rest split between spending by various non-commercial State bodies and by local government.

Despite the differences in coverage, the gross voted measure has risen at a similar pace (4.1 per cent per annum on average since 2015) to primary expenditure in recent years (Figure 1.5). Primary expenditure growth has risen from a pace of growth of 2.5 per cent in 2015 to 7.2 per cent in 2018.

However, governments can also expand fiscal policy through tax cuts. And tax cuts can, in effect, be considered somewhat equivalent to spending increases when it comes to using fiscal resources. If the impact of discretionary tax changes since 2015 are considered together with spending changes, then the net growth rate is faster again at an average of 5.1 per cent per annum (albeit that recent budgets have had large revenue-raising measures).[3]

Figure 1.5: Government Spending Growth is Rising



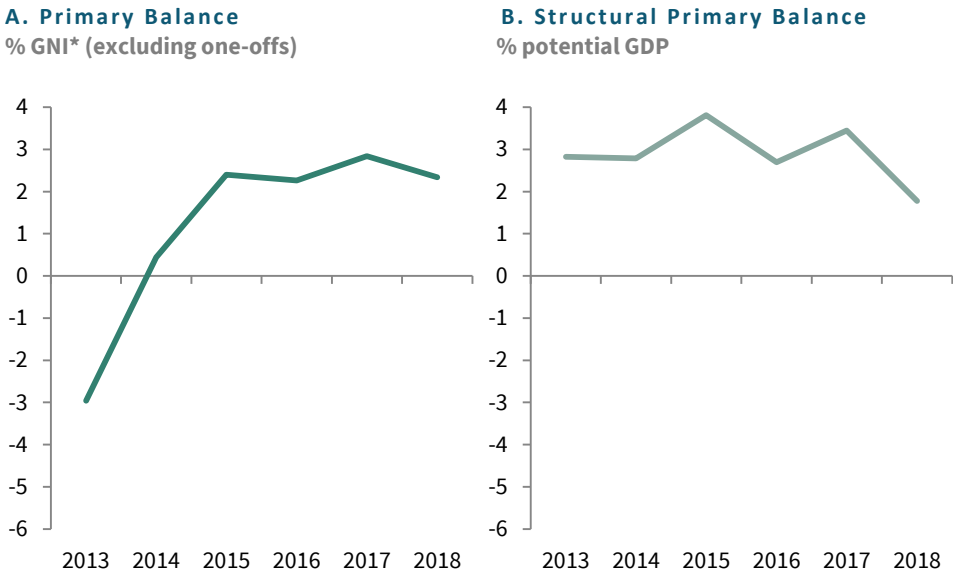
Sources: CSO; Department of Finance; and internal IFAC calculations.
Notes: * Primary Expenditure is total general government expenditure less interest costs. ** Net Policy Spending is a measure of spending growth that tries to get a truer reflection of what is under the control of governments and to allow for offsetting tax changes (Box A, IFAC 2018e). Net Policy Spending = total general government expenditure less interest, one-offs, cyclical unemployment benefits, and discretionary revenue measures. Unemployment benefits are calculated on the assumption of an unchanged natural rate of unemployment of 5.5 per cent.

The budget balance excluding interest costs (the primary balance) and excluding various one-off or temporary items has therefore been broadly unchanged over the same period (Figure 1.6). Recognising the increased revenues that are likely to have

[3] Note that discretionary tax measures here include the impact of non-indexation.

arisen from the cyclical upswing as well as from surging corporation tax receipts, the structural primary budget balance is likely to have worsened over the last three years, particularly in 2018. This is reflected in Figure 1.6B where standard adjustments for the cycle are made and where the Department's preferred alternative output gap estimates are used.[4]

Figure 1.6: No Improvement in Underlying Balance Since 2015

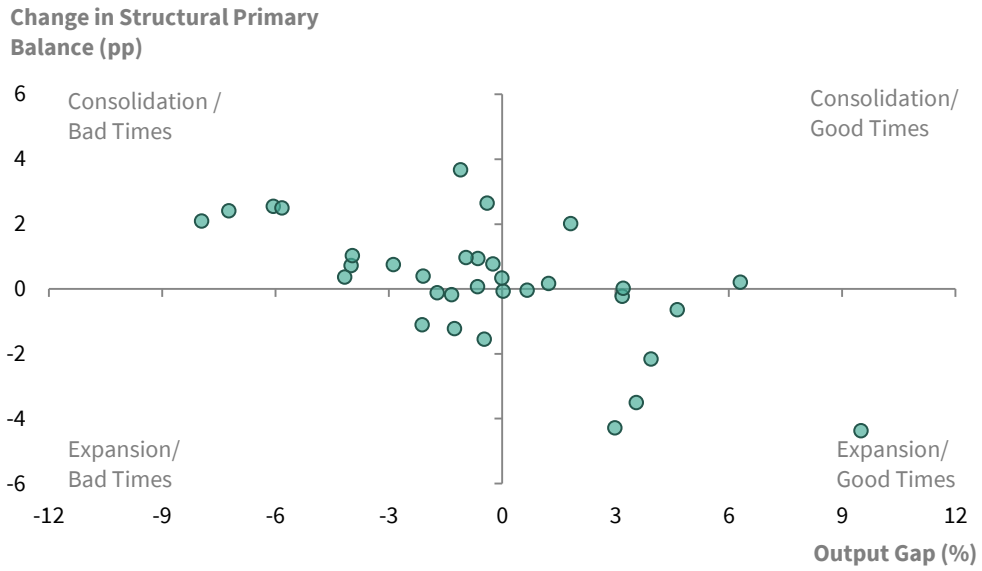


Sources: CSO; Department of Finance; internal IFAC calculations.
Notes: The primary balance is the general government balance less interest costs and it excludes one-offs assessed by the Council (e.g., see Table 1.1). The structural primary balance is the same but with a correction for the effects of the cycle. It uses the Department's preferred GDP-based output gap to measure the cyclical position under an assumed semi-elasticity of 0.588.

Ireland has a poor track record in terms of running a countercyclical fiscal policy. Instead, budgets have tended to follow the cycle: expanding in good times and contracting in bad times. This has stoked pressures in the economy at times when it is overheating and has exacerbated subsequent downturns. Specifically, it means that measures to increase spending or reduce taxation in good times have needed to be reversed in bad times. Figure 1.7 plots the Government's structural primary balance (the budget balance excluding interest costs, one-off items and cyclical effects) against the cyclical position of the economy. It shows that there are few occasions when policy has been unambiguously countercyclical (i.e., expansionary in bad times or contractionary in good times).

[4] A budgetary semi-elasticity of 0.588 for how the deficit responds to changes in the output gap is used as estimated in IFAC Analytical Note 12.

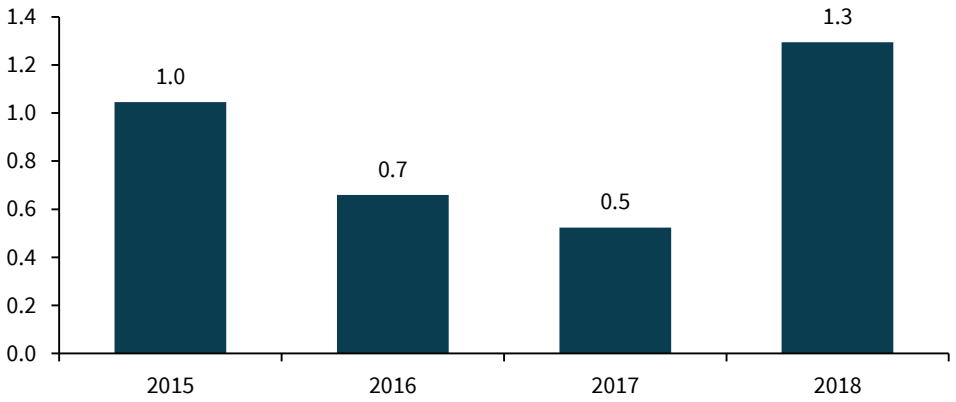
Figure 1.7 Irish Fiscal Policy has been Routinely Procyclical (1986–2018)



Sources: Department of Finance; CSO; internal IFAC calculations.
Notes: The figure shows the change in the structural primary balance and the output gap (using the Department's preferred output gap estimates for 2000–2018 and the Council's own estimates for earlier years in both cases). Observations in the top-left and bottom-right quadrants can be said to be consistent with procyclical fiscal policy.

Recent years have seen a recurring pattern of within-year increases in spending as the cycle has recovered (Figure 1.8). Such within-year changes have also demonstrated a procyclical bias in the past.

Figure 1.8: Within-Year Spending Increases in Recent Years



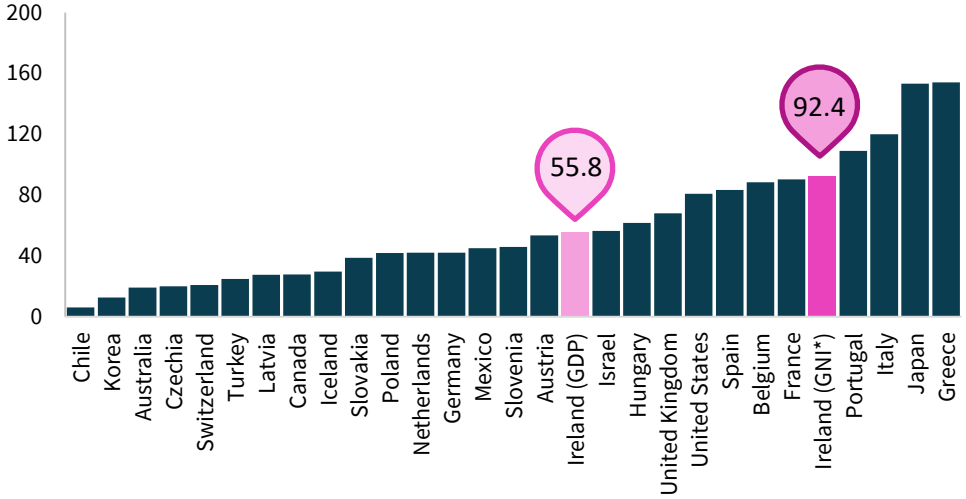
Sources: Department of Finance; and internal IFAC calculations.
Note: Within-year spending increases are based on gross voted spending outturns as compared to earlier vintages of estimates (*Budget 2015* for 2015; *Budget 2016* for 2016; *Budget 2017* for 2017; and *SPU 2018* for 2018, due to the reclassification of spending on water services into the Department of Housing, having previously been funded by a mix of local government, non-voted spending, and Irish Water borrowings).

Against this backdrop of poor budgetary management, Ireland's debt burden remains high. When Ireland's end-2018 net debt ratio is considered—a broad

measure of government debt less liquid assets—the burden stands out as the fifth highest among OECD countries (Figure 1.9). While the debt ratio is falling steadily (Figure 1.10), it is likely to remain high by historical and international standards in coming years.

Figure 1.9: The Largest Net Debt Ratios in OECD Countries

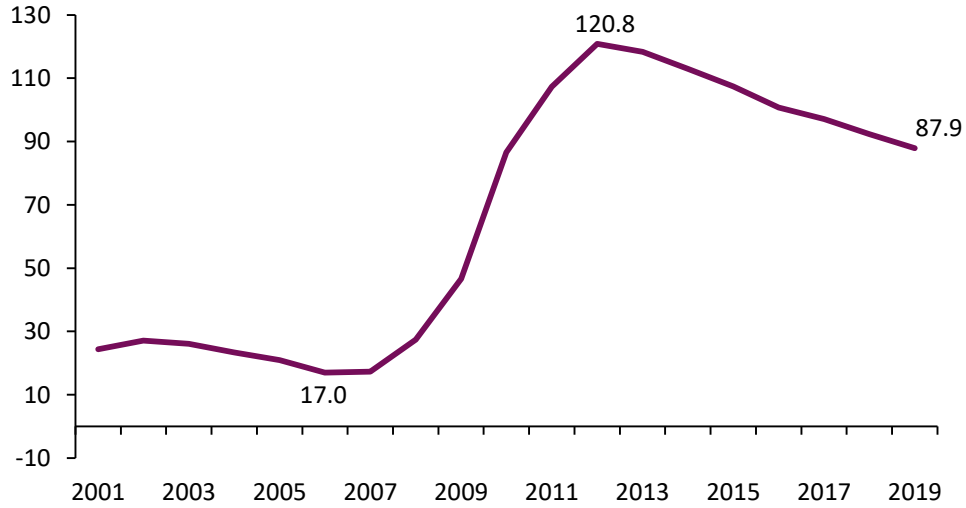
% GDP at end-2018 (% GNI* for Ireland), net general government debt



Sources: CSO; Eurostat; IMF World Economic Outlook (April 2019); and internal IFAC calculations.
Note: CSO data are used for Ireland; IMF data for Turkey, Switzerland, Canada, Korea, Iceland, Mexico, Israel, US and Japan, while Eurostat data are used for remaining countries.

Figure 1.10: Ireland's Net Debt Burden

% GNI*, general government basis



Sources: CSO; Department of Finance; and internal IFAC calculations.

Box B: Dealing with the Economic and Fiscal Impact of Surging Corporation Tax Receipts

The Council has made repeated calls for caution in terms of how the recent surge in corporation tax receipts is treated by the Government. Corporation tax receipts more than doubled since 2014. Receipts rose to a record 18.7 per cent share of total tax receipts last year from just 10.3 per cent in 2011. This share is also high relative to international norms (Chapter 3 shows equivalent shares for OECD countries).

The concentration of corporation tax receipts is a further concern. Half comes from the top ten corporate groups and close to four-fifths of annual receipts are attributable to foreign-owned multinational enterprises. As an indication of its relative importance, the €10.4 billion of corporation tax raised last year is similar, for example, to the Government spend on Education and Skills.

The fact that a large share of corporation tax receipts is raised from foreign rather than domestic income sources means that much of this revenue is a net stimulus to the economy from fiscal policy: funds available to the government but without a counterpart in terms of taxes paid out of domestic activity.

How large is the surge in corporation tax receipts?

The first question to ask is just how much have corporation tax receipts surged? Another way of framing this is to ask, "how far have receipts departed from predicted levels or from normal levels?" We can examine a number of approaches.

Model projections: One approach is to take standard forecasting methods and apply these to levels that prevailed at an earlier period to see how much actual receipts have diverged from projected values. Figure B.1 adopts this approach drawing on the forecasting models outlined in Casey and Hannon (2016). Using standard parameters for linking corporation tax changes to economic growth and taking 2011 as a base year, it suggests that some €3 billion to €6 billion of annual receipts as of 2018 are unexplained by the performance of the domestic economy, around 30–60 per cent of the total in 2018 or 1½ to 3 per cent of GNI*.

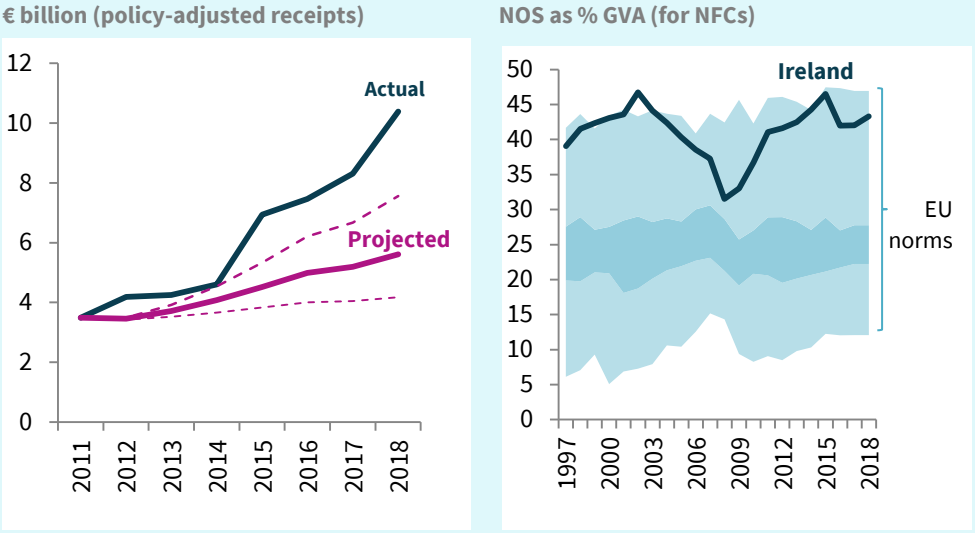
Official Forecasts: We can also consider the predicted performance of corporation tax versus where it actually is right now. In this respect, the earliest set of forecasts available for 2018 corporation tax receipts come from *Budget 2015.* Forecasts at that time suggested corporation tax receipts would be close to €5 billion for 2018, yet turned out to be twice that level at €10.4 billion. Taking this approach implies an excess performance in annual receipts of €5.4 billion (2.8 per cent GNI*): the upper range that we consider in our first exercise.

Historical Norms: If one were to assume that corporation tax receipts returned to their average long-run share of total receipts (12.5 per cent, 1990–2017), this would imply that 2018 receipts are €3½ billion (1.8 per cent GNI*) above expected levels.

International Norms: Another way to examine the exceptional performance of corporation tax receipts is to look at international norms. One way to do this is to consider the taxable base and how large it has become relative to wider economic activity. Comparing the closest equivalent measure of taxable corporate profits (Net Operating Surplus) against Gross Valued Added from the sector and focusing on non-financial corporations, we can see that Ireland's taxable base has departed from the middle 50 per cent of EU countries shares and is at the upper end of the all-Member State range. If Ireland were to return to the 75th percentile (i.e., the top of the middle 50 per cent range), then this would imply excess receipts in 2018 of €3.4 to €4.3 billion (1.8 to 2.2 per cent of GNI*).[5]

[5] This assumes an average effective tax rate of 10–12.5 per cent.

Figure B.1: Corporation Tax Receipts Unexplained by Underlying Economy and Profits are Exceptional



Sources: Department of Finance; Eurostat; and internal IFAC workings.
Notes: Panel A takes the best-performing approach to modelling corporation tax from Casey and Hannon (2016); it forecasts "Projected" corporation tax receipts adjusted for policy measures from 2012 onwards; and it uses the underlying economic driver as growth rates for the domestic economy (domestic GVA and nominal modified GNI*) rather than GDP. A 95 per cent confidence interval is shown with dashed lines around the Projected level. These estimates can be interpreted as the level of corporation tax receipts that would have been expected to prevail had distortions related to foreign-owned multinational enterprises, which also showed up in GDP, not contributed to a higher tax base from 2012. Panel B looks at Net Operating Surplus (NOS) as a share of Gross Value Added (GVA) for Non-Financial Corporations (NFCs) in Ireland. It gives a sense of the profits compared to total value added to identify whether or not the current levels observed in Ireland are operating above EU norms. Shaded bands represent the EU min to max range and the middle 50 per cent of EU countries.

What are the risks?

The fact that Ireland is receiving higher inflows of foreign capital and higher tax receipts is something to be welcomed from a public finance perspective and it highlights the fact that Ireland continues to be considered an attractive destination for global activities.

The risks relate to how these receipts are used by Irish governments and in terms of correctly interpreting their impacts on the economy. An obvious risk is that these receipts might reverse in coming years. This could be due to idiosyncratic reasons (like changes in the profitability of firms paying receipts or their individual location decisions) or due to changes in the international tax environment that make Ireland less attractive for companies. Corporation tax receipts are also statistically the most volatile and unpredictable of the four main taxes (Box H). These features warrant caution with how receipts are used, even if it does not imply risks of a permanent reduction in average medium-term receipts. If a government relies too much on these receipts for recurrent spending, then the risk is that any inevitable reversal would imply weaker budget balances, absent any policy response.

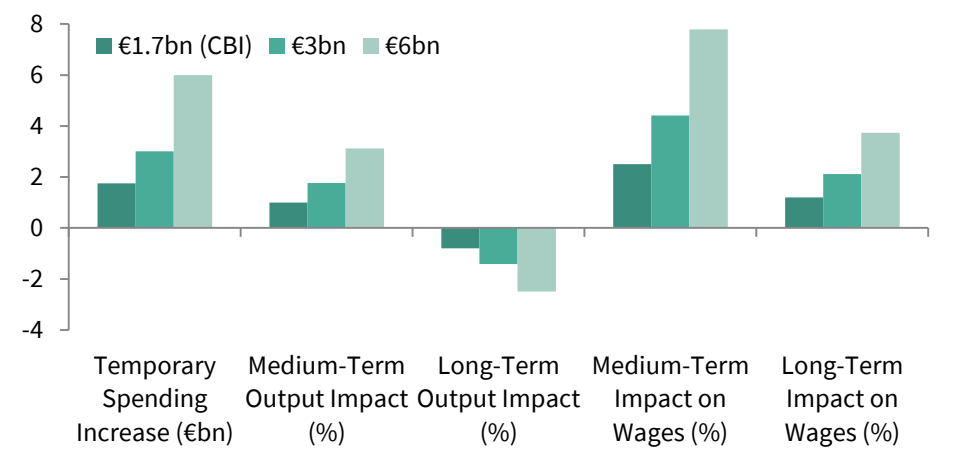
In terms of macroeconomic effects, the excess corporation tax receipts serve to make the current account balance (both headline and underlying measures) look more favourable than they otherwise would. This can complicate assessments of the sustainability of the current economic position and should be accounted for.

Recent work by Conefrey, O' Reilly and Walsh (2019) explores the impact on Irish output growth from saving €1.7 billion additional fiscal gains (mainly corporation tax receipts) over three years as compared to using it to fund additional expenditure.

Scaling up these results using the range of estimates for the excess corporation tax receipts (€3–6 billion) set out in this Box would suggest that spending rather than saving the receipts would imply an additional boost to economic output of some 2 to 3 per cent relative to baseline over the medium term in the context of an economy already at capacity (Figure B.2). Such spending would be expected to boost short-run growth. But if the economy is already at capacity (such as with low unemployment), this would be expected to contribute to overheating risks (including those related to wage pressures, and export competiveness losses).

Figure B.2: Short-Run Macroeconomic Impacts of Spending vs Saving any Excess Corporation Tax

€ billion and % deviation from baseline of temporarily spending excess fiscal gains



Sources: Conefrey, O' Reilly, and Walsh (2019); internal IFAC workings.
Notes: The "CBI" (Central Bank of Ireland) estimates are taken from Conefrey, O' Reilly and Walsh (2019). They show the impact of €1.7 billion excess receipts being used to fund additional government expenditure, and are scaled up linearly to produce the impacts for €3 billion and €6 billion use of excess receipts.

How can Ireland mitigate these risks?

Some policy responses have been considered in terms of how excess corporation tax receipts might be set aside. The Minister for Finance, Public Expenditure and Reform has on several occasions noted two solutions. First, that some of the corporation tax surge are being excluded from tax revenue projections and, accordingly, will "not feed into the expenditure base". Second, that some of the historically high levels of corporation tax are to be set aside in the Rainy Day Fund.[6]

These solutions make sense in principle, but it is difficult for the Government to commit to them and, indeed, it has not done so thus far. Excluding some receipts from revenue projections does not preclude the Government from ultimately spending these receipts when they come in or when forecasts are exceeded. If anything, the repeated within-year upward revisions to spending suggest that much of the unexpected receipts are being used to fund additional expenditure rather than being set aside. The Rainy Day Fund solution could work in principle, but the annual amounts to be set aside in the fund have in fact halved from their original target of €1 billion (*Budget 2017*) to €0.5 billion, whereas annual corporation tax receipts are now far higher than they were expected to be when the original commitments were made. The fixed payment amounts also fail to allow for saving of additional cyclical revenues.

Kydland and Prescott's (1977) "time-inconsistency" problem shows that policymakers who

[6] See, for example, the Minister's responses to the June 2018 and November 2018 Fiscal Assessment Reports.

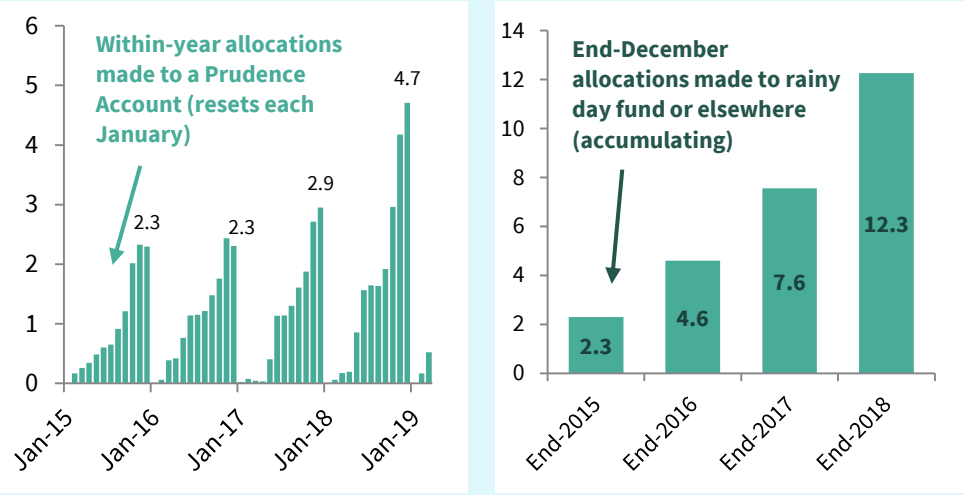
have complete discretion at every moment in time in terms of how they use resources available to them might not obtain the best possible long-term outcome. In other words, their actions later on might prove to be inconsistent with policy commitments made at an earlier stage. A key conclusion is that one can improve outcomes by limiting future discretion. This would help to preserve earlier commitments.

Proposal for a Prudence Account

To make a commitment to saving unexpected—and potentially temporary—receipts such as those from corporation tax more credible, it might be desirable to have a clear policy framework that supports this by constraining what can be done in future when those receipts arrive. Ideally there would be a fixed rule under which the Government sets aside excess receipts above a certain threshold. One option would be to notionally set aside in-year allocations to a "Prudence Account". These allocations could be based on the excess between actual and forecast corporation tax receipts (i.e., using the Exchequer profiles set out for corporation tax receipts after the previous year's budget and adjusting the base). Allocating these excess receipts to the Prudence Account as they come in could remove them from the budgetary calculus. It could reduce the scope for spending these funds as they come in, as has occurred in recent years, because the headline Exchequer position would not be impacted by these inflows. At year end, these notional amounts could then be turned over to the rainy day fund (the "National Surplus (Exceptional Contingencies) Reserve Fund") or set aside some other way.[7] The baseline for the following year would be based on the initial forecasts so that the overrun would not be locked into the base.

Figure B.3: How a Prudence Account Might have Operated

€ billion



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Allocations of above-profile corporation tax receipts to the Prudence Account would be made over the course of the year, and then turned over to the rainy day fund or set aside elsewhere. The base for next year's corporation tax receipts forecasts would be adjusted for unexpected receipts in the previous year.

Figure B.3 shows how the Prudence Account might have worked. It sets out what would have happened had the Government set aside the excess corporation tax receipts relative to forecasts (profile) since 2015. It adjusts for the surprise receipts in full when forecasting receipts for the year ahead. An approach like this would have implied some €2.3 billion being set aside at the end of both 2015 and 2016, a further €2.9 billion or receipts at end-2017, and €4.7 billion at the end of 2018. The cumulative amount of funds transferred to a rainy day fund or elsewhere would have been some €12.3 billion at the end of last year.

[7] Casey *et al.* (2018) shows how the rainy day fund could be used more actively to alleviate unsustainable expenditure increases on the basis of cyclical and other temporary revenues.

Had the Prudence Account been used as suggested here, then a larger Exchequer deficit would have been recorded in recent years. It would not have been masked by surprise corporation tax receipts. Table B.1 illustrates what the headline Exchequer Balance could have looked like in recent years had a Prudence Account worked as suggested. The Exchequer balance would have been in deficit by €4.6 billion in 2018 instead of recording a marginal surplus. Given the allocations made to a Prudence Account each year, the cumulative rainy day fund resources would have risen to just over €12 billion at end-2018. If the sustainability of such resources became clearer over time, their use could be gradually reconsidered.

Table B.1: Prudence Account and Exchequer Balance (Counterfactual)
€ billions

	2015	2016	2017	2018
Projected Corporation Tax	4.6	5.0	5.3	5.7
Actual Corporation Tax	6.9	7.4	8.2	10.4
Unexpected Corporation Tax → Prudence Account	2.3	2.3	2.9	4.7
Rainy day fund resources from Prudence Account	2.3	4.6	7.6	12.3
Exchequer Balance	-0.1	-1.0	1.9	0.1
Exchequer Balance with a Prudence Account	-2.4	-3.3	-1.0	-4.6

Sources: CSO; Department of Finance; and internal IFAC calculations.
Notes: Corporation tax receipts are projected using the same approach as in Figure B.1, but starting from the year 2015 as a base year. The Exchequer Balance with a Prudence Account Within-year allocations to the Prudence Account are assumed to transfer to the rainy day fund at the end of the year. These resources are assumed to accumulate in the fund. Note that this does not assume any macroeconomic impact from the additional borrowings implied to fund expenditure that took place in these years alongside the allocations to the Prudence Account.

An important consideration is what base year should be used. Too early a start date would mean that resources set aside would necessarily be larger. Too late a start date would mean that risks would only be stemmed from becoming much greater. But this would not mitigate the risks associated with today's level of receipts. At minimum, the Government should stem further risks from being built up in terms of a reliance on corporation tax receipts in future years. Given the risks posed, it should seek to gradually reduce reliance on existing receipts.

This exercise illustrates the extent to which excess corporation tax receipts have boosted the public finances in recent years. The analysis is something that the Council intends to update on a regular basis to show the implications for the Exchequer balance.

1.4 Assessment of the Fiscal Stance for 2019–2023

The economy is now close to its potential and there are risks of overheating absent major adverse shocks. The debt burden remains high though its ratio to income is declining steadily; creditworthiness has improved but is vulnerable to rapid changes; and the structural balance appears to be close to a balanced position (albeit that this might be artificially supported by recent surges in corporation tax receipts, which are not likely to be permanent).

Weighing up the uncertain macroeconomic outlook, the risks on the horizon, and the current fiscal position, the Council assesses that the Government should be cautious for the year ahead. For 2019, the Government should not allow within-year increases in spending, as in recent years, and any unexpected corporation tax receipts should be allocated to a Prudence Account (Box B) and then to a rainy day fund or used for debt reduction. For 2020, a prudent Budget is needed given Brexit risks, high reliance on corporation tax receipts, overheating risks, and the rapid spending increase over 2017–2019. There is room to increase spending to maintain the current level of services and planned investment increases, but any additional fiscal measures should be matched by tax increases or lower spending in other areas. This implies sticking to plans as implied by *SPU 2019* and allowing net spending to rise at a speed not quite as fast potential growth.

For the medium term, assuming that no major shocks materialise, the Government should—at maximum—grow net policy spending on the basis of sustainable growth rates, while continuing to manage risks related to corporation tax reliance. Any further tax or spending measures beyond this amount should be funded by sustainable revenue-raising measures or savings made elsewhere. Second, a credible medium-term framework needs to be developed to support budgetary planning. Third, the Government should gradually reduce the reliance it has built up in recent years on volatile and potentially reversible corporation tax receipts. These receipts have been used to mask the impact of the unplanned increases in expenditure on the headline balance in recent years.

Fiscal Stance in 2019

The fiscal stance initially planned for 2019 (as set out in *SPU 2018*) signalled an expansion in line with the economy's potential and inflationary pressures, but the Government ramped up spending beyond original plans. For 2018, the Government raised gross voted spending levels by €1.3 billion more than planned (compared to *SPU 2018*).[8] This was largely due to health overruns (IFAC, 2018e). At budget time, a €1 billion overrun was expected for 2018, but post-budget spending turned out to be a further €0.3 billion more than planned again. The overruns are evident even more so in general government data.[9, 10] For 2019, policy was also loosened relative to earlier plans. The net impact of the tax and spending measures announced on budget day meant a package of €1.1 billion. The 2018 *Summer Economic Statement* indicated that a package of €0.8 billion would be introduced. These repeated revisions to plans undermine the credibility of the budgetary process.

The unplanned increases meant that the Government went well beyond the limit of €3½ billion for spending increases or tax cuts that the Council had assessed as appropriate for introduction by the end of 2019 based on the figures in *SPU 2018*. This recommendation was made prior to the 2019 budget on the basis of sustainable growth rates. The larger increase mainly reflected the fact that the plans for 2019 were built on the imprudent and unplanned increase in spending in 2018.[11] The Council's assessments of the fiscal rules—which show breaches of the Expenditure Benchmark in recent years—reinforce the view that the increases in recent years have not been conducive to prudent economic and budgetary management (Chapter 4).

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[8] Note, we use *SPU 2018* rather than *Budget 2018* as the point of comparison to allow for the reclassification impact of a significant technical adjustment relating to funding of water services following the enactment of the Water Services Act 2017. Adjustments between *Budget 2018* and *SPU 2018* to gross voted spending were relatively minor otherwise.

[9] In terms of non-interest general government spending, the spending increases for 2018 relative to 2017 have been revised upwards repeatedly. As of *Budget 2018*, the annual increase was to be €2.2 billion; *SPU 2018*: €3.3 billion; *Budget 2019*: €4.5 billion; and the outturn now €5.4 billion.

[10] The general government spending revision upwards relative to *SPU 2018* is €1.9 billion. Of this, €0.2 billion was a one-off consultants' pay settlement that is not expected to recur and €0.1 billion relates to a reclassification of pension payments from Eircom and Coillte pension funds. These payments were reclassified retroactively in the sector of general government (CSO, 2019). However, the remaining €0.5 billion—above the estimated *Budget 2019* overrun—appears to be driven by (1) anticipated underspends in non-health areas not having materialised (these were factored into the budget day estimates for 2018), and (2) higher-than-estimated social payments including health service, housing assistance, and other social protection schemes.

[11] The Council's assessment in November was based on a 2018 general government expenditure increase that was €0.5 billion lower than shown by the CSO outturn data (when one-offs are excluded).

There is a risk that recent slippages could be repeated. Department of Health overruns remain a possibility in 2019 and provision has once again not been made for the Christmas bonus.[12] Health spending increases budgeted for in 2019 are large at €1.05 billion (+6.6 per cent). Yet there is no clear evidence to suggest that wider problems in planning and monitoring/controlling spending have been resolved. Higher-than-budgeted spending has been a recurring issue for the Department of Health (current spending overruns average €0.5 billion over 2013–2018). And the dangerous feedback loop between unrealistic forecasting and an anticipated relaxation of spending ceilings in health areas is likely to have reinforced the problem of a "soft budget constraint" (Box D, IFAC 2018e).[13] Moreover, recent failures in budget forecasts and controls are now evident on the capital side of the budget, with the National Children's Hospital showing substantial cost increases (Box F).

Why are the recent within-year spending increases problematic? First, the decision to loosen spending further—beyond already-budgeted-for increases—means that government debt remains higher than it otherwise would have been. Delaying a return to safer debt levels means that risks, such as a harder-than-expected Brexit, present more severe threats than would otherwise be the case. Carrying greater amounts of debt now means that there is less scope to respond to future downturns through government-led stimulus. Second, the faster-than-planned increases add additional stimulus to an economy that is already close to full employment, which can contribute to potential overheating in the economy. Third, the use of unexpected corporation tax receipts—largely a net injection of funds into the Irish economy—puts the public finances at risk of sudden reversals in receipts, and also contributes to the overheating risks.

Recognising these risks, the Government should stick to existing plans for 2019. This means that no additional within-year increases should be introduced without

[12] The Christmas Bonus has been paid in each of the past five years in some form, yet the Government refuses to budget for any payments. Instead, the Government maintains that this is at its discretion and will be decided based on prevailing conditions. Basing budgetary decisions on "prevailing conditions" in this sense implies a clear procyclical bias and is a poor approach to managing the public finances. If the full bonus is paid in 2019 as in 2018, then some €0.3 billion will be added to spending increases forecast for 2019. If it is not funded by additional revenue measures, then the underlying budgetary position will weaken by a corresponding amount.

[13] That is, providers of health services anticipate yearly spending ceilings will be relaxed at a later stage with little opposition, thus weakening incentives to stay within spending targets (Howlin, 2015).

offsetting measures. To help stem an even greater reliance of government spending on services and income supports on corporation tax receipts, the Government should allocate unexpected corporation tax receipts compared to profile to a Prudence Account during the year and then to a rainy day fund or elsewhere (Box B).

Fiscal Stance in 2020

The Council assesses that the Government should be prudent with its budget for 2020 and that it should stick to its plans as implied by *SPU 2019*. The potential scale of an adverse shock from a hard Brexit could be severe (see Box C). Postponing the introduction of further budgetary increases would allow for further support to be provided in the event of an adverse shock materialising, while cushioning some of its effects.

The scope to respond to an adverse shock like a hard Brexit is currently quite limited. Monetary policy may not be much more accommodative than it already is (other Euro Area members are less exposed than Ireland is to UK developments). The euro exchange rate is unlikely to adjust favourably to support Irish exports after any exit and it could move adversely. The scope to use Irish fiscal policy to support the economy against negative shocks—beyond allowing the budget balance to fluctuate with tax receipts as an automatic stabiliser—is limited by the fact that the government debt burden remains high after the crisis (when appropriately measured as a share of modified GNI*). Fiscal multipliers tend to be weaker in Ireland due to its highly open nature (much of the stimulus flows abroad in the form of higher imports).[14]

In the event of a negative shock such as a hard Brexit, the response of fiscal policy would need to be balanced against the economy starting from a position of operating near capacity, with unemployment at low levels already, and against how well various sectors of the economy actually perform. A hard Brexit would at least partly reflect a permanent shock to Ireland's supply-side that policy would not be possible to alleviate indefinitely. This suggests that any adverse impacts from a hard Brexit might be challenging to mitigate through available policy levers. There could also be unforeseen financial impacts arising from a disorderly Brexit. In particular,

[14] A recent IFAC working paper, Ivory *et al.* (2019), examines Ireland's spending multipliers in detail.

adverse income and employment impacts could transmit to lower bank profitability and to lower credit quality of loans (Central Bank of Ireland, 2018).

There are two policy implications worth thinking about in the context of a hard Brexit scenario. First, a relatively more benign hard Brexit scenario (like the ESRI/DoF-based scenario) might be one where letting the automatic stabilisers operate—as assumed in the simulation in Box C—might be sensible. This would allow a small rise in the debt ratio with limited need for more active policy measures to stabilise the debt path. Second, however, a disorderly Hard Brexit like that considered in the Central Bank of Ireland modelling has much more severe consequences for the public finances. Trade-offs here would be far worse, given the starting position, and the Government might need to cut spending or raise taxes to prevent debt ratios from rising again. Long-term levels of output would be worse in any such scenario rather than simply being an issue of temporary disorder in the economy. Should a more adverse shock materialise, the policy response would need to be carefully assessed. However, the Government should in principle act to support the economy in so far as possible during any period of unusually weak demand.

Given the risks, the Government should stick to the plans implied by *SPU 2019*. This would benefit the economy and public finances by avoiding the need for more substantial tightening to stabilise the debt burden in the event of a severe hard Brexit scenario materialising. Any further adjustments to policy should be deferred until there is reasonable clarity as to the precise nature of the shock. While the sustainable long-term growth rate of the economy would imply €3½ billion as a limit for spending increases or tax cuts in 2020, a prudent approach to the budget would use less of the space than this.[15]

Sticking to the plans implied by *SPU 2019*, as the Council assesses, would mean some €2.8 billion of budgetary measures for 2020. These amounts are already

[15] This is based on various estimates which would put the economy's sustainable growth rate at up to 3½ per cent, while inflation forecast for 2020 is close to 1 per cent. The Department's preferred GDP-based models show potential output growth averaging 2¼ per cent over the period 2020–2023. The Council's own suite of models suggest that potential is closer to 3½ per cent. Simulations using the ESRI's model COSMO (McQuinn et al., 2017) indicate that the economy's potential growth rate is approximately 3.3 per cent (2.4 per cent for the non-traded sector and 3.9 per cent for the traded sector). The impact of a harder-than-expected Brexit could well be to reduce potential output growth rates by impacting on Ireland's potential future exporting performance, hence lowering long-run productivity growth.

earmarked for increases in public investment, public sector pay, provision to cater for demographic changes, and for planned tax cuts in 2020. Public investment alone is forecast to be more than double its level six years ago (€8 billion in 2020 as compared to €3.5 billion in 2013). If additional discretionary measures are to be taken beyond the *SPU 2019* plans, then the Government should introduce additional revenue-raising measures to preserve overall sustainability or it should scale back planned spending increases and tax cuts elsewhere.

A smaller expansion than the €2.8 billion currently implied by *SPU 2019* plans would also be desirable recognising the severe risks posed by Brexit, the reliance on corporation tax receipts, and the risks of further overheating. This could include not using the €0.6 billion that is currently set aside for assumed tax cuts and unallocated spending increases.

In the context of potential adverse fiscal outcomes, it is worth noting that recent reforms to the European Stability Mechanism could entail greater scope to absorb shocks across all Euro Area Member States including Ireland. Of course, this insurance mechanism carries costs too (Box D).

Fiscal Stance over the Medium Term (2021–2023)

The Government needs a credible strategy for the medium term. Operating fiscal policy on the basis of the correct "budgetary stance" and being willing to be more prudent than the current fiscal rules allow is the correct approach to take. A better approach to budgetary planning could be built around four elements:

1) **A better approach to medium-term budgeting would start with a clear statement of the sustainable growth rate that net policy spending can grow at.** This could be informed by the Department's alternative estimates of potential output, but any approach should try to correct for the risks of procyclical bias present in such estimates. As it stands, the fiscal rules—owing to their procyclicality—are not proving a helpful anchor for sustainable spending growth (net of tax measures). The limits for real net spending growth allowed under the Expenditure Benchmark are climbing to high levels, given how procyclical the measure used is (Casey *et al.*, 2018).

2) **Departmental three-year expenditure ceilings should be reframed around this medium-term growth rate and forecasts should be more realistic.** The current ceilings are not working. A better approach would see more realistic spending plans set out in advance and a strengthening of subsequent spending controls and monitoring. In principle, the spending ceilings should work by making offsetting cuts in other areas or clawbacks in subsequent years when overruns arise in one area to ensure that aggregate spending increases are sustainable. In practice, recent years have seen overruns, especially in health spending, that have not been absorbed by other areas.

   To address this, forecasts should be more realistic (accounting for obvious pressures) and should be anchored to more sustainable growth rates. The budgetary surpluses currently forecast to be run over the medium term are unlikely to materialise (Chapter 3).

   The Department of Public Expenditure and Reform views its current ceilings as (a) the best way to generate efficiencies (allowing for general price inflation is viewed as raising the effective floor for negotiations with line departments); and (b) as a way to allow the Government to address emerging, unforeseen social/economic pressures as they arise. The current approach to medium-term spending ceilings might therefore be better understood as an attempt to impose commitment mechanisms, rather than efforts to realistically forecast expenditure. The problem with the approach is that it lacks credibility. Upward revisions to ceilings are frequent and the ceilings fail to function as an effective tool for controlling spending. This is also problematic for the macroeconomic forecasts (Chapter 2), with forecast aggregate demand slightly lower than it otherwise would be in a situation where government consumption forecasts were more realistic.

3) **The debt ratio target should be lower to reflect Ireland's volatile growth rates; it should be restated as a percentage of modified GNI*; it should be clarified as either a ceiling or target; and it should have clear staging posts.** The current debt ratio target of 55 per cent of GDP—though not referenced in *Budget 2019*—is not a particularly low or prudent debt ratio considering the distortions to GDP and given Ireland's typical debt

dynamics.[16] A better approach would be to define a lower ratio to reflect this. It should also be clarified as either a ceiling or a target and to define it in terms of a more appropriate measure of national income like modified GNI*. Ideally, a debt objective should also incorporate a broader assessment of long-term spending pressures. In addition, there are no clear staging posts for when the debt ratio should be achieved. To help guide the debt burden to safer levels, the Government should publish debt ratio targets for individual years so that these can be assessed over time.

4) **A budgetary position less reliant on corporation tax receipts should be an overarching principle guiding fiscal policy in coming years.** A key policy challenge for the State in coming years will be to stem its dependency on corporation tax revenues for supporting long-lasting expenditures on income supports and public services. Box B explores the risks involved and how this reduced reliance could be achieved. Reducing the dependency should—at minimum—mean that any future surges in corporation tax receipts are not used to fund permanent expenditure increases as in recent years. Ideally, the Government should attempt to reduce its dependency on corporation tax receipts by growing spending by less than is implied by sustainable growth rates in future years, while also implementing something like a Prudence Account (Box B).

[16] As Box H of the November 2017 Fiscal Assessment Report (IFAC, 2017e) shows, Ireland has a volatile history in terms of its debt dynamics, which would argue for setting a debt ceiling below the SGP limits (these are primarily set with larger EU Member States in mind).

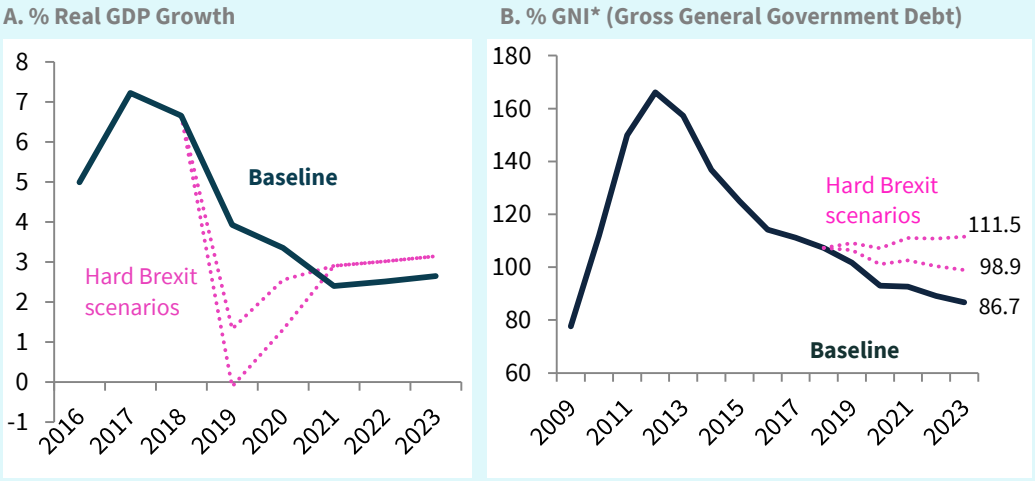
Box C: Fiscal Impacts of Hard Brexit Scenarios

This box considers the fiscal impacts from alternative scenarios of how the economy might evolve in coming years, given the uncertain outlook.

Alternative Scenarios

The two alternative "Hard Brexit" scenarios considered are based on the ESRI/DoF (Bergin *et al.*, 2019) and Central Bank of Ireland (2019) scenarios for a disorderly Brexit. Figure C1.A shows the implied growth rates under each scenario relative to the baseline.

Figure C1: Alternative Growth and Debt Ratio Scenarios



Source: Internal IFAC calculations based on CBI and ESRI/DoF; CSO.
Note: The baseline is taken as *SPU 2019* estimates. CBI shock is initially the more adverse of the two "Hard Brexit Scenarios". ESRI scenario is based on Box 1, McQuinn *et al.* (2019). Scenario growth rates are higher in later years to allow for the fact that the *SPU 2019* forecasts already incorporate a soft Brexit after 2020 leading to a free trade agreement between the UK and EU. As noted in Chapter 3, the baseline debt ratio projections over the medium term may be unrealistic due to the technical nature of expenditure forecasts.

Fiscal Impacts

The shock impacts from the scenarios are taken and modelled through the Council's Fiscal Feedbacks Model (IFAC, 2012). The model applies the difference in real GDP growth rates under each scenario relative to the Department's baseline macroeconomic forecasts as the basis for a growth shock. It models the cyclical impact on the primary balance (lower tax revenues and higher cyclical unemployment spending) and the feedback to nominal GDP growth from this. This is consistent with a situation in which the automatic stabilisers are allowed to work. The model does not take into account any change in marginal borrowing costs on Irish government debt, or changes in the exchange rate (which might dampen nominal growth), or possible direct costs related to Brexit, such as infrastructure costs or support to specific sectors. Furthermore, it assumes an average response whereas actual effects may be quite different to a standard shock. Lastly, the model assumes that shocks are permanent (i.e., that there are no offsetting responses in later years to the initial shock to the level of economic activity).

The scenarios highlight just how sensitive Ireland's public finances are to alternative outcomes. We can see that the hard Brexit scenarios considered would imply debt-to-GNI* ratios remaining close to 100 per cent by 2023 or rising to almost 112 per cent (assuming no policy response). The effects come about from much bigger deficits being run and also from less favourable GDP growth.

The budget balance and funding costs would also be affected (Table C1). The baseline scenario sees the budget balance rise gradually to 2.3 per cent by 2023 (albeit that this is based on

unrealistic expenditure assumptions as noted in Chapter 3). The hard Brexit scenarios paint a much more adverse picture. The ESRI/DoF scenario would see the budget balance swing back to deficit rapidly (-1.9 per cent in 2019 with a deficit persisting out to 2022). Funding requirements would be estimated to average 8.1 per cent of GNI* per annum (for context, advanced economy median requirements are around 6 per cent on average over 2019–2021).[17] The CBI scenario shows even more adverse outcomes, given a deeper growth shock early on.

Table C1: Estimated Fiscal Outcomes

% GNI*

	2019	2020	2021	2022	2023
Budget Balance					
Baseline	0.3	0.6	1.2	1.7	2.3
Hard Brexit (ESRI/DoF)	-1.9	-2.3	-1.4	-0.4	0.5
Hard Brexit (CBI)	-3.2	-4.7	-3.8	-2.8	-2.1
Gross Debt Ratio					
Baseline	101.7	93.0	92.7	89.2	86.7
Hard Brexit (ESRI/DoF)	106.4	101.1	102.6	100.3	98.9
Hard Brexit (CBI)	109.1	107.2	111.0	110.8	111.5
Funding Requirements					
Baseline	7.2	9.9	1.2	5.8	3.8
Hard Brexit (ESRI/DoF)	9.6	13.2	3.8	8.0	5.7
Hard Brexit (CBI)	11.0	15.8	6.2	10.6	8.4

Source: Internal IFAC calculations based on CBI and ESRI/DoF; CSO.
Notes: Budget balance and gross debt ratio are in general government terms. Funding requirements are estimated as the Exchequer borrowing requirement + maturing debt + anticipated buybacks of floating rate bonds.

Stabilising Debt Ratios

A common response to adverse shocks is to allow revenue to temporarily decline and cyclical spending to rise. However, in a situation where the debt ratio might begin to climb on an unsustainable trajectory, more active measures to stabilise debt ratios might be warranted. The growth shock based on the ESRI/DoF Hard Brexit scenario implies a debt ratio that remains relatively stable. By contrast, the shock based on the CBI estimates would see debt rising over the medium term.

A question worth considering is what level of adjustment to the structural primary balance would be required to stabilise the debt ratio. This can be considered in the Fiscal Feedbacks Model by exploring the required additional discretionary adjustments that would be needed to keep debt ratios at or below end-2018 levels over the medium term (107 per cent of GNI*). Based on the model, this could be achieved with a front-loaded adjustment of almost €4 billion in 2020 or with a cumulative adjustment of €5 billion phased evenly over the three years 2020–2022.

Caveats to the Analysis

There are several final caveats to note. First, the analysis here is based on an assumed deficit multiplier of 0.5, which is consistent with recent research based on SVAR-based approaches and COSMO estimates that assume no endogenous policy responses (Ivory *et al.*, 2019; Carroll, 2019). This gives different results to those produced in the ESRI/DoF analysis, which implies a lower sensitivity to growth shocks (at peak, the general government balance in the latter is

[17] This is based on the IMF's April 2019 Fiscal Monitor, which takes "total financing needs" as maturing debt + budget deficits. It includes the refinancing of short-term debt outstanding. By comparison, the Council's estimates for Ireland refer solely to medium- and long-term maturing debt rollovers + Exchequer borrowing requirements.

assumed to worsen by 0.9 percentage points relative to the baseline scenario, whereas the medium-term five-year impact is 0.5 percentage points). The lower sensitivity in the latter reflects two aspects: (1) lower sensitivity of the deficit to growth shocks in general in the model, and (2) moderate wage, and hence income tax, responses in a Brexit scenario (higher import prices lead to higher consumer prices, which offsets the downward pressure on wages). Second, the Council's scenario is based solely on a growth shock aggregated to the economy-wide level so that the exact nature of impacts from the hard Brexit scenarios on tax headings, cyclical expenditures, and economic behaviour is not considered. Third, the model assumes that the shock takes place in 2019, though the effects could obviously be assumed to take place over the course of 2019–2020, given the current timing.

Box D: Reforms to the European Stability Mechanism (ESM)

Last December, euro area heads of state and government endorsed a set of proposals that may have fiscal implications for Ireland. The goal of the reforms is to enhance the ESM's capacity as a crisis resolution fund—a provider of emergency support programmes—to help the euro area to withstand future crises (ESM, 2018).

The ESM

The ESM is a lender of last resort for countries that lose market access, or are close to losing market access. This is a function that did not exist before the recent crisis and the lack of which was considered a key failing in terms of how quickly and efficiently euro area institutions could respond (Baldwin and Giavazzi, 2015). The ESM was set up in October 2012, has a maximum lending capacity of €500 billion, and finances its activity by issuing bonds and other debt instruments. Its creditworthiness is supported by €705 billion of support from euro area member states: €80.55 billion paid-in capital, and €624.25 billion of callable capital. The callable capital serves as an additional buffer that the ESM can call on member states to contribute as and when necessary. It reinforces the ESM's creditworthiness further should a borrower of ESM funds have to default on a loan payment and should paid-in capital and other reserves prove insufficient to cover losses.

A common backstop to the Single Resolution Fund (SRF)

A key reform to how the ESM operates is the implementation of a common financial backstop for the Single Resolution Fund (SRF) so that it has enough cash to deal with a very big crisis from 2024 at the latest. The SRF is an EU fund for resolving failing banks and is financed by bank contributions. The backstop should mean that the ESM would be able to lend necessary funds to the SRF should the SRF's bank-provided resources prove insufficient to avert major bank failures in future.[18]

It is expected that the SRF bank-provided resources will be around €60 billion (or 1 per cent of deposits covered in the Banking Union) by 2024, while ESM loans available would be about the same size. If the ESM loans were to be used, the SRF would be required to pay back the ESM loan with money from bank contributions within three years (subject to an extension of up to two years). This means that it is intended to be fiscally neutral over the medium term.

The common backstop has several fiscal implications for Ireland:

There are obvious benefits to Ireland arising from the euro area architecture being made more robust. A common concern relating to the last crisis was that individual Member States—by

[18] Loans would have to be mutually agreed by the ESM's Board of Directors, consisting of euro area finance ministry officials, but the plan is that approvals could be made swiftly (in as little as 12 hours).

giving up monetary independence—had stripped away their central banks' role as lender of last resort (De Grauwe and Yuemei, 2013). A lack of guarantees of support from member states allowed liquidity crises to emerge in downturns among crisis countries. These crises were marked by large outflows of liquidity; difficulties in funding debt rollovers at reasonable interest rates; and limited capacity to allow automatic stabilisers to support the economy.

By providing insurance against the extent to which the costs of bank failures are borne by individual Member States, the reform could mean lower risk premia for Ireland, and hence lower government debt interest costs. It could provide further scope to allow automatic stabilisers to operate in a downturn (by alleviating pressure to consolidate). And it could also limit the likelihood of systemic crises in future (including sovereign-bank doom loops).

The reforms are not costless. A series of large bank bailouts in future could entail requirements for additional capital to be paid into the ESM to shore up the ESM's creditworthiness (hence preserving its capacity to borrow funds and lend to crisis countries). Ireland's paid-in capital currently amounts to €1.3 billion of the €80.5 billion total reflecting its 1.59 per cent contribution key (ESM, 2012). Ireland has also committed a further €9.8 billion of the ESM's €624 billion of callable capital. Bank losses in the last crisis were exceptionally large in some cases and so the risk of these funds being required is not negligible.[19] While financial crises occur infrequently (about once every 24 years on average), the realisation of contingent liabilities tend to be highly correlated during crises (IMF, 2016). Macroeconomic downturns tend to trigger other shocks, including financial sector crises, bailouts of state-owned enterprises and subnational governments, and other contingent liabilities. A risk is that future crises require Ireland to commit some of these callable amounts, if not more. It is plausible that such requirements might also entail adverse external economic conditions for Ireland. Spillovers from deteriorating financial conditions elsewhere might be expected to reduce Irish exports, domestic demand, and possibly even to transmit to weaker financial conditions domestically. Finally, to the extent that moral hazard problems exist—as with any insurance mechanism—risks of future bailouts might be aggravated by the reforms.

Other reforms

Other reforms will see the ESM's financial assistance tools developed. These include making eligibility for the ESM's precautionary lending more transparent and predictable, thus increasing its accessibility during liquidity crises. So-called "Single-limb Collective Action Clauses" are to be introduced by the ESM by 2022. These will allow a supermajority of bondholders to agree to debt restructurings that are legally enforceable on all bondholders, making debt restructuring smoother when needed (avoiding holdouts).

In addition, there is an agreement between the ESM and the European Commission on cooperation between the two institutions. This would cover partaking in missions related to economic policy coordination and budgetary monitoring; eligibility assessments; debt sustainability assessments; financing needs; financial stability risks; policy conditionality (e.g., goals and expected impacts of reform measures in relation to the financing needs to help Member States financial situation and refinancing capacity); and compliance and post-programme monitoring.

[19] Most notably, Germany's Hypo Real Estate was provided with guarantees of €145 billion between 2008 and 2010, while Dexia in 2008 was backed by French, Belgian and Luxembourg state guarantees amounting to €135 billion (Bruegel, 2018). In terms of adjustment programmes during the financial crisis, some €480 billion of external support was required for five euro area countries during the period 2010 – 2018 (Greece, €289 billion; Ireland, €67.5 billion; Portugal €76 billion; Spain, €41 billion; and Cyprus, €7 billion), which is more than the ESM's current lending capacity.

Chapter 2

Endorsement and Assessment of the Macroeconomic Forecasts

2. Endorsement and Assessment of the Macroeconomic Forecasts

Key Messages

- The Irish economy has recovered from a deep crisis. Now, into the sixth year of cyclical upswing, it is operating near capacity according to the Department of Finance's preferred estimate of potential output. The Council assesses that these supply-side estimates are more plausible than those based on the EU Commonly Agreed Methodology (CAM). Despite elevated uncertainty in recent months relating to Brexit, and the prospect of weaker demand from Ireland's main trading partners, underlying economic activity in Ireland has remained resilient thus far.

- The Council endorsed the Department's *SPU 2019* forecasts for continued growth in the real economy over the medium term, with output forecast to rise steadily above its estimated potential in the coming years in the absence of significant countercyclical policies or a large negative economic shock. Downside risks mainly relate to Brexit. However, if economic growth instead outperforms *SPU 2019* forecasts over the medium term, the economy could significantly overheat.

- Although the *SPU 2019* medium-term forecasts show some typical characteristics of an economy operating above its potential, the Council assesses that the coherence of this picture is weaker in some areas. In particular, the forecasts for the household savings ratio, the modified current account, and net migration are not consistent with an economy that would be overheating.

- Since 2013, the Department's forecasts for real growth rates in government consumption have been generally lower than outturns. This is evident in an average year-ahead forecast error of 2.8 percentage points, rising to around 4 percentage points for forecasts made two and three years in advance. This shows that government spending increases, which are in excess of what was planned for in successive budgets and which rely on technical assumptions, can affect the accuracy of medium-term macroeconomic forecasts.

2.1 Introduction

The analysis in this chapter examines the consistency of *SPU 2019* medium-term macroeconomic forecasts, in particular regarding the interaction between the demand-side forecasts and the Department's alternative supply-side estimates. The improved availability of relevant indicators of the Irish economy provides a stronger basis for understanding economic activity and its sustainability. Box E at the end of this chapter provides a methodology for forecasting two such relevant indicators: (nominal) modified gross national income and the modified current account.

As the identification of potential risks and economic imbalances requires careful and continuous analysis, the Council monitors developments in the Irish economy on an ongoing basis. The Council's twelfth endorsement exercise assessed macroeconomic forecasts prepared by the Department of Finance reflected in *Stability Programme Update 2019* (*SPU 2019*).

2.2 Endorsement of *SPU 2019* Projections

The Council's twelfth endorsement exercise of macroeconomic forecasts to be used in the Budget or SPU was undertaken in March 2019 (see Appendix B for the endorsement timeline details).[20] The Council assessed that the macroeconomic forecasts produced by the Department of Finance and contained in *SPU 2019* were within an endorseable range for the medium term, taking into account the methodology and plausibility of the judgments made.

The endorsement process entails three key aspects: the plausibility of the methodology used, the pattern of recent forecast errors, and comparisons with the Council's benchmark projections and other forecasts.

Methodology

The Council is satisfied that the Department's approach to macroeconomic forecasting broadly conforms to that of other forecasting agencies.

In terms of the demand-side macroeconomic forecasts, they tend to be constructed based on an expected reversion of economic growth to equilibrium over some medium term. The forecasting approach has remained largely unchanged in recent years. As discussed in the analysis of recent forecast errors, the methodology has produced reasonably accurate short-term (in-year and year-ahead) forecasts of key aggregates, including underlying domestic demand.

However, one component with persistent forecast errors has been government net consumption of goods and services. For example, its year-ahead annual real growth forecasts for 2013–2018 have been 2.8 percentage points lower than outturns, on average. This coincides with several instances of within-year and budget-time upward revisions to spending by the Government, which have been frequently discussed by the Council in *Fiscal Assessment Reports* and other publications. Forecasts made two and three years in advance have been around 4 percentage points (on average) lower than outturns. This performance underlines the case for

[20] The forecasts prepared by the Secretariat were also approved by the Council. The statutory function is detailed in IFAC (2013) and IFAC (2014a). The SPU is the national medium-term fiscal plan, requiring a longer endorsement horizon than for the Budget. Benchmark projections prepared by the Secretariat form a key part of the endorsement process. An important input into the preparation of the benchmark projections involves rounds of discussions with other external forecasters. The Secretariat met with IBEC and statisticians from the CSO to gain further insights into recent data releases.

realistic spending projections, in particular regarding outer-year forecasts. Besides contributing to inaccuracy in the Government's macroeconomic forecasts, such unplanned spending weakens the credibility of medium-term fiscal forecasts. The use of "technical assumptions" is likely to understate the spending required to achieve government objectives, and is unlikely to adequately account for anticipated economic and population growth contained in the macroeconomic forecasts (see Chapter 3).

The Department's publication of forecasts for underlying measures of economic activity, which attempt to correct for statistical distortions mostly related to multinational enterprises, is welcome and in line with Council recommendations (IFAC, 2018e). These provide a more meaningful measure of economic activity and are likely to be more closely related to sustainable tax revenues. The Department forecasts modified gross national income (GNI*) using the nominal growth rate of gross national product (GNP), and assumes a path for the modified current account (CA*) to complement trends in the preferred output gap estimate. This approach does not explicitly consider linkages between adjustments to gross national income and the current account necessary to calculate GNI* and CA*, and their related demand-side variables (including investment in aircraft and intangibles). Box E describes the Council's approach to deriving forecasts for GNI* and CA*.

As discussed in the November 2018 *Fiscal Assessment Report* (IFAC, 2018e), the Department's alternative supply-side estimates are broadly consistent with their assessment of economic activity. However, as discussed later in this chapter, this assessment is not necessarily reflected in some elements of the Department's demand-side forecasts, including the household savings ratio and the change in net migration. The methodology behind the supply-side estimates is one that is relevant for a small open economy, as described in Murphy, Nacheva and Daly (2018). The approaches are similar to the Council's methodology, as described in Casey (2018). In particular, these methodologies involve a suite-of-models approach to estimating the output gap and potential output. In the Council's view, these estimates are more plausible than those based on the EU Commonly Agreed Methodology (CAM). While potential output is not observable and is always estimated with uncertainty, the Department's estimates are more consistent with other indicators of the economy, and the forces known to be affecting it, than the CAM-based estimates. Variables of

particular relevance to the output gap include net migration, the modified current account, and rates of unemployment and inflation.

The prominence of the alternative supply-side estimates in Department publications represents a significant improvement compared to relying on CAM-based estimates, which have well-documented shortcomings and which often show misleading indications about the economy.[21] Furthermore, a national-specific methodology is preferable for Ireland and other small open economies, whereas the CAM uses a harmonised EU-wide approach.

The Department's preferred methodology applies extended Hodrick-Prescott (HP) filters with gross domestic product (GDP) as the measure of output. The Council considers the Department's other supply-side estimates based on domestic gross value added (domestic GVA) to be conceptually more robust than the GDP-based estimates, given the large distortions to GDP in recent years. There may also be statistical drawbacks to using HP filters rather than Kalman filters, although the profile indicated by the HP-filtered GDP-based estimates of a widening positive output gap out to 2023 is still plausible.[22] A sensitivity analysis is explored in Section 2.3 using the Department's preferred methodology but with different inputs for net inward migration and private sector credit growth. Higher net migration and private sector credit would result in larger positive output gaps over the medium term.

Pattern of Recent Forecast Errors

In forecasts of activity over the past six years, the Council has found a pattern of generally positive errors in forecasts of underlying domestic demand. This is in contrast to the crisis period prior to 2013, when there were persistent underperformances in economic growth relative to forecasts—see Chapter 2 in the November 2018 *Fiscal Assessment Report* (IFAC, 2018e).

Figure 2.1 shows errors for four vintages of underlying domestic demand forecasts, and the contributions of its components: personal consumption of goods and services, government consumption, and underlying investment. Since 2013,

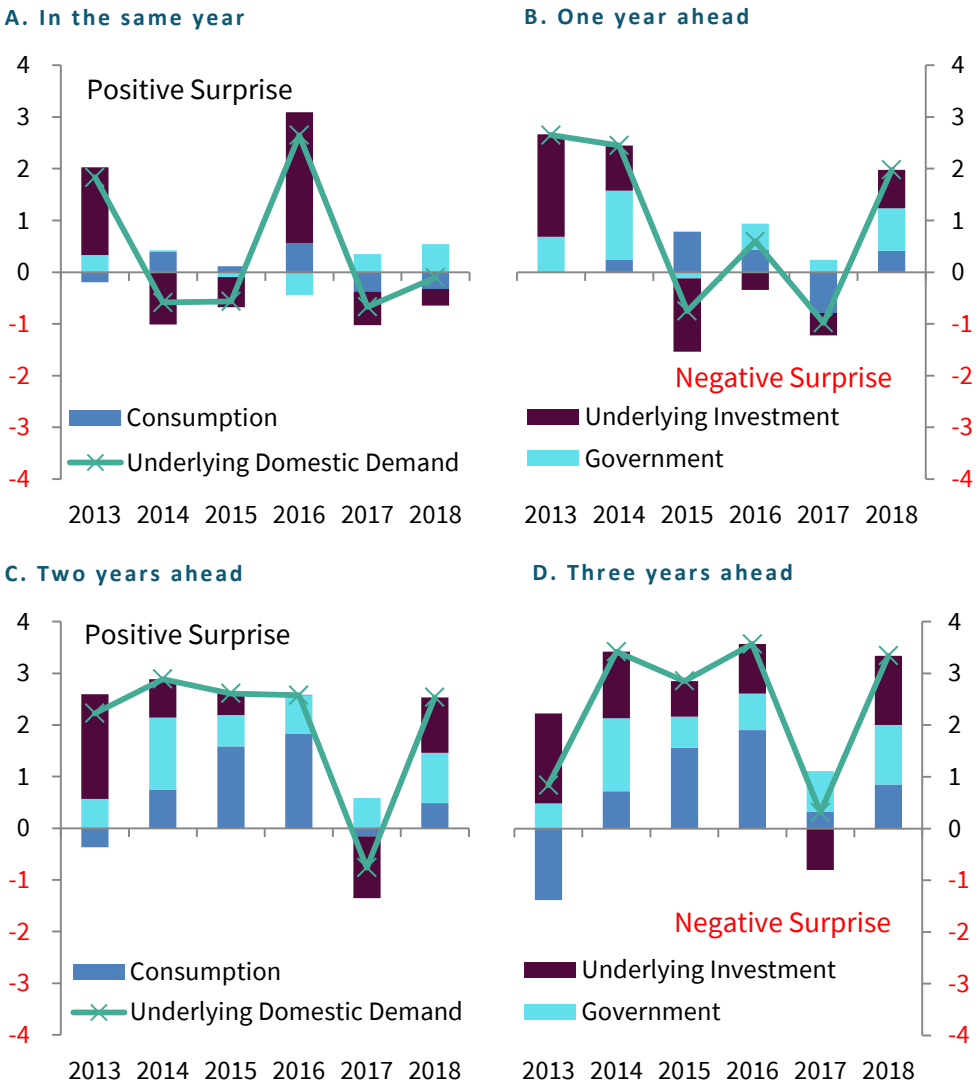
[21] For details on issues with the CAM-based estimates for Ireland, see Boxes B and E in IFAC (2017e).

[22] These drawbacks mainly relate to end-point bias, an issue the Department mitigates to an extent with mechanical (crude) extensions of forecasts three years beyond each publication's horizon.

government net consumption of goods and services has contributed the largest average share in forecast errors of underlying domestic demand across the four vintages. Its average year-ahead forecast error is 2.8 percentage points, rising to about 4 percentage points for forecasts made two and three years ahead. Despite a small weight in the aggregate over the period (19 per cent), the mean error contribution for government consumption since 2013 is 0.6 percentage points, more than the contributions from underlying investment and personal consumption (0.5 and 0.4 percentage points).

Figure 2.1: Forecast errors of underlying domestic demand

Percentage points (forecast error and contributions)



Sources: Department of Finance, various Budget forecasts since 2010; CSO, various Quarterly National Accounts and National Income and Expenditure data releases since 2009; and internal IFAC calculations.

Note: Underlying domestic demand is calculated as domestic demand excluding stocks, aircraft, and intangibles. Aircraft and intangibles are published as separate quarterly series and forecasts by the Department of Finance for these series are available back to 2016. Prior to 2016, domestic demand excluding stocks is used as a proxy.

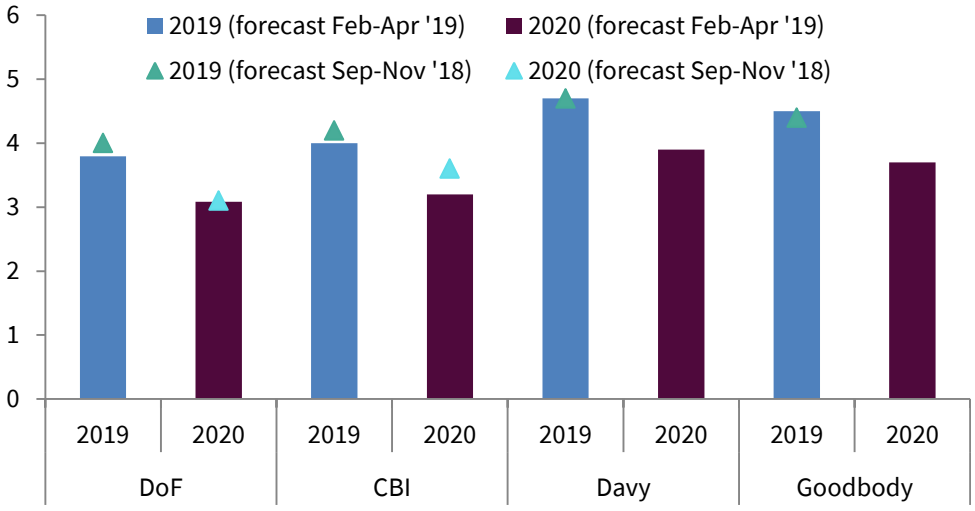
Comparison with Other Projections

The Council's benchmark projections are presented in Appendix C, and there are generally minor differences between these and the Department's macroeconomic forecasts in *SPU 2019*. The benchmark projections anticipate a slower growth rate than *SPU 2019* forecasts show in underlying domestic demand over the medium term, including broadly offsetting contributions of faster growth in personal consumption and slower growth in underlying investment.

Figure 2.2 compares recent and (where available) prior short-term forecasts for real underlying domestic demand in 2019 and 2020. As discussed in Box C of the November 2018 *Fiscal Assessment Report* (IFAC, 2018e), the Council would welcome more widespread adoption by official and private-sector forecasters of alternative measures of economic activity in Ireland. Forecasts that report only the traditional components of GDP and an unmodified current account profile as a share of GDP or GNP provide very little relevant information to users. Instead, prominent inclusion of available alternative measures in forecast publications will improve the quality and relevance of economic forecasts.

Figure 2.2: Forecasts of underlying domestic demand

Percentage change (year-on-year)



Sources: Department of Finance, *Budget 2019* and *SPU 2019*; Central Bank of Ireland, *Quarterly Bulletin* (Nos 4 for 2018 and 2 for 2019); Davy Stockbrokers, October 2018 and April 2019; Goodbody Stockbrokers, *Irish Economy Health Checks* November 2018 and February 2019.

2.3 Assessment of the Macroeconomic Forecasts in *SPU 2019*

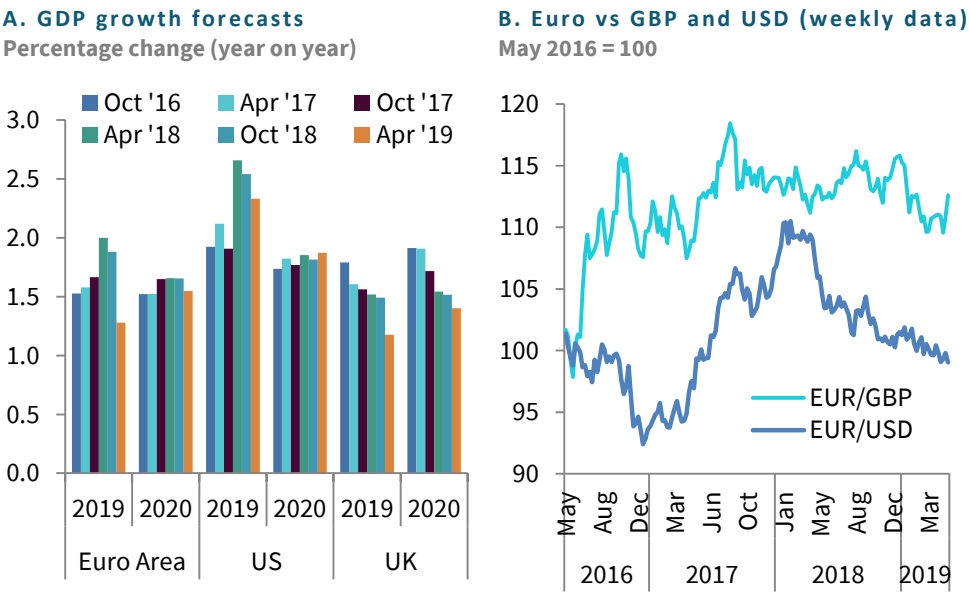
Macroeconomic Context

The Irish economy grew rapidly once again in 2018, and the Department estimates output is now operating near capacity. Annual average employment growth has been 3.1 per cent since 2013, and the unemployment rate has fallen from almost 16 per cent in early 2012 to below 5 per cent in the first quarter of 2019. The Department forecasts continued growth in underlying domestic demand in 2019 and 2020, although Brexit uncertainties remain high.

Output appears to be close to its medium-term potential path, and capacity constraints across various sectors of the economy have been evident, in particular for residential construction. Hourly nominal wage growth has accelerated in recent months, and the Department forecasts further increases over the medium term. Inflation is again forecast in *SPU 2019* to remain below 1 per cent in 2019, only rising above 2 per cent in 2023.

Prospects for external demand have worsened considerably over the past year. As shown in Figure 2.3A, recent IMF forecasts for economic growth in Ireland's main trading partners have been revised downwards—in particular for 2019 in the euro area and the UK.

Figure 2.3: Trading-partner growth forecasts and exchange rates



Sources: IMF World Economic Outlook and Datastream.

Various indicators for the US economy suggest that it is reaching the peak of the economic cycle. Bureau of Labor Statistics data show that the unemployment rate has been at or below 5 per cent since December 2015, and the current unbroken run of economic expansion in the US is expected to surpass its previous record (from 1991–2001) by mid-2019. The Federal Reserve has raised the Federal Funds Rate starting in December 2015, and the effects of a recent fiscal stimulus may wear off during 2020.

Furthermore, an indicator of a potential economic recession is an inverted yield curve, and the ten-year US Treasury bond yield fell below the three-month Treasury yield in March 2019. Although this indicator has been strongly correlated for some 50 years with ensuing recessions in the US—with a lag of up to two years between the yield curve's first inversion and the downturn—there may also be causal factors at play. A channel for this indicator to possibly bring about a recession is through its implications for business sentiment. On this view, as returns to medium- and long-term projects fall below the short-term returns to low-risk activities, businesses are less likely to engage in such investment, which can cause job creation to slow.[23]

The assumptions in *SPU 2019* regarding the impact of Brexit on the Irish economy are essentially unchanged compared to *Budget 2019*, with the exception of the timing of the start of the transition period, which has proven difficult to anticipate given the current degree of political uncertainty. As such, the Department's baseline Brexit assumption is that the UK will leave both the EU customs union and single market for a free-trade agreement to be agreed in 2021, following a transition period beginning during 2019 and lasting until end-2020.

Clearly, a disorderly Brexit remains possible, and it could still involve the imposition of large World Trade Organisation (WTO) tariffs, which would pose a significant threat to Irish firms. Recent estimates jointly produced by the ESRI and Department of Finance (Bergin *et al.*, 2019) indicate a ten-year impact of a disorderly Brexit on the level of GDP, which would be 5 percentage points lower than under a no-Brexit baseline. Estimates produced by the Central Bank of Ireland suggest a more severe shock from a disorderly Brexit (Box C).

[23] Several explanations have been suggested as to why the current yield-curve inversion may not indicate a likely recession by end-2020, including the influence of quantitative easing and non-standard monetary policies, and the increased issuance of short-term debt by the US Treasury (undertaken in part to fund the recent fiscal stimulus).

SPU 2019 Short-Term Forecasts, 2019–2020

Table 2.1 sets out in detail some of the key short-term macroeconomic forecasts contained in *SPU 2019*.

Table 2.1: *SPU 2019* macroeconomic forecasts (to 2020)

Percentage change in volume, unless stated

	2018[a]	2019	2020
Demand			
Underlying domestic demand[b]	5.7	3.8	3.1
GDP	6.7	3.9	3.3
…of which (contributions)			
Underlying domestic demand[c] (p.p.)	*2.6*	*2.0*	*1.6*
Underlying net exports[c] (p.p.)	*4.0*	*2.0*	*1.8*
Personal consumption	3.0	2.7	2.5
Government consumption	6.4	3.9	2.7
Investment	9.8	6.9	5.5
Underlying investment[b]	14.6	7.2	5.2
Exports	8.9	5.2	4.5
Imports	7.0	5.9	5.0
Underlying imports[b]	7.2	5.8	4.9
Supply			
Potential output	4.1	3.1	2.6
Output gap (% of potential output)[d]	-0.5	0.2	0.8
Labour Market			
Population	1.4	1.4	1.4
Labour force	1.7	1.9	1.9
Employment	2.9	2.2	2.1
Unemployment rate (% labour force)	5.7	5.4	5.2
Prices			
HICP	0.7	0.9	1.1
Personal consumption deflator	1.4	1.5	1.6
GDP deflator	1.5	1.5	1.7
Other			
Nominal GNI*	6.1	4.9	4.9
Nominal GDP	8.3	5.5	5.1
Nominal GDP (€ billion)	318.5	335.8	352.8
Modified current account (% of GNI*)	1.8	0.7	0.5

Sources: CSO; Department of Finance; and internal IFAC calculations.

Notes: [a] Denotes latest outturns from the CSO.
[b] Underlying (final) domestic demand, investment and imports exclude other transport equipment (mainly aircraft) and intangibles.
[c] Underlying contributions to real GDP growth rates in percentage points. Underlying net exports include the effect of the change in inventories and exclude the effect of investment in aircraft and intangible assets.
[d] The output gap and potential output estimates used here are the Department's GDP-based alternative estimates.

Domestic demand

Growth in underlying (final) domestic demand is forecast to moderate somewhat in 2019 and 2020 in the baseline scenario. The average real growth rate over the past five years is close to 4½ per cent. The forecast modest decrease is in line with a moderation in growth of each of its components: personal consumption, government consumption and underlying investment. This would reflect downward pressures due to Brexit and a maturing of the Irish recovery.

The short-term outlook for **personal consumption of goods and services** is for growth of close to 2½ per cent per year for 2019 and 2020, a modest deceleration compared to an annual average of nearly 3 per cent over 2016–2018. Seasonally adjusted retail sales values have been largely unchanged for several months—affected by weaker vehicle first-time licensing data, which show a 3.9 per cent annual decrease in the first four months of 2019. However, core retail sales (excluding motor trades) suggest strong year-on-year growth in early 2019.

Preliminary indications for 2018 suggest an increase in savings driven by higher net lending by households and non-profit institutions serving households (NPISH).[24] This may be consistent with a rise in precautionary savings related to Brexit uncertainty. However, other drivers may include an increasing deposit requirement for those seeking to purchase residential property, or simply that income is now growing more rapidly than consumers wish to spend it. Overall, the household savings ratio has increased from 10.8 per cent in 2017 to 11.6 per cent in 2018, while net lending by households and NPISH to other institutional economic sectors remained above €5 billion, close to double its 2016 level. The Department forecasts a further increase in the household savings ratio in 2019 and 2020 to almost 13 per cent, well above its historical average since 1995 of 8.5 per cent.

As a result of unplanned spending increases in the latter months of 2018, the full-year growth rate for **government net consumption of goods and services** increased to 6.4 per cent, compared to the 3½ per cent expected by the Department

[24] Quarterly data on households' gross disposable income is currently estimated by the CSO based on trends in the *Earnings, Hours and Employment Costs Survey* (EHECS) data. These estimates are later revised taking account of detailed P35 income-tax returns. There may be differences between the EHECS trends and those contained in more-detailed administrative data. Preliminary figures show growth in household gross disposable income of 5.9 per cent was somewhat below the 7.1 per cent combined growth rate of PRSI and income tax in 2018.

at the time of the Budget in October and 1.9 per cent in *SPU 2018* published in April. As discussed in Chapter 3 and in previous *Fiscal Assessment Reports*, these in-year spending increases reflect the problem of a soft-budget constraint. Furthermore, official projections may not adequately reflect known expenditure pressures in later years that are unrelated to policy changes. Near-term government consumption growth is forecast to fall back to 3.9 per cent and 2.7 per cent in 2019 and 2020; the profile has also been revised upwards since *Budget 2019* forecasts of 2.9 per cent and 1.9 per cent, respectively.

The final component of underlying domestic demand is **underlying investment**, which grew rapidly by close to 15 per cent in 2018. This performance was mainly driven by building and construction. In particular, residential building increased by nearly a quarter, with some 18,000 new dwellings built in 2018 compared to about 14,400 in 2017. However, this output remains well below the range of medium-term estimated demand for new dwellings (30,000–50,000).[25] The increase in supply of apartments remains minimal, rising by just over 100 completed units to closer to 2,300 in 2018. More apartment completions will be necessary in order to realise *SPU 2019* forecasts of a cumulative additional 51,000 units in both 2019 and 2020, corresponding to annual growth in residential building and construction of about 15 per cent.

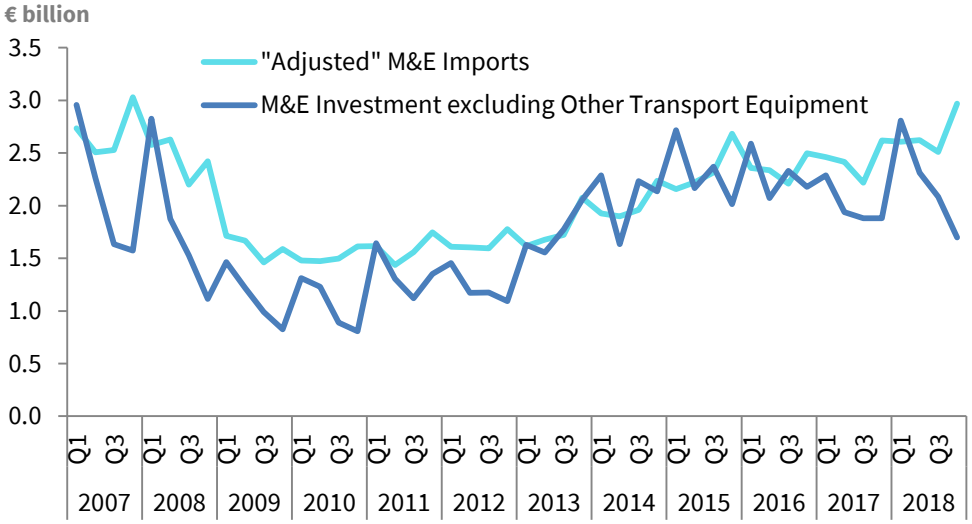
The Department forecasts a near-term slowdown in non-residential construction growth to 2 per cent by 2020. This follows an annual average expansion of close to 15 per cent for 2016–2018, and with a large share of this activity relating to the building of offices for multinational firms. Starting from a high base, the forecast share of non-residential construction activity in GNI* would reach an all-time high of 10.8 per cent in 2019 and 2020, well above its long-term average of just under 7 per cent. This represents a clear imbalance and source of upward pressure on demand that could result in overheating, in particular given the Department's forecast of rapid near-term growth in residential building and construction, and their preferred estimate of the output gap closing in 2019.

Figure 2.4 shows investment in machinery and equipment excluding aircraft compared to imports of machinery and equipment excluding aircraft, private cars,

[25] See Duffy *et al.* (2016) and Lyons (2017) for details of these estimates.

and certain other sectors (see figure note for details). The fall in underlying machinery and equipment shown in the preliminary outturn for the final quarter of 2018, to its lowest nominal value in five-and-a-half years, was not matched by capital goods imports in the high-frequency trade data—which instead reached an eleven-year peak. The CSO has advised that additional data sources for investment will be available for the *National Income and Expenditure* results. As such, caution is warranted in the interpretation of trends in underlying machinery and equipment, which can be prone to especially large revisions.

Figure 2.4: Underlying investment and imports of machinery and equipment



Sources: Eurostat; and internal IFAC calculations.
Note: "Adjusted" M&E Imports excludes items 79, 72.821, 75.230, 75.270, 75.997, and 77.642 in the merchandise imports data where large distortions are visible in recent years. Also, item 78.120 has been excluded as imports of private cars are primarily included in the national accounts as personal consumption expenditure on goods.

External trade

Despite the expected slowdown in growth of external demand, continued real growth in **exports of goods and services** is forecast by the Department, albeit somewhat slower than in recent years at close to 5 per cent. Trade statistics from the first quarter of 2019 show a record €38 billion in exports of goods, of which €24 billion was organic chemicals and medical/pharmaceutical products. The two largest destinations of such sales were recorded as the US and Belgium. The CSO has indicated an expected continuation of recent levels of exports of goods for several quarters to come, based on the patents and product life cycles of the large pharmaceutical firms involved. For services exports, there has been strong momentum in recent years in sales from the information and communication technology (ICT) sector, reflected in a nominal increase of €16 billion during 2018. At

present, it is not clear to what extent such drivers of exports growth may be affected by a slowdown in external demand, or the impact of a disorderly no-deal Brexit, in particular considering the countercyclical characteristics of certain pharmaceutical sales. However, these shocks would likely have a significant impact on exports of some domestic firms, with associated implications for employment, incomes, and underlying domestic demand.

For **imports of goods and services**, the Department forecasts a moderation in growth to 5 per cent by 2020. There was a large increase in imports of goods in the final quarter of 2018, leading to a growth rate for the year of over 14 per cent. This was driven by record-high investment in aircraft. Excluding this activity, underlying imports of goods grew by 8.5 per cent. Applying a similar adjustment for intangibles investments, underlying services imports increased by 6.6 per cent in 2018. The forecast reduction in growth of underlying imports of goods is supported by a fall in the purchase of private cars evident in the first four months of 2019. Payments made for royalties/licences, the largest individual component of services imports, have been relatively stable since a large increase took place in 2015.

Aggregate activity and demand

Growth in **underlying domestic demand** in 2017 was negatively impacted by a measured slowdown in growth of personal consumption of goods. This base effect was the main cause of the measured rebound in underlying domestic demand to 5.7 per cent in 2018. *SPU 2019* forecasts point to a moderation in growth to 3.1 per cent by 2020—unchanged compared with the *Budget 2019* forecast.

Nominal GNI* has not yet been published for 2018. However, given the CSO's preliminary estimate of a large modified current account (CA*) surplus for 2018, and applying the forecast methodology described in Box E, the size of the economy in 2018 measured by GNI* appears to be around €200 billion, if not closer to €210 billion.[26] The Department forecasts GNI* using the nominal growth rate in GNP, presented in Table 3 of *SPU 2019* as €192 billion in 2018 and reaching €211 billion in 2020.

[26] Absent a downward revision to GNP, 2018 nominal GNI* would be higher than €208 billion if the preliminary CA* estimate matches the outturn published in this summer's *International Accounts* release, and if the share of each adjustment to the current account stay the same as for 2017.

In general, the increased exports of pharmaceuticals and ICT described above have not been matched by corresponding increases in services imports and net factor income flows, suggesting a significant build-up of profits in Ireland. This has possibly been reflected in the large increases in corporation tax paid to the Irish Exchequer in recent years, and has resulted in the large contributions of net exports to growth in headline **GNP** and **GDP**. However, it remains to be seen whether these trends, which have little if any significance for underlying economic conditions in Ireland, will continue.

SPU 2019 Medium-Term Forecasts, 2021–2023

Over the medium term, the Department forecasts economic growth to fall back toward its estimated potential rate. Underlying domestic demand forecasts in *SPU 2019* show growth of 2½–3 per cent per year for 2021–2023, while employment growth is forecast to moderate to below 2 per cent per year. Despite the assumed negative impact of the Brexit transition period ending in 2021, the Department forecasts the unemployment rate to remain close to (but above) 5 per cent.

As discussed regarding the endorsement of the macroeconomic forecasts, some of the trends in key economic sustainability indicators over the medium term lack coherence. The Council's concerns particularly relate to the interaction of the household savings ratio, the output gap, net migration, and the modified current account balance. With output forecast to exceed the Department's preferred estimate of its potential over the medium term, typical characteristics for a small open economy may include:

- a lower and falling household savings ratio, despite strong wage growth
- a declining current account balance that is generally in deficit
- a strong (and often upward-trending) inflow of net migration
- an elevated growth rate of private-sector credit.

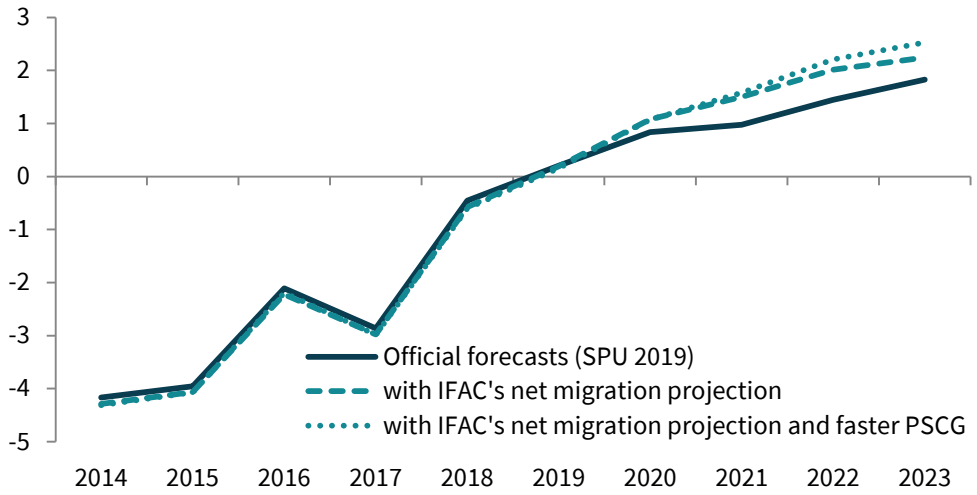
Although *SPU 2019* forecasts are consistent with some of these typical trends, the coherence of the medium-term forecasts is weaker in some areas. In particular, the persistently high level of the savings ratio over the medium term is at odds with

typical cyclical behaviour and the decline in net inward migration as a share of the labour force from 2019 onwards does not fit with Ireland's long-standing and increased sensitivity of migration flows to the cycle.

These features of the official forecasts, together with what are assumed to be moderate increases in the growth of private sector credit, could dampen the extent of the positive output gap projected by the Department. Figure 2.5 examines the impact of scenarios involving assumptions of higher net migration and higher growth in private-sector credit.

Figure 2.5: Alternative output gap estimates: sensitivity analysis for input variables

Output gap (% potential output)



Sources: Department of Finance, *SPU 2019*; and internal IFAC calculations.
Note: PSCG refers to private sector credit growth. The IFAC net migration forecasts are taken from the Council's benchmark projections.

The net migration scenario is based on the higher assumed flows in the Council's benchmark projections, which would be more in keeping with the forecast rise in dwellings output over the medium term. Private-sector credit is further assumed to reach a growth rate that is ten percentage points higher by 2023. This suggests that overheating, as measured with the Department's preferred methodology for the output gap, could be 0.7 of a percentage point higher (2½ per cent) in outer years if migration and credit follow more typical patterns for a mature phase of an expansion in the Irish economy.

2.4 Risks and Imbalances

Macroeconomic Risks

As discussed in Chapter 1, the medium-term outlook for the Irish economy is even more uncertain than usual (see Figure 1.1). Although upside risks to the *SPU 2019* forecast mainly relate to the potential for overheating—which would not represent "upside" in any normative sense—the potential for realisation of downside risks has intensified. Among the current downside macroeconomic risks are potential escalation of protectionist measures involving the world's largest economies, the onset of a cyclical downturn in Ireland's main trading partners, and adverse financial developments (including related to Italy).

Furthermore, Brexit presents an elevated risk to medium-term economic growth in Ireland. Despite the expiry of the initial two-year Article 50 notification period at end-March 2019, a broad range of different forms of Brexit are still possible. A negative impact on the Irish economy is anticipated with each of these outcomes. The risk of a no-deal Brexit has increased since *Budget 2019*. Recent joint analysis by the Economic and Social Research Institute and the Department of Finance (Bergin *et al.*, 2019) estimates a disorderly no-deal Brexit reduction of 3.3 per cent in real output over five years, and 5 per cent over ten years, with employment lower by 2 per cent over five years and 3.4 per cent over ten years. For an orderly deal scenario, the long-run effects are about half as large as the worst-case scenario considered. Estimates produced by the Central Bank of Ireland suggest a more severe shock from a disorderly Brexit (Box C).

Table 2.2 reviews the short- and medium-term macroeconomic risks described by the Department in *SPU 2019*. Likelihood and impact factors are assessed, and a brief commentary describes the Council's own assessment of each risk. Various macroeconomic risks have been noted that could affect the Department's central forecasts. These include the realistic possibility of an unwinding over the medium term of various favourable conditions that have been in place since the recovery began, including low interest rates and strong external demand conditions. Three additional risks are included by the Council: inappropriate monetary policy, inappropriate domestic policy, and a potential volatility in food commodity prices.

Table 2.2: Assessing the *SPU 2019* Macroeconomic Risk Matrix

Likelihood and Impacts from *SPU 2019*, unless stated:
high in red; medium in pink; low in grey

Assessment in SPU 2019 (or IFAC risk, when stated) and IFAC comments	*Likelihood*	*Impact*
"Disorderly Brexit" Risks of a WTO-style arrangement, impact on Irish-UK trade. Impact on medium-term growth prospects in Ireland. Severity and persistence of shock relative to estimates.		
External demand shock Strong current global economic growth context. Concern due to slowdown in global trade and prospective trade wars.		
Geopolitical risks Limited direct impact, second-round impacts could be more significant.		
Disruptions to world trade Protectionism risk: possible negative impact on global trade flows.		
Loss of competitiveness Domestic sources: wage pressures, rising commercial/residential rents. External source: exchange rates.		
Inappropriate monetary policy (IFAC risk) Monetary policy is set by the European Central Bank. Growth in Ireland is forecast to continue to outperform the euro area. Risk of looser monetary policy than would be ideal for Ireland. This could amplify the business cycle, as occurred prior to the last crisis.		
Housing supply pressure A supply response would be expected to moderate price growth. Excess demand: harmful for competitiveness and labour mobility. Overheating risk: construction boom with output nearing potential.		
Food commodity prices (IFAC risk) Weather-related increases of recent years expected to unwind. Potential to disrupt dairy profits, crucial for regional economic growth.		
Concentrated production base Production base concentrated in a small number of sectors. Sector- or firm-specific shocks could pose wider risks for the economy.		
Overheating economy Could occur in the Irish economy even without significant credit growth. Strong growth when currently near potential output risks overheating. **The Council assesses that a high impact would be more appropriate**.		
Inappropriate domestic policy (IFAC risk) Ireland has fewer levers for managing the domestic economy. Two main domestic policy tools are fiscal and macroprudential policy. These may need to play an active role in preventing overheating.		

Imbalances

The Council's modular approach—see Appendix D for detailed charts of each module—examines various indicators with a view to identifying sources of economic imbalances in real time (as discussed in Box A of IFAC, 2015b). The approach seeks to address the difficulty of producing a summary statistical estimate of the cyclical position of the economy, and to monitor specific economic data that may indicate the presence of potentially unsustainable positions of relevance to the public finances, or developments that display procyclical tendencies. The four modules examined are the labour market and prices, external balances, dwellings and investment, and credit conditions.

Figure 2.6 shows the Council's "heat map" visualisation (Timoney and Casey, 2018). The visualisation depicts a set of broadly red-coloured indicators as the crisis years approached, which abruptly transitioned to blue ones for much of the time since 2009, becoming more neutral (yellow) as the recovery progressed. For the forecast period, many of the indicators remain broadly neutral. However, it should be noted that demand-side forecasts are typically constructed on an equilibrium-reversion basis (that is, forecasts tend to be developed in a way that assumes the economy reverts to its equilibrium or steady state rather than showing more acute overheating or excess spare capacity). This assumption may not prove accurate.

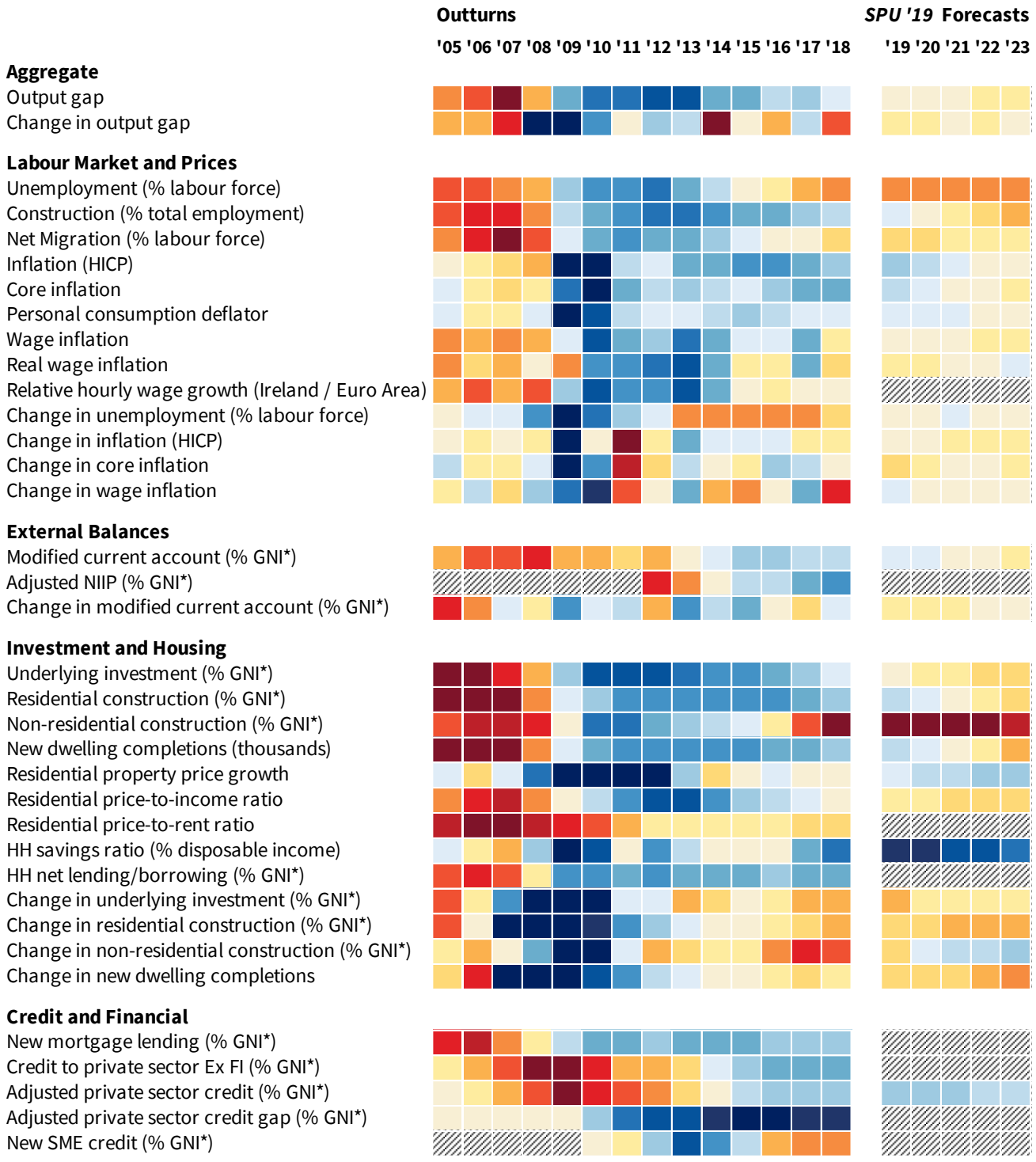
The labour market and prices

Forecasts contained in *SPU 2019* regarding the labour market continue to suggest a benign environment over the forecast horizon. Despite strong employment growth in recent years, inflation measures remain muted in Ireland. Hourly wage growth accelerated in 2018, and is projected to remain higher over the forecast horizon—reaching 3.7 per cent by 2023. The unemployment rate fell below 5 per cent in recent months, and is forecast by the Department to remain between 5.1 and 5.3 per cent over the medium term. Forecasts for inward migration show moderation from a projected 1½ per cent of the labour force in 2019, to a rate averaging 1.2 per cent for 2020–2023—largely unchanged since *Budget 2019*. Analysis of recent flows suggests that a more highly educated and skilled profile of immigrants have been arriving to Ireland, when compared with previous episodes of net inward migration. As discussed previously, the inconsistency between an increasing and positive output gap and a moderation in net migration may imply upside risks to the Department's net migration forecast.

Figure 2.6: Heat map for monitoring potential imbalances in the Irish economy

Within specified standard deviation bands of central values:

-2.00 -1.75 -1.50 -1.25 -1.00 -0.75 -0.50 -0.25 0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 2.00 NA



Sources: CSO; Central Bank of Ireland; Department of Finance (*SPU 2019* forecasts); Department of Environment, Heritage and Local Government; ESRI/PTSB; European Commission (AMECO and CIRCABC); Residential Tenancies Board; and internal IFAC calculations.

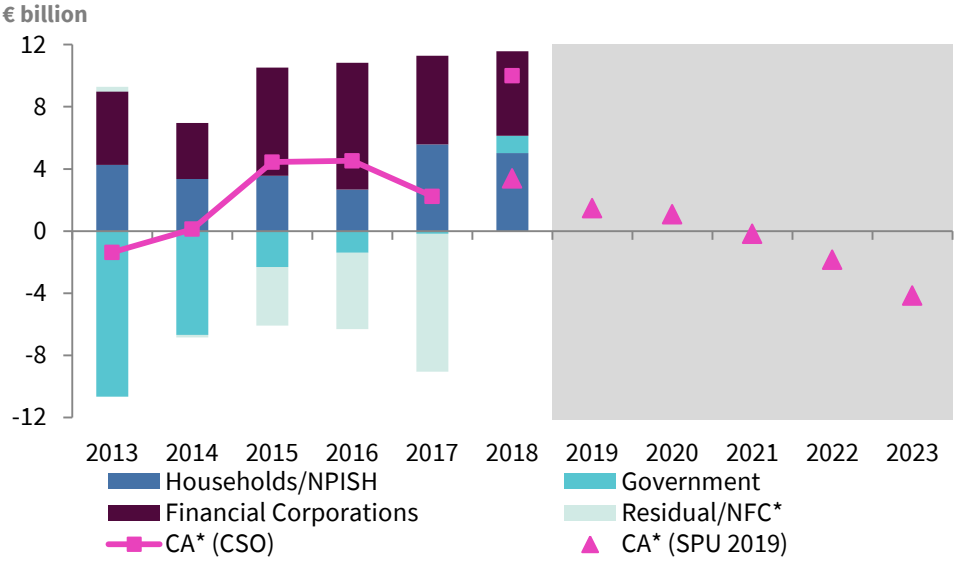
Notes: To provide a more meaningful analysis of sustainable wage growth rates, the sample periods for wage inflation, real wage inflation, relative hourly wage growth (Ireland / Euro Area), and change in wage inflation have been restricted to begin in 2003. This removes the latter years of Ireland's convergence-growth period, where hourly wages grew by up to 10 per cent annually. For other calculation details, see Timoney and Casey (2018).

External balances

For the modified current account (CA*), a breakdown can be analysed based on the net financial balances of institutional economic sectors (described further by Allen, 2018). This is approximated using the balance of gross savings less gross capital formation by households/NPISH, government, financial corporations, and a residual category which includes "modified" non-financial corporations (NFC*). This breakdown ensures that corresponding adjustments to CA* are reflected in the net financial balance of the residual/NFC* category.

The sectoral rebalancing of the Irish economy since 2013 is shown in Figure 2.7. Gross capital formation far exceeded gross savings for the residual/NFC* category in 2017, which explains the reduction in CA* for that year. However, the CSO's preliminary estimate of CA* in 2018 is a surplus of €10 billion, and the combination of the household/NPISH, government, and financial corporates sectors show a positive net financial balance of €11.6 billion for the year. This tentatively suggests the residual/NFC* balance may have returned close to balance in 2018.

Figure 2.7: Gross savings less gross capital formation by institutional sector, and the modified current account



Sources: CSO; and internal IFAC calculations.
Note: Net-financial-balance components of the modified current account are calculated as gross savings less gross capital formation of households/NPISH, government, financial corporations, and a residual category which includes (modified) non-financial corporations. The CSO has indicated a preliminary estimated CA* surplus for 2018 of €10 billion. The Department's forecast of 1.8 per cent of GNI* corresponds to a lower surplus of €3.4 billion.

The rising CA* trend has also been apparent in the adjusted net international investment position—excluding all IFSC entities and all non-financial corporations—which increased to +€114 billion in 2018 from –€90 billion in 2012 (see Appendix D).

The CA* surplus is forecast in *SPU 2019* to unwind by 2020, before reaching a deficit of €3.2 billion in 2023. However, the pace of CA* deterioration could prove more rapid if the household savings ratio falls more in line with historical patterns than *SPU 2019* forecasts assume. As discussed later in this chapter with respect to household-sector credit, the balance-sheet improvement undergone by households in the past decade has been substantial—therefore, an increase in the marginal propensity to consume by households could be expected to occur following an extended period of high net savings.

Dwellings and investment

From a low base of activity, residential construction is forecast by the Department to continue to rise over coming years. Annual housing completions, officially estimated at 18,023 for 2018, are forecast by the Department to increase to 48,000 by 2023. This would approach the upper end of estimates of the appropriate medium-term level of new-dwelling completions consistent with demand.

While it is necessary to address the undersupply of new housing, there is a risk that the associated construction activity in an economy already close to full employment will create imbalances in demand and a skew towards new-dwelling construction. Residential construction is an employment-intensive activity and generates significant tax revenues, as well as typically attracting inward migration—which in turn can further increase the required supply of new dwellings.

As discussed earlier regarding the Department's investment forecasts, the level of activity in non-residential construction is projected to remain above its long-run average share of GNI* over the medium term. Allowing for usual volatility, this level of activity is more than two standard deviations above its long-run average, suggesting possible resource over-concentration in non-residential construction.

Credit conditions

The stock of credit owed by households and enterprises (excluding financial intermediation) has been in continuous decline for ten years, beginning in the fourth quarter of 2008. During this period, credit outstanding has more than halved—an enormous deleveraging of €199 billion, or close to €5 billion per quarter on average. In this context, it is perhaps encouraging that the current pace of reduction in the stock of private-sector credit has slowed, and new lending to small-

and medium-sized enterprises reached €5.3 billion in 2018, close to double the amount newly borrowed in 2014. Net credit flows to private-sector enterprises (excluding financial intermediation) returned to growth in 2018. However, as discussed by White and Sheenan (2019), the extent of deleveraging has caused disintermediation in the Irish banking system. As a result, non-bank financing in commercial property transactions appears to have reduced the reliance on bank lending compared to previous financial cycles in Ireland, suggesting a lower degree of balance-sheet risk.

For household lending, net flows of credit advanced for principal dwelling purchases have been growing since the second quarter of 2016, and have since accelerated to 4.7 per cent as of the fourth quarter of 2018. This growth has occurred despite the impact of macroprudential limitations on lending, which could be contributing to the slowdown in national residential property price growth over the past year—recent CSO data show a reduction in annual price growth to 3.9 per cent in March 2019, compared to 12.6 per cent in March 2018. With new-dwelling completions forecast to increase steadily to 48,000 units over the medium term, there is clearly potential for rapid growth in net flows of credit for house purchases. Given the central role of a functioning market for private-sector credit in a modern developed economy, credit expansions carry significant potential for imbalances in the economy to arise. It is therefore essential that developments in credit are closely monitored and anticipated, in order to enable policymakers and regulators to take corrective actions where necessary.

Box E: Deriving Forecasts for Modified Gross National Income and the Modified Current Account

The CSO's *National Income and Expenditure* release for 2016 introduced modified gross national income (GNI*) and the modified current account (CA*). Given the significant impacts of globalisation on Irish data, these indicators have improved users' understanding of the level and sustainability of economic activity in the economy, as portrayed in the national accounts and the balance of payments data. Although further development of these statistics is ongoing—for example, the provision of a constant-prices GNI* series would be very helpful to users—the currently available data, in conjunction with alternative supply-side estimates, provide a more consistent framework for analysis of the economy.

Details of the Adjustments for GNI* and CA*

Box C of the November 2018 *Fiscal Assessment Report* (IFAC, 2018e) described the improved availability of relevant measures of underlying economic activity in Ireland in recent years. Two of the most relevant of these underlying indicators are GNI* and CA*, which both exclude:

- net factor income of re-domiciled PLCs, and
- depreciation of research and development (R&D) related service imports and trade in intellectual property (IP), and aircraft for leasing.

These adjustments relate to outflows of reinvested earnings within primary income in the balance of payments. Net factor income of re-domiciled PLCs is excluded as this income reflects future dividend payments to foreign-equity owners that will not accrue to Irish residents. Similarly, depreciation of foreign-owned domestic capital is an operating cost of foreign-owned firms, and therefore does not affect the resources generated by domestic residents (CSO, 2016). By adding these amounts to outflows of reinvested earnings in the balance of payments, GNI* and CA* no longer include them as domestic primary income.

The following further adjustments to CA* relate to the impact on net exports of firms that buy aircraft for leasing and engage in R&D activities:

- net aircraft activities related to leasing,
- net trade in R&D-related IP, and
- R&D service imports.

Net aircraft activities related to leasing are excluded from imports of goods, reflecting the exclusion of the related depreciation charge from primary income flows. Purchases of R&D-related IP by firms domiciled in Ireland have artificially increased the level of imports of services recorded in the Irish imports data, and this has led to an increase in R&D-related IP exports, albeit to a much lesser extent than the increase in imports. Other non-IP R&D-related imports of services are also excluded. As this activity has been undertaken by large multinational firms whose profits do not accrue to domestic residents, these amounts are excluded from net exports.[27]

Deriving Forecasts of GNI* and CA*

Given the importance of GNI* and CA* for quantifying activity and sustainability in the Irish economy, the Council has developed a mechanical approach to estimating the adjustments needed to forecast the underlying measures. To forecast GNI* and CA*, the derived adjustments are combined with the Council's benchmark forecasts for gross national income and the current account. Adjustments common to both GNI* and CA* are forecast as follows:

- Net factor income of re-domiciled PLCs is assumed to remain unchanged.
- Depreciation adjustments are forecast using prior-year amounts, updated for straight-line depreciation in additional investments in intangibles and aircraft.[28]

Forecasts of the remaining adjustments made in calculating CA* use the following approaches:

- Net aircraft activities related to leasing are extended with the nominal growth rate in aircraft investment.
- R&D service imports and R&D-related IP imports are extended with the nominal growth rate in intangibles investment.
- R&D-related IP exports are assumed to remain unchanged.

[27] For 2017, the cumulative adjustment amount to primary income outflows was €53 billion, and the total adjustments to net exports included in CA* (€30.4 billion) imply "modified net exports" of €119.6 billion.

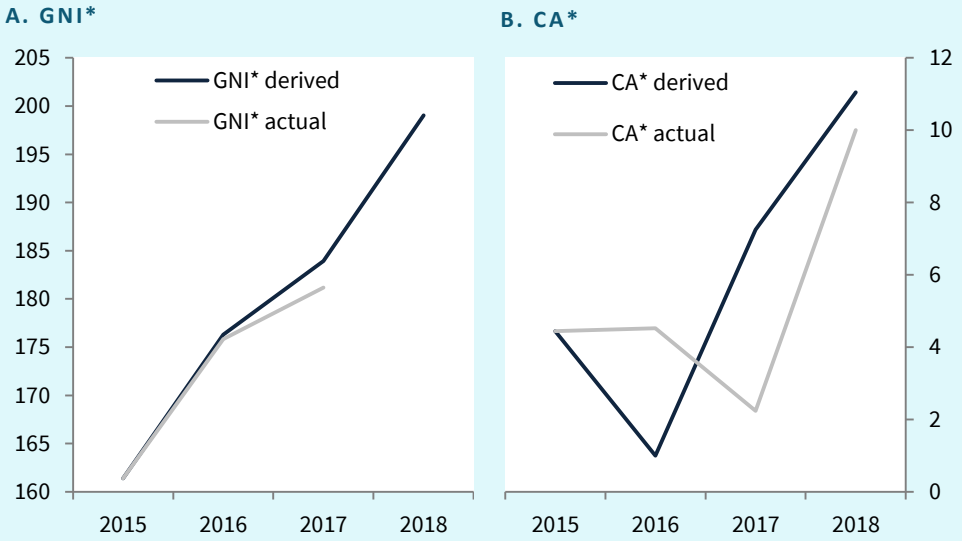
[28] Depreciation of R&D-related service imports and trade in IP is approximated by adding its prior-year level to 10 per cent of current-year intangibles investment. Similarly, depreciation of aircraft for leasing adds its prior-year level to 5 per cent of current-year aircraft investment, the majority of which (86 per cent in 2018) relates to leasing activity.

The usefulness of this approach can be tested by deriving series for GNI* and CA* using historical data for gross national income and the current account, adjusted using the forecasts described above, and comparing these derived series to the actual outturns.

Figure E1 compares derived and actual GNI* and CA* data, with a preliminary 2018 outturn of CA* also included. The adjustments take 2015 outturns as the base period and then forecast on the basis of outturn data for investments in intangibles and aircraft, and services exports.

Figure E1: Derived forecasts of GNI* and CA* for 2016–2018

€ billion



Sources: CSO; and internal IFAC calculations.

Note: The "CA* actual" series includes a preliminary estimated surplus for 2018 of €10 billion, provided by the CSO at the National and International Accounts Q4 2018 press conference in March 2019.

The results appear reasonably good for GNI*, but somewhat more mixed for CA*. However, the CSO has advised that its preliminary CA* estimate for 2018 is consistent with an upward-sloping trend over several years, which appears to be captured in the derived figures (except for 2016). As such, the methodology applied offers a consistent estimation of the adjustments made to gross national income and to the current account for arriving at GNI* and CA*.

Some issues with the approach include that the magnitudes of absolute forecast errors for the adjustments may be large, and these errors will not necessarily be offset. Furthermore, the effects of globalisation mean that there is an inherent difficulty in forecasting Irish GDP and gross national product (GNP), in particular due to the volatile performance of net exports. Nonetheless, the Council believes it is important that GNI* and CA* are forecast in a manner that is consistent with the related expectations for intangibles and aircraft investment. Otherwise, forecasts for these important indicators of the economy become overly reliant on a judgement-based methodology.

Chapter 3

Assessment of Budgetary Forecasts

3. Assessment of Budgetary Forecasts

Key Messages

- The general government budget (excluding one-off items) was broadly balanced in 2018, an improvement compared to 2017. This was aided by several favourable factors such as strong revenue growth, falling unemployment and declining interest payments. The primary balance (excluding one-off items) stayed relatively constant in 2018, with revenue and non-interest spending growing at close to 7 per cent.

- The general government balance (excluding one-off items) is forecast in *SPU 2019* to improve in 2019 to a surplus of €0.6 billion. This improvement is driven by a forecast slowdown in underlying expenditure growth compared to last year. Significant upside risks to 2019 expenditure forecasts are apparent, particularly from potential health overruns and payment of the Christmas Bonus, which has again not been budgeted for.

- Corporation tax receipts as a share of tax revenue in 2018 reached record levels (18.7 per cent of Exchequer tax revenue), aided by an unexpected boost in receipts of €1.9 billion relative to *Budget 2018* forecasts. This tax head is very volatile and is strongly concentrated in a small number of companies. This, together with potential changes in the international tax environment, leaves government revenue particularly exposed to shocks.

- For 2020–2023, the general government balance is forecast to improve, with surpluses increasing in every year. The expenditure forecasts are not credible: they are based on technical assumptions which do not reflect either likely future policies or the future cost of meeting existing commitments. The technical assumptions used imply an implausible slowdown in expenditure growth, overstating the likely budget balance. Other than for corporation tax, revenue forecasts as a whole have been reasonably accurate in recent years.

3.1 Introduction

This chapter assesses recent data from the CSO and the latest set of fiscal forecasts produced by the Department of Finance in *SPU 2019*.

For 2018, the general government budget balance recorded a surplus of €46 million, an improvement from 2017. Excluding one-off receipts of €0.4 billion in corporation tax and €0.2 billion of expenditure, gives an underlying deficit of €91 million.[29]

In 2019, the general government balance (excluding one-off items) is forecast to improve to a surplus of €0.6 billion. However, there are significant upside risks to expenditure forecasts, such as overruns in the health sector (which have averaged €500 million in recent years) and the payment of the Christmas bonus (full payment last year cost €265 million), which has again not been budgeted for.

After 2019, expenditure projections are based on technical assumptions, which are not credible. Voted current expenditure is assumed to grow by only 2.5 per cent per annum for 2020–2023. This implies a significant slowdown in expenditure growth, likely overstating surpluses in later years. These assumptions are unlikely to match future policies and outcomes.

General government revenue growth is forecast to remain strong in the coming years, but at a slower pace than in recent years. Over 2020–2023, revenue (excluding one-off items) is projected to grow by 4.0 per cent on average, compared to 6.8 per cent in 2018 and 5.2 per cent 2019.

The *SPU 2019* plans allocate €0.5 billion each year from 2019 to 2023 to a Rainy Day Fund (also known as the National Surplus Reserve Fund) from the Central Fund. In addition, a €1.5 billion transfer from the Ireland Strategic Investment Fund (ISIF) to the Rainy Day Fund is planned this year. Although the annual €0.5 billion contributions will count as Exchequer spending (non-voted capital expenditure), they will not impact the general government spending or the balance, because these are transfers that remain within the general government sector.

[29] The one-off expenditure item in 2018 relates to a €213 million settlement for pay arrears to medical consultants. A one-off payment of corporation tax (€350 million) in 2018 relates to the adoption of a new accounting standard (IFRS15).

Table 3.1: Summary of Fiscal Outturns and Forecasts (2017–2023)

€ billion, unless stated

	2017	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*
General Government Balance	-0.8	0.0	0.6	1.2	2.5	3.8	5.3
General Government Balance (excluding one-offs) [1]	-0.7	-0.1	0.6	1.2	2.5	3.8	5.3
Total Revenue	76.5	82.0	86.0	88.8	92.2	96.1	100.4
Total Revenue excl. one-offs [1]	76.5	81.7	86.0	88.8	92.2	96.1	100.4
Total Revenue excl. one-offs (% change) [1]	4.9	6.7	5.2	3.4	3.8	4.2	4.5
Total Expenditure	77.4	82.0	85.3	87.6	89.7	92.3	95.0
Total Expenditure excl. one-offs [1]	77.2	81.8	85.3	87.6	89.7	92.3	95.0
Total Expenditure excl. one-offs (% change) [1]	2.7	5.9	4.4	2.6	2.4	2.9	3.0
Interest Expenditure	5.8	5.2	4.8	4.3	4.1	4.4	4.6
Primary Expenditure	71.6	76.8	80.6	83.3	85.6	87.9	90.4
Primary Expenditure excl. one-offs [1]	71.4	76.5	80.6	83.3	85.6	87.9	90.4
Primary Expenditure excl. one-offs (% change) [1]	3.4	7.2	5.3	3.3	2.8	2.7	2.8
Primary Balance	5.0	5.3	5.4	5.6	6.6	8.2	10.0
Primary Balance excl. one-offs [1]	5.1	5.1	5.4	5.6	6.6	8.2	10.0
Nominal GNI* Growth (% change)	3.0	6.1	4.9	4.9	3.9	3.9	4.1

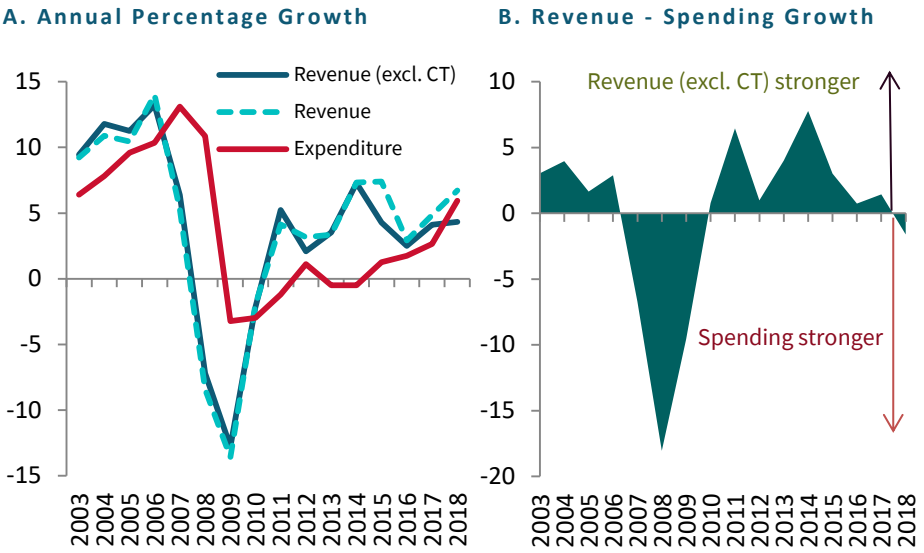
Sources: CSO; Department of Finance; and internal IFAC calculations.

Note: [1] One-off items/temporary measures are as assessed by the Council to be applicable, as per Table 1.1, Chapter 1. These one-offs are removed from variables to get a sense of the underlying fiscal position. Rounding can impact on totals. Figures in grey indicate that the Council assesses these forecasts as largely the result of technical assumptions on expenditure, which are unlikely to reflect future developments.

3.2 Assessment of 2018 Outturns and 2019 Estimates

The headline **general government balance** for 2018 was a surplus of €46 million, an improvement on forecasts from *Budget 2019* (which forecasted a deficit of €0.3 billion). Excluding one-off receipts of €0.4 billion in corporation tax and €0.2 billion in expenditure, however, gives an underlying balance close to zero (deficit of €91 million) for 2018, an improvement relative to 2017. This was aided by strong cyclical revenue growth, declining unemployment-related expenditures and falling interest payments (€0.6 billion lower than 2017). Figure 3.1 shows underlying revenue and expenditure trends. The growth of general government expenditure has been rising since 2013 and in 2018 outpaced revenue growth (excluding the highly volatile corporation tax revenue), a reversal of the previous eight years.

Figure 3.1: Expenditure Growth Accelerating, Outstripping Non-Corporation Revenue



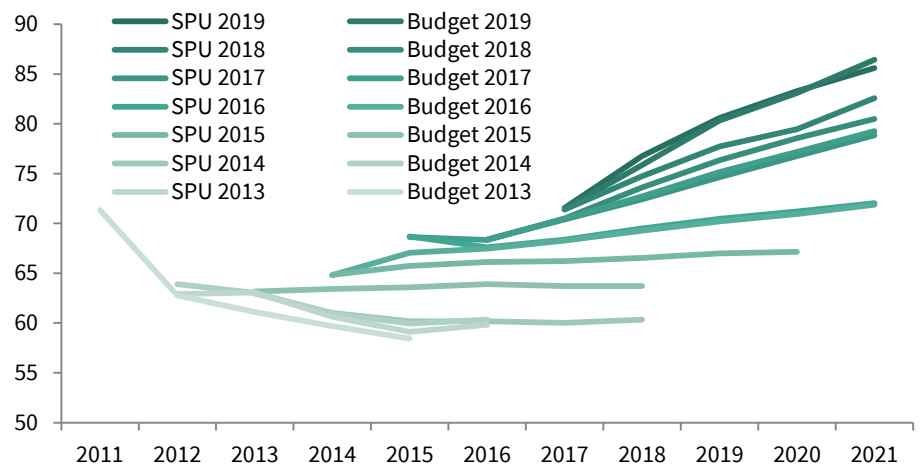
Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Revenue and expenditure in general government terms. They exclude one-offs assessed by the Council as applicable.

The **primary balance** (excluding one-off items) was largely unchanged in 2018 relative to 2017. Non-interest spending grew at a faster pace (7.2 per cent) than total revenue (6.7 per cent). General government **primary expenditure** (excluding one-off items) grew by €5.2 billion in 2018. The main items driving this growth were compensation of employees (€1.5 billion), gross fixed capital formation (€1.2 billion), and intermediate consumption (€1.0 billion). Underlying primary expenditure growth has been accelerating in recent years and this continued in 2018 reaching 7.2 per cent growth.

Primary spending in 2018 was €0.9 billion higher than forecast in *Budget 2019*. Of this, €0.2 billion was a one-off pay settlement for pay arrears to medical consultants that is not expected to recur, and €0.1 billion relates to a reclassification of pension payments from Eircom and Coillte pension funds.[30] The remaining €0.5 billion is spending on a general government basis shown by the CSO for 2018, which the Department had not included in its *Budget 2019* estimates for 2018.[31]

This further upward revision to primary spending is consistent with the pattern of revisions to spending seen at budget times and within-year in recent years. Figure 3.2 shows various vintages of forecasts of primary spending; one can see there has been a tendency for spending to drift up as the cyclical recovery takes hold.[32]

Figure 3.2: Vintages of General Government Primary Spending Forecasts



Sources: Department of Finance.
Note: Primary expenditure excludes interest payments. Prior to *Budget 2016*, spending forecasts were made on the unrealistic assumption of fixed nominal spending for most items. Since then, forecasts have been made on a more realistic basis, and so upward revisions to spending more clearly show the upward drift in spending plans.

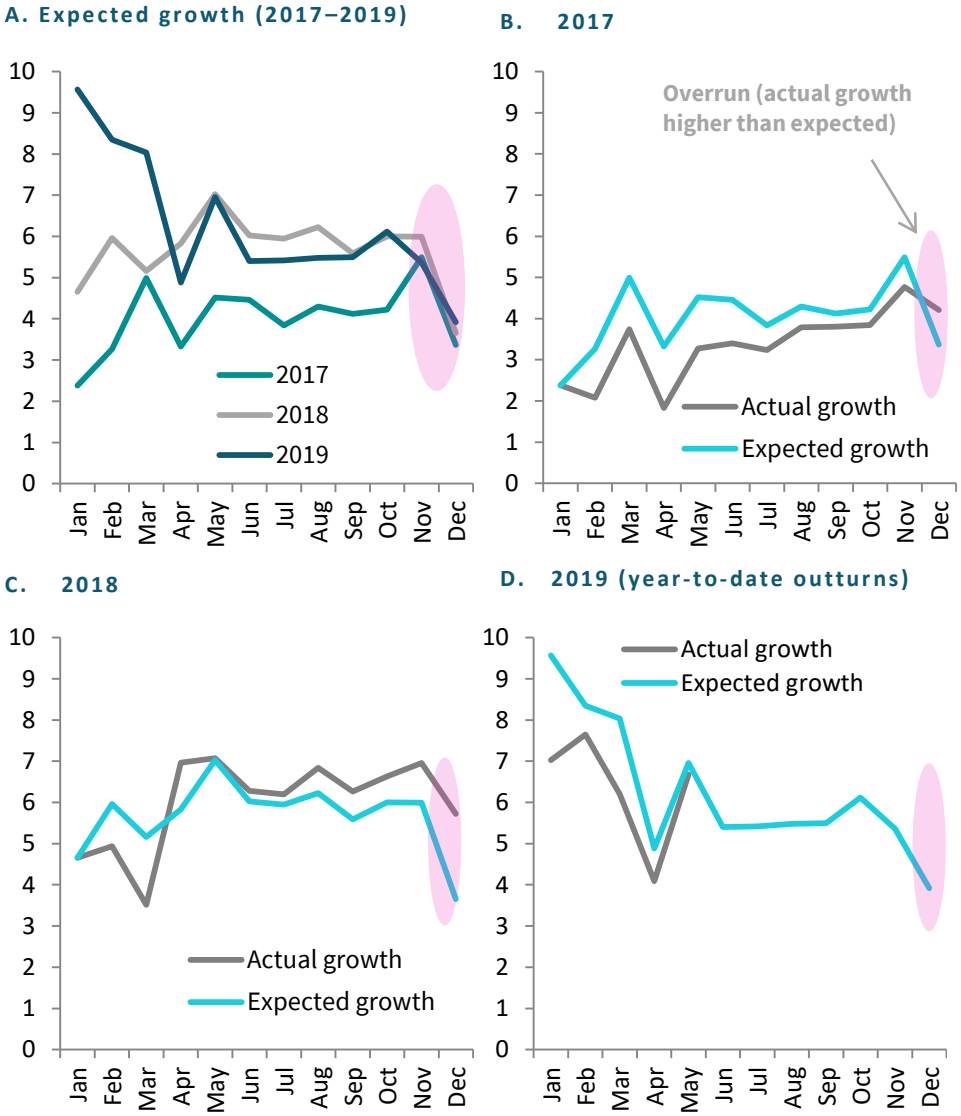
[30] Pension funds were reclassified retroactively in the sector of general government (CSO, 2019).

[31] In part, this is driven by anticipated underspends in non-health areas not having materialised having been factored into the budget day estimates for 2018. Much of the additional €0.5 billion appears to relate to higher-than-expected social payments including health service, housing assistance, and other social protection schemes.

[32] Forecasts for spending at the end of the forecast horizon may have been somewhat unrealistic (i.e., low) prior to *Budget 2016*, which may exaggerate the extent of upward revisions.

Figure 3.3: Monthly Exchequer Spending Profiles Assume a Sharp Fall in December that Leads to Overruns if Not Achieved

Percentage growth (year-on-year), cumulative



Sources: Department of Finance (Fiscal Monitor); and internal IFAC calculations.
Note: Gross voted current spending in cumulative terms. Expected growth refers to the change in the current year's forecast relative to the outturn of the previous year.

In terms of recent developments on expenditure, the outturns for the year to date (end-May) are slightly below monthly forecasts, but past patterns would suggest that this is not a reliable guide to the final outturn.[33] Figure 3.3A explores the patterns of monthly spending forecasts for 2017, 2018 and 2019.[34] For all three years, a clear trend emerges: the expected growth rate in December of each year

[33] For example, in May 2019, gross voted current spending in the Department of Health was 0.7 per cent below profile, but the annual growth was very strong at 9.0 per cent.

[34] This is calculated as the growth rate of the current year's forecast relative to the previous year's outturn, in cumulative terms.

assumes a sharp fall relative to previous months.[35] In 2017 and 2018, the actual growth rate did not fall as rapidly as had been forecast, resulting in overruns in both years (Figure 3.3 Panels B–C). In 2017, the actual growth was lower than forecast for the first eleven months of the year, so signals of overruns were not apparent over the course of the year. However, the final outturn for the year resulted in an overrun. For 2018, while there had been overruns for the second half of the year, the overrun widened significantly in December, with the end-year overrun becoming substantial.

Turning to capital spending, some ongoing investments are experiencing significant overruns, as discussed in Box F.

Box F: Capital Project Overruns in Ireland

A common feature of big capital investments in Ireland and internationally is that initially-set budgets tend to escalate over time, leading to overruns that can put pressure on the public finances. This Box examines the general drivers of this trend and provides an overview on the Irish experience, focusing on the case of the National Children's Hospital.

Internationally, investment in infrastructure megaprojects (i.e., projects worth over $1 billion) has gained momentum in recent years. Yet, nine out of ten megaprojects incur cost overruns (Flyvberg, 2014), largely caused by: (1) weak leadership by planners who lack experience in large projects, which can lead to major changes throughout the project cycle; (2) conflicts of interest in decision making by different stakeholders in the public and private domains; and (3) the long-term nature of the project, which increases the extent of potential risks. Exceeding initial budgets can have important consequences in the public finances, including resorting to in-year cuts in other spending areas or the use of temporary revenue gains.

Scale of Overruns in Ireland and their Impact

Ireland is not an exception to this systematic pattern of overruns in infrastructure projects (Table F.1). The construction of the Dublin Port Tunnel, for example, involved an overrun of 160 per cent of the initial budget. While lessons should have been learnt from past experience, some ongoing capital projects are still incurring substantial overruns. The National Broadband Plan, which has been approved by the Government, has seen the estimated cost increase from an initial €500 million to an estimated €3 billion (an increase of 500 per cent).

Table F.1: Examples of Capital Investment Overruns in Ireland

Approximate increases from initial budget to final cost/latest estimate

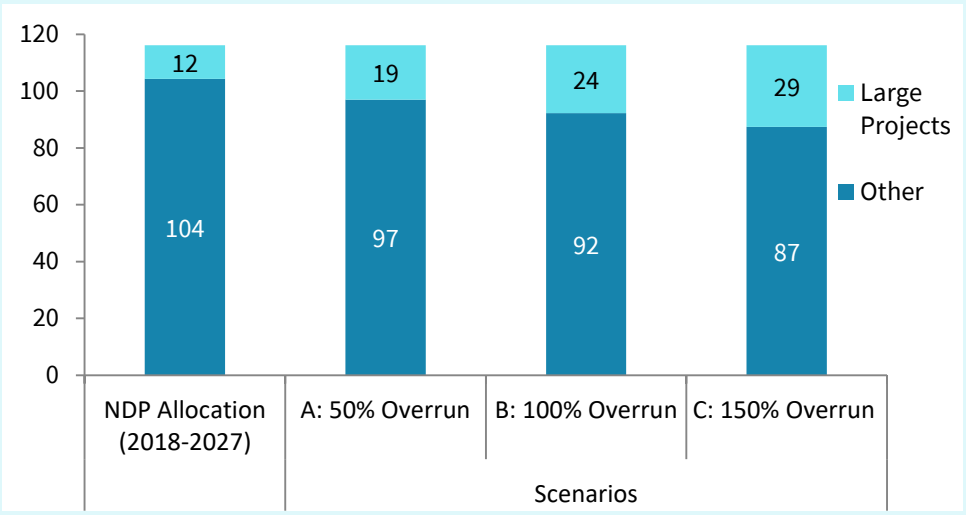
	Overrun (€ million)	*Overrun (%)*
National Broadband Plan	2,500	500
National Children's Hospital	983	94
Luas Line [1]	578	289
Dublin Port Tunnel	495	160

Sources: Internal IFAC calculations.
Note: [1] This refers to the first construction phase of the Luas line. The extension that followed, however, performed well in sticking to initially-budgeted costs.

[35] From an average expected growth of 5.6 per cent in November to 3.7 per cent for the end-year.

Deviating from initially planned budgets can have wider implications. As an illustration, Figure F.1 shows how overruns in the largest projects would squeeze the budget for the other investments set out in the National Development Plan (Department of Public Expenditure and Reform, 2018a) assuming that the overall envelope was maintained.[36,37] Under the baseline scenario from the National Development Plan, the large projects would imply an average annual cost of €1.3 billion, leaving on average €11.6 billion per annum for other projects. However, if these large projects overran by 150 per cent (except for the National Children's Hospital and the National Broadband Plan, for which the latest overrun estimates are incorporated), this would imply that the allocation for the large projects would increase to €3.2 billion annually, reducing the scope for the rest of the projects to €9.7 billion.[38]

Figure F.1: Overruns in Large Projects Can Reduce the Scope for Other Investments



Sources: Department of Public Expenditure and Reform (2018a); and internal IFAC calculations.
Note: The National Development Plan (NDP) allocation is adjusted to take account of the outturn for 2018. Scenarios A, B and C assume overruns of 50 per cent, 100 per cent and 150 per cent, respectively, for the large projects considered in the exercise (except for the National Children's Hospital and the National Broadband Plan, for which the latest overrun estimates are considered final).

Case study: the National Children's Hospital

The National Children's Hospital is the largest capital investment programme ever undertaken in Ireland's healthcare system. Since the project was established six years ago, the estimated cost of the investment has doubled, as shown in Figure F.2. In 2013, the estimated budget for the construction of the hospital was €790 million. In April 2017, the estimation increased to €983 million, which included costs related to the construction and equipment of the hospital

[36] The projects identified as "large" in this exercise refer to: the National Children's Hospital, the National Broadband Plan, the Dart Expansion, the Metro Link, the M20 Cork-Limerick, the BusConnects Programme, and the Eastern and Midlands Water Supply Project. For the National Children's Hospital and the National Broadband Plan, the latest overrun estimates are incorporated in the exercise, and no further assumptions are applied to these.

[37] The overall envelope from the National Development Plan refers to the total allocation committed for 2018–2027. This has been adjusted to take account of the 2018 outturns.

[38] The annual average, shown for illustrative purposes, should not be taken literally since it assumes that the cost of the projects is spread equally over the nine-year horizon (2019–2027), while this is not necessarily the case (e.g., the duration of some projects is below nine years) .

and the two satellite centres. In December 2018, the associated cost increased to €1.43 billion. After this, a further €293 million is expected to be needed to cover additional items (e.g., IT systems), increasing the latest estimate to €1.73 billion.

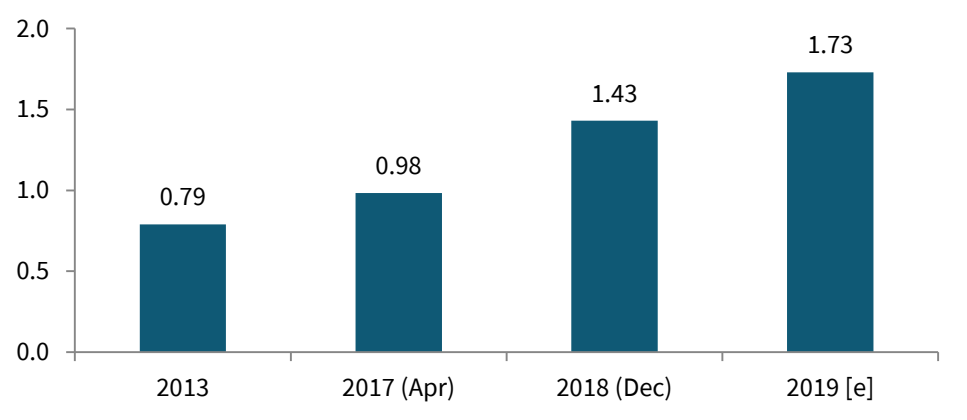
For 2019, cost developments in the Children's Hospital are expected to be covered through savings in other departments/capital projects. The Minister for Finance outlined in February that €99 million will be needed this year for timely provision of the National Children's Hospital.[39] This amount is planned to be accommodated as follows: €24 million arises from a scheduled draw-down in Health across 2019 and 2020; the remaining €75 million will be met through a number of savings elsewhere, the largest being a re-scheduling of €27 million arising in relation to the A5 Motorway in Northern Ireland.

A review by PwC (2019) helps understand the rationale for the cost-escalation up to end-2018. Three key deficiencies were identified as driving such re-estimations of the costs:

1. Planning. This relates to the lack of a solid cost-benefit analysis being undertaken prior to the construction process. This includes an underestimation of potential risks, besides the absence of robust planning to identify a guaranteed maximum price (i.e., a ceiling to the investment cost).
2. Execution. Once the investment had been committed, there was poor coordination and control of the guaranteed maximum price.
3. Governance. The body in charge of overseeing the project (the National Paediatric Hospital Development Board) did not adequately put into question the deficiencies of the project, allowing it to progress "too quickly" and without being challenged regularly.

Figure F.2: The Estimated Cost of the Children's Hospital Has Doubled

€ billion



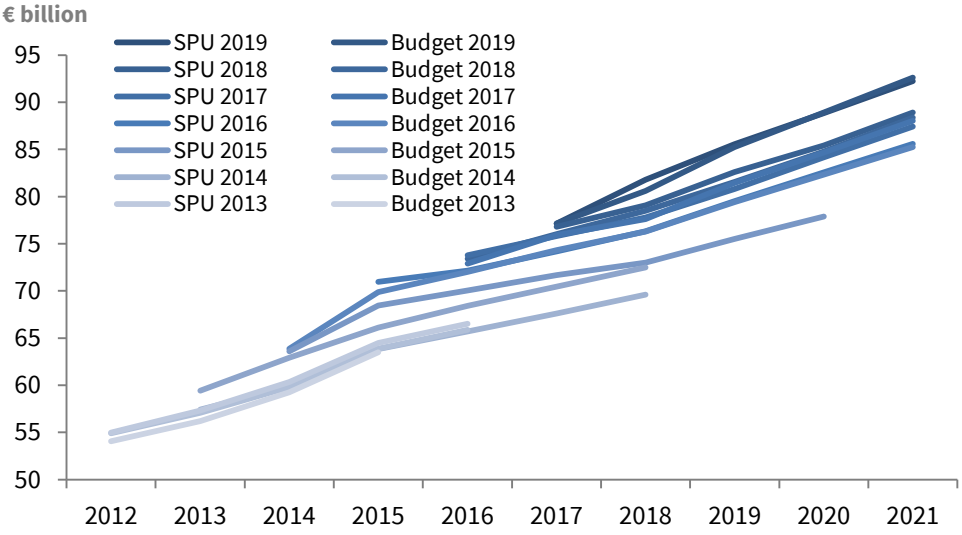
Sources: PwC (2019).
Note: The 2019 figure refers to the latest estimate of the investment cost. However, this figure does not include additional costs that may well arise, including accommodation costs or inflation.

Key failures associated with health spending overruns were identified in Box D of IFAC (2018e). There are clear parallels between those failures, the conclusions noted in the review of the National Children's Hospital, and some deficiencies identified in Flyvberg (2014). These refer to: (i) unrealistic forecasts; and (ii) weak spending controls. This gives rise to the "soft budget constraint" problem, whereby the budgeted cost is surpassed repeatedly. In turn, this creates future problems by reinforcing the belief that upward revisions to the ceiling are very likely to be facilitated, hence weakening spending controls further. The interaction between unrealistic forecasts and a subsequent relaxation of ceilings can put the public finances at risk.

[39] Minister for Finance public statement on 12 February 2019, available here.

Turning to **general government revenue** for 2018, this amounted to €82.0 billion. This is €1.2 billion higher than anticipated in *Budget 2019*, which was published just three months before the end of the year. This outperformance was largely driven by taxes on income and wealth arising from higher-than-expected corporation tax receipts. IFAC (2018c) highlighted how revenue projections have been revised procyclically. Figure 3.4 updates this analysis. For 2019, revenue projections—adjusted for discretionary revenue changes—are now some €10.4 billion stronger than first forecast in *SPU 2015.* This underlines the likely cyclical characteristics of some part of forecast revenue growth (part of which is driven by higher corporation tax receipts, which are also likely to be cyclical rather than structural increases in tax revenues).

Figure 3.4: Vintages of General Government Revenue Forecasts



Sources: Department of Finance; and internal IFAC calculations.
Note: Data are adjusted to account for discretionary tax policy changes (not including the impact of non-indexation of tax bands and credits).

Box G: Sources of Revenue Surprises Over Recent Years

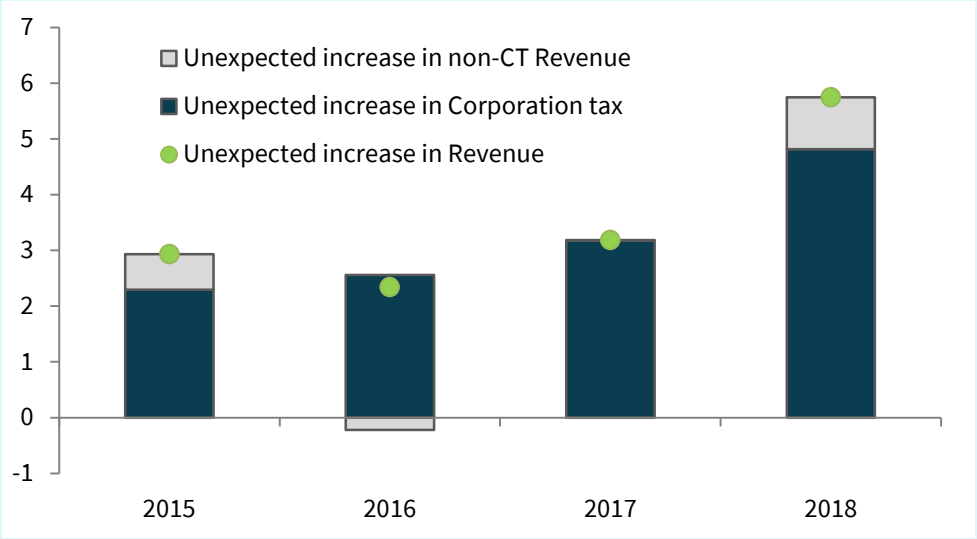
This Box examines the recent performance of general government revenue relative to previous forecasts. Over the past four years, general government revenue has been much stronger than was predicted. As an illustrative exercise, we use the *Budget 2015* forecasts of general government revenue for the years 2015–2018 and compare them to the outturns.[40] As some of the difference between the levels of outturns and levels of forecasts may be due to revisions or reclassifications, this Box focuses on the year-to-year growth in general government receipts. This means that such reclassifications are less likely to impact on the analysis presented here.[41]

One important aspect is the role of corporation tax receipts, which more than doubled from 2014 to 2018. *Budget 2015* did not include explicit medium-term corporation tax forecasts. However, medium-term corporation tax forecasts by the Department of Finance typically project from the current level using nominal GNP growth.[42] This approach is applied to the 2015 forecast using GNP forecasts at the time.[43] We take the nominal GNP growth rate forecast in *Budget 2015* and apply that to the 2015 forecast to get forecasts for 2016–2018.

Figure G.1 shows that almost all of the over performance of revenue in this four-year period can be attributed to the stronger-than-anticipated growth in corporation tax. The largest forecast errors came in 2015 and 2018, mainly due to unexpected increases in corporation tax receipts. With this in mind, it appears that the Department has been relatively accurate in forecasting general government revenue excluding corporation tax.

Figure G.1: Revenue Surprises Driven by Corporation Tax Receipts

€ billion, cumulative revenue surprises from 2015



Sources: *Budget 2015*; CSO; and internal IFAC calculations.

[40] For the outturns, we adjust them for policy changes and one-offs, as these would be unlikely to have been incorporated into *Budget 2015* forecasts.

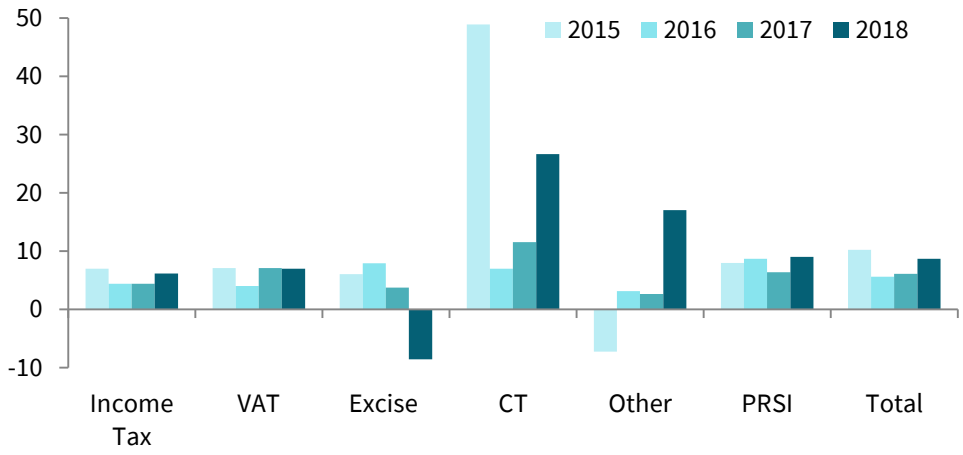
[41] This is because reclassifications are generally applied to the whole time series and hence are less likely to impact on individual year-to-year changes.

[42] While gross operating surplus is used by the Department to forecast corporation tax, GNP growth is used in this exercise as forecasts for GNP were published in *Budget 2015*.

[43] The 2015 forecasts for corporation tax were given in the Exchequer returns, consistent with *Budget 2015* projections.

In terms of **Exchequer tax revenue**, receipts of €55.6 billion were collected in 2018, €1.4 billion higher than forecast in March 2018.[44] While the majority of tax heads and PRSI have followed stable growth in 2018, some other sources have substantially moved away from recent trends (Figure 3.5).[45] The most remarkable growth relates to corporation tax revenue, which grew by 27 per cent in 2018, far ahead of an average growth of 9 per cent in the previous two years. In 2015, however, the growth amounted to 50 per cent, reflecting the highly volatile nature of this tax head (Casey and Hannon, 2016).

Figure 3.5: Tax Revenue and PRSI in 2015–2018
Percentage change (year-on-year)



Sources: Department of Finance; and internal IFAC calculations.
Note: Tax revenue expressed in Exchequer terms. Other includes stamp duties, customs, capital gains tax, capital acquisition tax and other unallocated tax receipts. It excludes local property tax and motor tax for comparability purposes. Total represents the growth of Exchequer Tax Revenue and PRSI.

Appendix E.1 shows how the *SPU 2019* estimates for 2019 have been revised relative to the *Budget 2019* forecasts for 2019. Corporation tax forecasts are the only ones that have been revised significantly, with the forecast for 2019 now €500 million higher than in *Budget 2019*. This upward revision is largely driven by an update of

[44] See Exchequer Borrowing Requirement Profiles 2018 available at: https://assets.gov.ie/8259/48ccce88b835414f850d876eee9b751e.pdf.

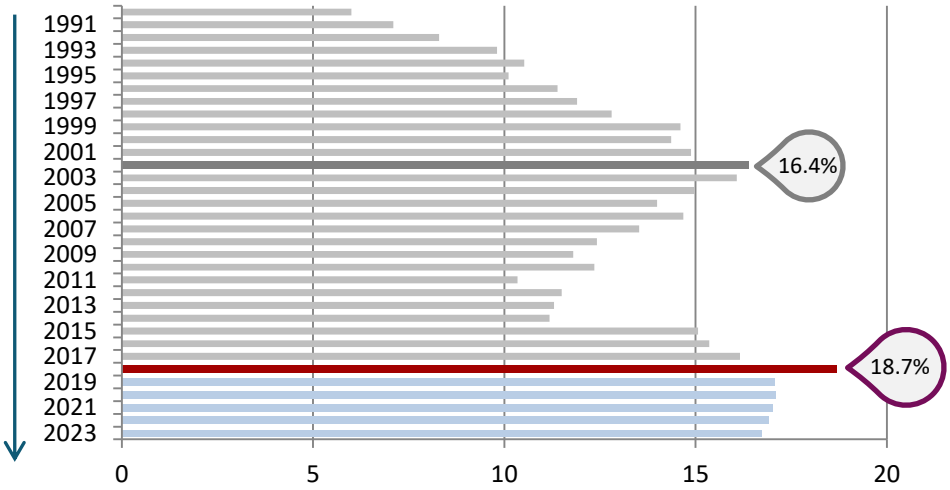
[45] In 2018, excise duties experienced substantial negative growth, largely attributed to the implementation of the plain-packaging of tobacco products. Other tax revenue recorded strong positive growth, largely driven by strong growth in stamp duties (nearly 21 per cent). Despite this, stamp duty revenues were substantially lower than initially forecast for 2018 (by €217 million, or 13 per cent). This is partly due to an over-optimistic yield expected from the increase of stamp duty on commercial property deals from 2 to 6 per cent introduced in *Budget 2019.* The estimated yield was €376 million for 2018, while the actual yield might be close to €289 million.

the 2018 outturn (captured in the "starting point error"), which is taken as the basis of the forecast for 2019.[46]

In 2018, corporation tax revenue represented 18.7 per cent of total Exchequer tax revenue, the highest share ever recorded (Figure 3.6). This tax head is very volatile and is strongly concentrated in a small number of companies (Box H). This, together with potential changes in the international tax environment, leaves government revenue exposed to shocks (see Table 3.6).[47] IFAC (2018c) provided a stylised scenario on the direct impact of a large firm leaving Ireland. This exit was estimated to trigger a reduction of government revenues by over €330 million, close to half a per cent of total revenue in 2016.

Figure 3.6: Corporation Tax (% Revenue) in 2018 at Highest Peak

% of total Exchequer tax revenue (horizontal axis)



Sources: Department of Finance; and internal IFAC calculations.
Note: The shares for 2019–2023 are based on *SPU 2019* estimations/projections.

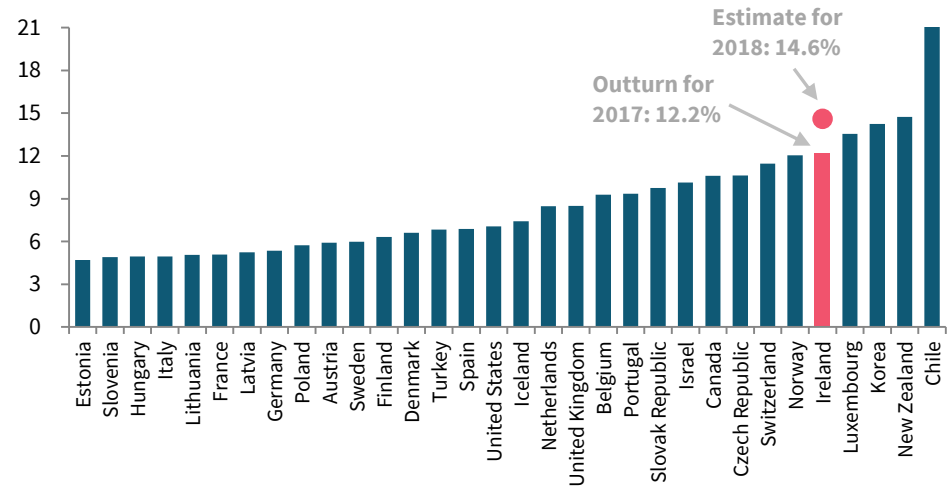
An international comparison suggests that Ireland is one of the countries within the OECD with the highest reliance on corporation tax revenues (Figure 3.7). In 2017, Ireland had one of the highest shares of corporation tax over total taxation (with total taxation including tax revenue from the central government, local government,

[46] At the time of *Budget 2019,* the Department of Finance identified a corporation tax one-off of €700 million for 2018. This was related by the adoption of new accounting standards by some firms (€300 million, later revised to €350 million (Revenue Commissioners, 2019)) and non-recurring improved profitability/trading conditions from other Revenue clients (€400 million). But corporation tax receipts in 2018 were €800 million higher than had been forecast three months before in *Budget 2019.* Of this €800 million, €500 million is assumed to enter in the base for 2019.

[47] The corporation tax increase in recent years could also be a result of hyper-cyclicality, where the elasticity of the Irish corporation tax to the global business cycle has become particularly large in the last decade (Box H).

social security funds and supranational funds). For 2018, this share has grown substantially for Ireland, with corporation tax estimated to now represent 14.6 per cent of total taxation, well over OECD norms.

Figure 3.7: Corporation Tax (% Total Taxation) in the OECD



Sources: OECD Corporate Tax Statistics; and internal IFAC calculations.
Note: Data shown for 2017 (circle for Ireland refers to 2018, estimated through internal calculations). Total taxation includes tax revenue from the central government, local government, social security funds, and supranational funds.

In terms of income tax, receipts grew substantially in 2018 (by 6.2 per cent or €1.2 billion), reflecting solid employment and earnings growth. However, receipts were €202 million lower than previously forecast in *Budget 2018*. Relatedly, **PRSI** is another source of government revenue that mirrors labour market conditions. While receipts from this source account for an important part of government revenue, its importance is often not recognised in revenue analyses. As shown in Figure 3.8, PRSI has consistently overperformed in the last three years by €231 million (on average), while income tax has underperformed by €88 million over the same period.[48] This substantial difference comes despite PRSI revenue being equivalent to only half the value of income tax receipts (Figure 3.8B).

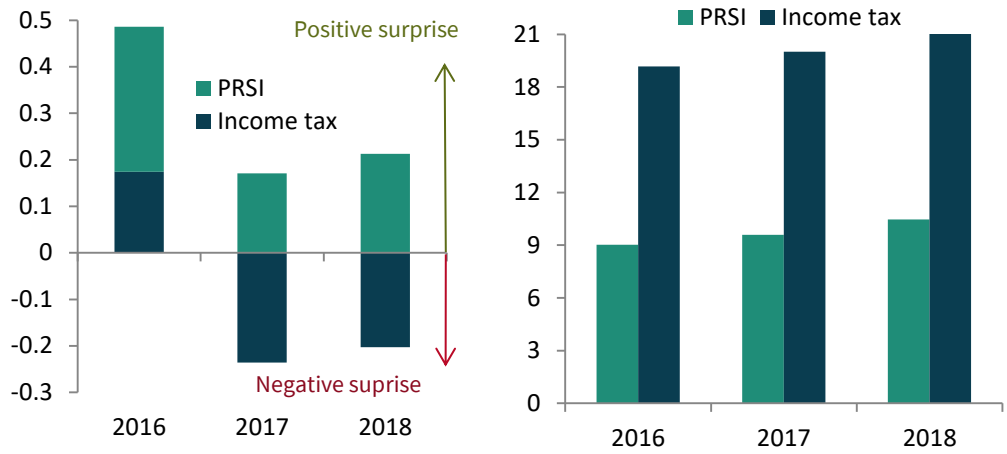
[48] The income tax underestimation might be linked to the revenue loss due to income tax changes in some recent budgets.

Figure 3.8: Unexpected PRSI Offsets Income Tax Surprises

€ billion

A. PRSI surprises positive and larger than income tax surprises…

B. …even if PRSI receipts are just half the value of income tax

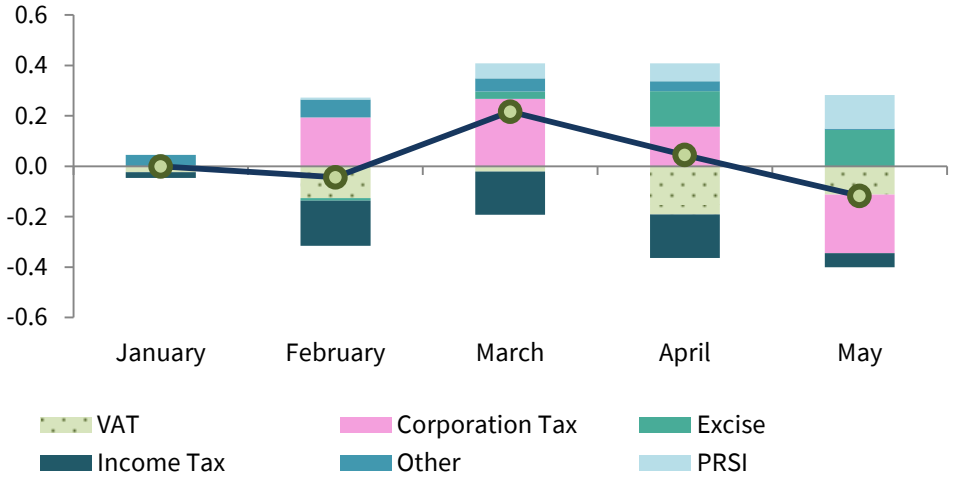


Sources: Department of Finance; and internal IFAC calculations.
Note: PRSI revenue includes its corresponding excess as per the memo items. Panel A shows the difference between the outturn and the profiles as per the Analytical Exchequer Statements.

In terms of the Exchequer developments for the year to end-May (Figure 3.9), tax revenue and PRSI have, as a whole, underperformed. This is the result of lower-than-expected corporation tax, VAT and (to a lesser extent) income tax taking hold. This has not been offset by overperforming PRSI and excise duties. PRSI revenue has been very strong thus far: €399million (or 9.3 per cent) higher than in the same period last year and €133 million (or 2.9 per cent) over profile.

Figure 3.9: Tax Revenue and PRSI Performance (Outturn–Profile) in 2019

€ billion (cumulative)



Sources: Department of Finance; and internal IFAC calculations.
Note: Data as per the monthly Analytical Exchequer Statements. Other includes capital taxes, motor tax and other unallocated tax receipts.

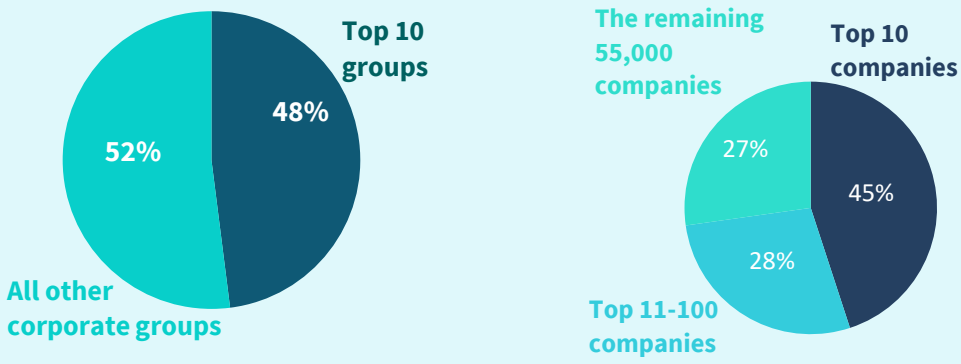
Box H: Corporation Tax Concentration and Volatility

Corporation tax revenue in Ireland is characterised by its high volatility and strong concentration in a few firms. These factors contribute to make it the most challenging of the main tax heads to forecast (Casey and Hannon, 2016). This Box provides new insights into the concentrated and volatile nature of corporation tax in Ireland drawing on the latest data from the Revenue Commissioners (2019).

How concentrated are corporation tax receipts among firms?

A large share of the corporation tax revenue in Ireland is paid by relatively few companies. In 2018, corporation tax receipts amounted to €10.4 billion. Of this, the top ten largest corporate groups paid €5 billion, virtually a half of all receipts (Figure H.1). This concentration is evident over the last five years for which data are available, with the largest top ten companies contributing 37–45 per cent of receipts each year since 2014. The following top 11–100 companies have contributed to total corporation tax even more than the remaining 101–55,000 companies, with a share close to 25 per cent of total receipts.

Figure H.1: Only 10 Groups Paid Almost Half of Corporation Tax (2018)
Percentage of total corporation tax receipts



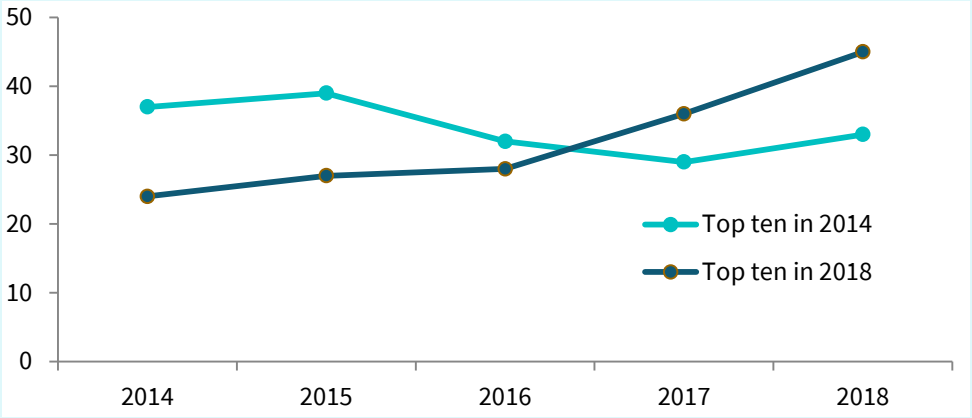
Sources: Revenue Commissioners (2019); and internal IFAC calculations.

When thinking of concentration risks, it is important to identify whether the top ten companies vary over time. If the top ten companies tend to be made up of the same ten firms every year, and their payments are significantly larger than the following top 11–100, then the concentration risk might be said to be greater. The risks might be lower if firms in the top ten vary regularly and do not account for a much greater share than firms just outside the top ten.

Recent analysis from the Revenue Commissioners (2019) suggests that the composition of the top ten companies varies somewhat. Figure H.2 shows that the top ten companies in 2014 paid 37 per cent of total corporation tax in 2014, while those same ten companies paid 33 per cent of total revenue in 2018. By contrast, the top ten companies in 2018 paid 45 per cent in 2018, while their 2014 share was only 24 per cent. This kind of movement might lead one to conclude that concentration risks are less severe. In other words, part of what is happening from year to year may simply be that some firms do well in a given year, with others taking their place the next year. Yet some top ten companies for 2014 might also reside in the top ten for 2018. It is not possible to tell from the Revenue analysis how stable the composition of the top ten is and, hence, how severe the concentration risk is.

Figure H.2: Top Ten Companies Can Change Over Time

Percentage of total corporation tax revenue



Sources: Revenue Commissioners (2019); and internal IFAC calculations.

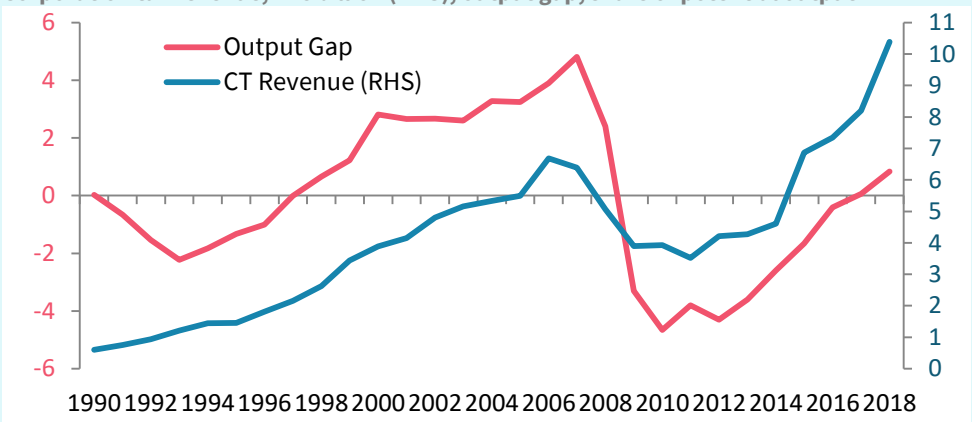
How volatile are corporation tax receipts?

A feature of corporation tax receipts in Ireland is that they have tended to be volatile. A way to quantify this is examining how the data deviates from its mean for a given period (i.e., the standard deviation). When analysing the annual growth over 1990–2018, it is evident that corporation tax has the highest degree of volatility of all the tax heads. This is the case both when using actual revenue collected (standard deviation of 17.6 per cent) and when adjusting that revenue for policy measures (15.8 per cent).[49]

Another relevant issue is whether the volatile nature of corporation tax is related to the cycle. Figure H.3 explores the correlation of corporation tax revenue and the cyclical position, with a relatively procyclical pattern emerging over the last decades. During 1995–2007, when the output increased somewhat above its potential, corporation tax revenue increased steadily. After reaching the peak of the boom period, the advent of the crisis triggered a sharp decline in nominal corporation tax, which has followed a strongly increasing trend again as the economy has recovered. The corporation tax increase in recent years could also be a result of hyper-cyclicality, where the elasticity of the Irish corporation tax to the global business cycle has become particularly large in the last decade.

Figure H.3: Procyclicality of Corporation Tax Receipts

Corporation tax revenue, in € billion (RHS); output gap, share of potential output



Sources: Department of Finance; and internal IFAC calculations.
Note: IFAC's output gap estimates are based on Casey (2018).

[49] By way of contrast, this is substantially higher than the volatility of VAT, with a standard deviation of 8.3 per cent on a headline basis, and 8.5 per cent in the policy-adjusted measure.

3.3 *SPU 2019* Forecasts (2019–2023)

2019–2023 general government balance

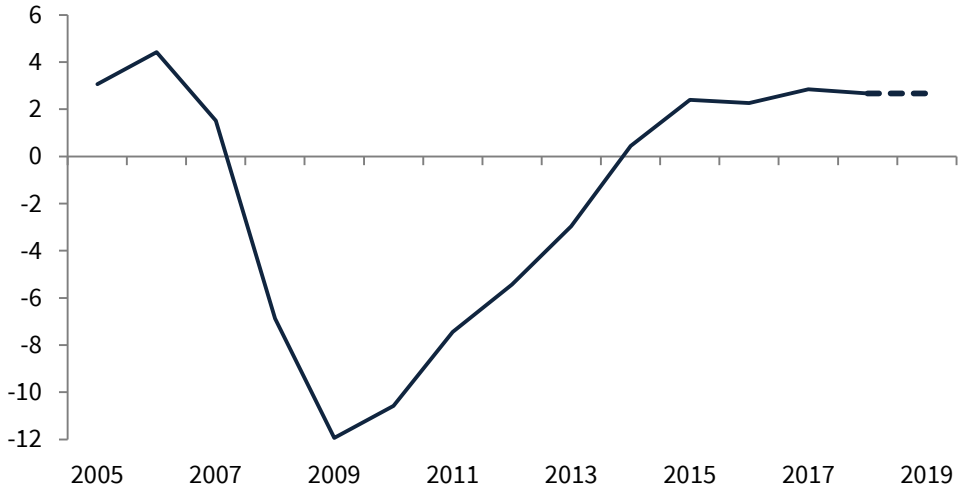
SPU 2019 forecasts the **general government balance** to improve in 2019 by €0.6 billion (€0.7 billion when one-off items are excluded). This improvement is aided by falling interest payments (€0.5 billion) and a slowdown in primary expenditure growth. This slowdown in primary spending growth would be threatened by upside risks to expenditure highlighted below, such as health overruns or payment of the Christmas bonus (which has not been budgeted for). The underlying primary balance is forecast to improve modestly in 2019 by €0.2 billion, far less than the sharp improvements up to 2015 (Figure 3.10). An acceleration in the growth of expenditure—only partially funded by revenue-raising tax changes and the non-indexation of tax bands and credits—is mainly responsible for the lack of improvement in the underlying primary budget balance in recent years.

In the later years of the projections (2020–2023), the general government balance and the primary balance are projected to improve significantly. However, this is based on expenditure figures which rely on technical assumptions: these assumptions are unlikely to reflect actual policy and are described below. Revenue forecasts for the same years are much more informative as they are based on continuing existing policies in a way that is likely to broadly reflect reality.

Based on the technical assumptions, the general government surplus is projected to increase in every year out to 2023. However, this improvement is likely to be overstated by the unrealistic assumptions being used. Forecasts of the general government surplus in 2021 to 2023 have been revised down slightly since Budget *2019*.

Figure 3.10: Primary Balance

% GNI*, excluding one-off items



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Dashed line indicates forecasts from *SPU 2019*.

2019 expenditure

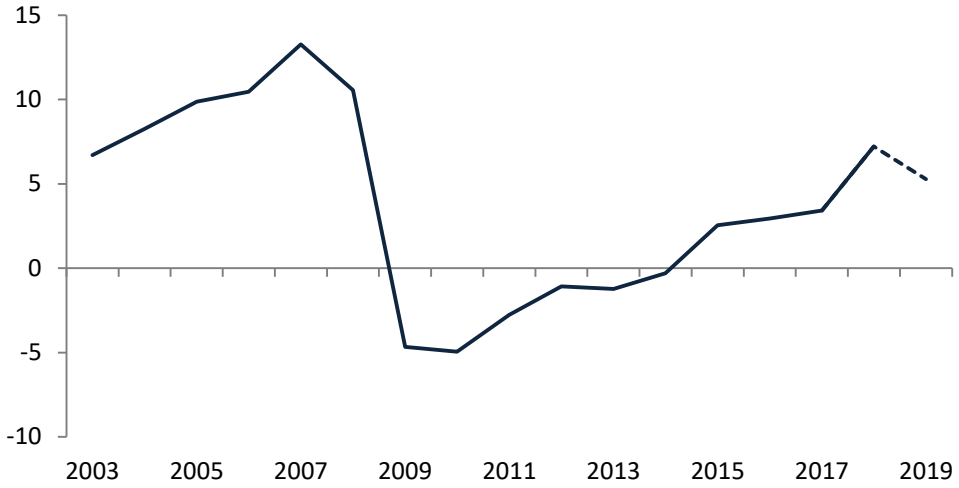
In 2019, general government expenditure is forecast to increase by €3.6 billion (excluding a one-off item in 2018).[50] This comes despite interest payments falling by €0.5 billion. This means that underlying primary expenditure (i.e., expenditure net of interest payments and one-off expenditure items) is forecast to grow by €4.0 billion (5.3 per cent). While this would typically be considered quite strong expenditure growth, if delivered on it would represent a significant slowdown from last year (7.2 per cent; see Figure 3.11). More generally, one can see a clear pattern of underlying expenditure growth accelerating over the past number of years. Intermediate consumption (€2.1 billion) and public gross fixed capital formation (€1.2 billion) are both set to contribute strongly to expenditure growth in 2019. Compensation of employees is set to increase by €0.8 billion this year.

General government expenditure in 2018 was higher than anticipated at budget time (€840 million; see CSO, 2019). Despite this, *SPU 2019* forecasts for 2019 overall expenditure are unchanged from *Budget 2019*, resulting in a slower rate of growth in expenditure this year. The fact that the general government forecasts in *SPU 2019* have not been revised upwards in light of the higher-than-expected 2018 outturn (much of which arises from social payments and public sector pay, which would be expected to recur) means that these are likely to be revised upwards in subsequent

[50] This relates to a €213 million one-off expenditure related to a settlement of pay arrears to medical consultants.

estimates. This is not expected to affect the gross voted current expenditure estimates for 2019, only the general government forecasts.

Figure 3.11: Primary Expenditure Growth
Percentage change (year-on-year), excluding one-off items, general government basis



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Primary expenditure equals total expenditure less interest repayments on government debt and one-offs. One-offs are those defined by the Council as applicable.

There are significant upside risks to these forecasts of primary expenditure (as well as possible upward revisions). For example, health spending has exceeded expenditure forecasts for each of the past number of years. While significant increased funding has been provided for in the latest set of forecasts, previous experience suggests overruns are likely.[51,52] Further public sector pay increases outside of the current agreement are also an upside risk to expenditure forecasts.

The Christmas bonus for recipients of weekly payments from the Department of Employment Affairs and Social Protection has, again, not been budgeted for in 2019, despite this payment having been made to varying degrees over the past five years. Throughout this period, the payment has not been budgeted for, with a decision on the scale of the payment being made late in the year. Last year, the bonus was paid for a full week, with a cost of €265 million. In the interest of good budgetary planning and to avoid a pattern of spending decisions based on cyclical developments (as occurred in the past), budget estimates should account for the payment of the bonus unless the Government genuinely does not intend to pay it.

[51] The latest gross current expenditure ceiling for the health group in 2019 is €901 million higher than the 2018 figure, which itself was €625 million higher than originally forecast.

[52] See IFAC (2018e) for analysis on previous health overruns.

Strong expenditure growth forecast for 2019 comes after substantial increases in 2018. Underlying primary expenditure is set to be 12.9 per cent higher in 2019 than in 2017. On this two-year basis, gross fixed capital formation is forecast to record the strongest growth (44.4 per cent), and large contributions from intermediate consumption (31.7 per cent) and compensation of employees (11.3 per cent) are also projected.

2020–2023 expenditure

For the years 2020–2023, expenditure forecasts in *SPU 2019* are not credible as they are based on technical assumptions that do not reflect either current government policy or likely future policies. Gross voted current expenditure is assumed to grow by 2.5 per cent per annum for 2020–2023. In recent years, the Department of Finance had improved its medium-term expenditure forecasts by moving from simply assuming no nominal growth in spending to a more realistic basis that was consistent with stated government policy.

Budget 2019 took a step backwards in this regard, by assuming a fixed (and implausibly low) growth rate in the outer years with no link to existing policies or needs. The forecasts contained in *SPU 2019* have applied the same inadequate methodology. Non-voted current expenditure is forecast to grow by only 0.6 per cent on average over the period, mainly due to falling interest costs. This is highly unrealistic in an economy with a growing population, demands for public services and forecast increases in wages in the economy. There is limited information value in these forecasts as they are based on assumptions rather than on a medium-term policy path or the costs of sustaining existing policies.

However, forecasts for voted capital expenditure are in line with the National Development Plan, with growth averaging 6.4 per cent over 2020–2023. As this is part of stated policy, this forecast is more informative than the other assumptions for spending forecasts.

Table 3.2: General Government Expenditure Forecasts

Percentage change year-on-year, unless otherwise stated

	2018	*2019*	*2020*	*2021*	*2022*	*2023*
General Gov. Expenditure	6.0	4.1	2.6	2.4	2.9	3.0
Compensation of Employees	7.5	3.5	2.3	1.6	0.1	-0.1
Intermediate Consumption	10.0	19.7	0.5	1.9	2.4	2.9
Social transfers	2.5	0.2	1.6	1.0	0.3	0.4
Interest Expenditure	-9.9	-9.0	-9.1	-5.1	6.3	5.6
Subsidies	-7.6	-3.0	0.6	-0.3	-1.8	3.7
Gross Fixed Capital Formation	21.7	18.6	3.9	4.5	5.8	6.7
Capital transfers	15.6	4.3	16.5	8.2	8.4	4.5
Other	20.5	-10.4	11.0	3.6	2.7	2.5
Resources to be allocated, € billion (included in total above)	0.0	0.0	0.6	1.3	2.4	3.6
Primary Expenditure	7.3	5.0	3.3	2.8	2.7	2.8
Primary Expenditure, % of GNI*	39.9	40.0	39.4	39.0	38.5	38.0

Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Figures in grey indicate that the Council assesses these forecasts as largely the result of technical assumptions on expenditure, which may be unrealistic. Resources to be allocated represents expenditure which is yet to be allocated to a specific item, with a decision as to where this is to be allocated to be made closer to the time. It is not included in "other" expenditure listed above.

In a separate publication (IFAC, 2019b), IFAC presents the Stand-Still scenario, which estimates the cost of maintaining today's level of public services and benefits (in real terms) over the medium term. This is based on relatively conservative assumptions with respect to spending pressures, notably on health. The findings suggest that the level of non-interest spending budgeted for under *SPU 2019* plans would not be sufficient to accommodate the Stand-Still estimates over the period 2020–2023. This implies that expenditure as forecast would not be sufficient to maintain existing levels of service and public investment plans.

At the Budgetary Oversight Committee, the Minister for Finance, Public Expenditure and Reform said that "my view is that as future budgets are done, regardless of whether I or other Ministers have the opportunity to do them, the share of Government expenditure as a percentage of GNI* will at least stay constant, if not grow, and taxation decisions will have to be made in order to do that or decisions will have to be made not to do other things".[53] As discussed above, the plans outlined in the *SPU 2019* show declines in spending as a share of GNI* over the

[53] Committee on Budgetary Oversight, Wednesday 16 January 2019, available at https://data.oireachtas.ie/ie/oireachtas/debateRecord/committee_on_budgetary_oversight/2019-01-16/debate/mul@/main.pdf.

medium-term and hence are not consistent with the view expressed by the Minister (see Table 3.2 and Figure 3.12).

Figure 3.12: General Government Expenditure
% GNI*, excluding one-off items

Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: One-offs are those defined by the Council as applicable.

The technical nature of the projections implies that many expenditure items show limited growth. Compensation of employees sees a significant slowdown in growth in 2020 and 2021, and is projected to remain flat in 2022 and 2023. Given the likely increases in staff numbers and wage growth in the economy, it would seem highly unlikely that compensation of employees (for the general government sector) would stay nominally constant in 2022 and 2023. IFAC Stand-Still estimates would indicate that if public sector pay rates were to increase in line with agreed pay deals and in line with private-sector wages thereafter, this would imply additional cost pressures of over €700 million per year.

The Department has left a significant amount of unallocated expenditure in the forecasts. A better practice would be to give an indication of where these resources would be employed, even if this might be adjusted by subsequent policy decisions.

Two alternative illustrative scenarios for general government spending and the resulting balance assuming the same tax policies as the SPU are presented in Table 3.3.[54]

[54] In both cases, general government revenue is adjusted to account for the increased levels of expenditure (relative to *SPU 2019* forecasts). This is done using the Council's Fiscal Feedbacks Model.

The first alternative scenario shows how general government expenditure would evolve were it to remain at its 2019 share of GNI* (42 per cent).[55] *SPU 2019* forecasts of nominal GNI* are used for 2019–2023. This first alternative scenario shows much stronger expenditure growth in the years 2020–2023. The stronger expenditure growth results in a very different path for the public finances. In this illustrative scenario, a deficit emerges in 2020 before improving to a surplus thereafter. The surpluses in the later years are also much smaller than those presented in *SPU 2019*.

Table 3.3: Alternative Scenarios for General Government Expenditure, Revenue and Balance

€ billion

	2018	*2019*	*2020*	*2021*	*2022*	*2023*
Expenditure						
SPU 2019	82.0	85.3	87.6	89.7	92.3	95.0
Alternative: Share GNI*	82.0	85.3	89.5	93.0	96.6	100.6
Alternative: Stand Still	82.0	85.3	87.9	90.6	93.9	97.5
Revenue						
SPU 2019	82.0	86.0	88.8	92.2	96.1	100.4
Alternative: Share GNI*	82.0	86.0	89.3	93.1	97.2	101.6
Alternative: Stand Still	82.0	86.0	88.9	92.5	96.5	100.9
Balance						
SPU 2019	0.0	0.6	1.2	2.5	3.8	5.3
Alternative: Share GNI*	0.0	0.6	-0.2	0.1	0.6	1.0
Alternative: Stand Still	0.0	0.6	1.0	1.9	2.7	3.4

Sources: CSO; *SPU 2019*; and internal IFAC calculations.
Notes: Two scenarios are considered in this exercise. The "Alternative: % GNI*" scenario shows general government expenditure which would arise from holding it constant as a share of GNI*, using GNI* forecasts from *SPU 2019*. The "Alternative: Stand Still" scenario shows the general government expenditure which would arise when adding in the additional IFAC Stand-Still costs for demographics and price pressures over the pre-commitments for these items, carryover costs and unallocated resources in *SPU 2019* forecasts. Figures in grey indicate that the Council assesses these forecasts as largely the result of technical assumptions on expenditure, which may be unrealistic.

As a second illustrative scenario, we use the IFAC Stand-Still scenario to arrive at more realistic spending projections. We take the difference between IFAC Stand-Still estimates of the costs associated with demographic change and price pressures (pay and non-pay) and the pre-committed amounts and unallocated resources in *SPU 2019* expenditure forecasts. This difference is then added to the *SPU 2019* projections for general government expenditure. The SPU pre-commitments used

[55] Although 2019 expenditure is a forecast, rather than an outturn, it is used as the starting point here. This is because most of the policy decisions for expenditure in 2019 have already been made. In addition, starting from 2019 ensures consistency with the Stand-Still approach, which is also used as an alternative scenario for expenditure in Table 3.3.

for this exercise include allocations for demographics, public sector pay and carryover costs. The largest differences between IFAC Stand-Still estimates and *SPU 2019* forecasts of expenditure are in the later years of the forecast. As highlighted above, public sector pay increases are not factored in beyond the year in which the current pay deal ends, which is in 2020. The unallocated resources in *SPU 2019* are not enough to cover the IFAC estimates of pay and non-pay price pressures in the later forecast years. In this second illustrative example, the budget balance remains in surplus throughout the forecast horizon, albeit with smaller surpluses than in *SPU 2019*.

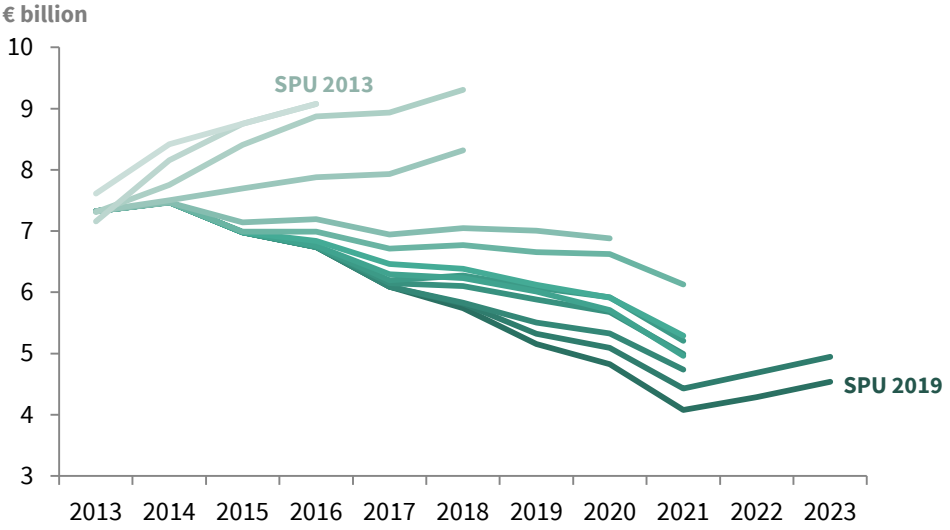
The first illustrative scenario (where spending remains fixed as a share of GNI*), leads to a greater increase in spending compared to the second illustrative scenario (using IFAC Stand-Still estimates). This is due to the growth in nominal GNI* which is forecast over this period, with growth of almost 5 per cent in 2020 and an average of 4 per cent over 2021–2023.

SPU 2019 confirmed a practice of forecasting macroeconomic and fiscal variables over a five year horizon. In spring, the current year is considered a forecast year, so forecasts out to four years ahead are published. In autumn, forecasts are to be published out to five years ahead.

Interest Expenditure

Interest costs on government debt have declined in recent years, and this is forecast to continue until 2021. This is especially true as higher coupon bonds are replaced by bonds with lower rates. Figure 3.13 shows the improvement in forecast and actual interest costs due to: (i) low global interest rates; (ii) agreed reductions in interest rates on official borrowing; (iii) expansionary monetary policy by the ECB, including the Public Sector Purchase Programme; and (iv) the early repayment of IMF loans and other debt restructuring. *SPU 2019* has once again seen a fall in expected interest payments over the period 2019–2023. However, interest costs are forecast to rise somewhat after 2021, due to a forecasted rising average interest rate and a rising level of debt (in absolute terms). The average interest rate is forecast to rise because the bonds due to be refinanced in 2022 have very low rates; hence they are currently forecast to be refinanced at higher rates.

Figure 3.13: Revisions to National Debt Cash Interest Payments



Sources: Department of Finance.
Note: Successive vintages of forecasts of cash interest payments are shown for budget and SPU publications between *SPU 2013* and *SPU 2019* with darker shades showing more recent vintages.

2019–2023 revenue

The outlook for 2019 points to **general government revenues** of €86.0 billion (Table 3.4). This is 5.2 per cent higher than in 2018 on an underlying basis (excluding one-off receipts of €0.4 billion in corporation tax revenue in 2018). The forecast for 2019 is €720 million higher than at *Budget 2019* time, largely driven by upward revisions of current taxes on income and wealth (with the corporation tax forecast being €500 million higher than in *Budget 2019*) and taxes on production and income.[56]

For 2020–2023, general government revenue is forecast to grow by 4.0 per cent, on average (Table 3.4). This is slightly lower than forecast in *Budget 2019,* largely due to downward revisions in "other" revenue not being fully offset by increased forecasts of current taxes on income and wealth and property income.[57,58] As a share of GNI*,

[56] Another important issue relates to local property tax. The revaluation that was due to take place in November 2019 has now been deferred until November 2020. This is despite the fact that the *Review of Local Property Tax* (Department of Finance, 2019a), published in March 2019, strongly recommended that the revaluation take place as planned in November 2019, noting that "further delays in revaluation may present risks to the long-term sustainability of the tax".

[57] The Department of Finance noted that the CSO outturn for "payments or non-market output" was significantly lower than the estimate for 2018 at budget time. Therefore, this was factored into the baseline projections. In addition, the outturn for current and capital transfers' receivable was higher than had been forecast in *Budget 2019*. However, given the "lumpy" nature of this item, this upward revision has not been incorporated in the baseline forecasts.

[58] The revision on taxes on production and imports is largely due to receipts from the National Lottery Fund being reclassified as tax revenue, rather than property income (in line with Eurostat guidance). This reclassification will not impact on general government revenue. The upward

general government revenue is projected to be 42.6 per cent in 2019, and 42.1 per cent in 2020–2023, on average.

Table 3.4: General Government Revenue Forecasts
€ billion, unless stated

	2018	2019	2020	2021	2022	2023
General Gov. Revenue	81.7	86.0	88.8	92.2	96.1	100.4
Taxes on production and imports	25.5	26.8	27.6	28.5	29.3	30.4
Current taxes on income, wealth[1]	34.2	35.9	37.7	39.4	41.4	43.6
Capital taxes	0.5	0.5	0.5	0.5	0.6	0.6
Social contributions	13.4	14.8	15.5	16.3	17.1	18.0
Property income	1.3	1.7	1.4	1.3	1.2	1.1
Other	6.8	6.2	6.1	6.3	6.5	6.7
Macro Indicators						
General Gov. Revenue (% GNI*)	42.5	42.6	42.0	42.0	42.1	42.2
General Gov. Revenue (% GDP)	25.7	25.6	25.2	25.1	25.1	25.1

Sources: Department of Finance; and internal IFAC calculations.
Note: [1] Current taxes on income and wealth for 2018 exclude the €350 million corporation tax one-off item assessed by the Council as applicable.

In **Exchequer** terms, **tax revenue** is estimated to amount to €58.4 billion in 2019, representing annual growth of 5.2 per cent. This strong increase is mainly driven by income tax, followed by VAT and excise duties.[59] These are partly offset by an expected decrease of corporation tax revenue in 2019 (negative growth of 3.9 per cent for the year, see Appendix E). For 2020–2023, Exchequer tax revenue growth is projected to average 4.6 per cent (Table 3.5 and Figure 3.14).

revision of property income is partly due to increased expectations on the Central Bank surplus income and dividends.

[59] Excise duties are estimated to grow strongly in 2019, yet this is largely the result of a low base in 2018. As discussed in IFAC (2018e), the introduction of plain packaging on tobacco products in 2017 triggered a drag in receipts arising from this source. *SPU 2019* notes that these impacts have now unwound in 2019.

Table 3.5: Tax Revenue and PRSI Forecasts
€ billion

	2018	*2019*	*2020*	*2021*	*2022*	*2023*
Tax Revenue	55.6	58.4	61.2	63.9	66.7	70.0
Income tax	21.2	22.9	24.2	25.5	27.1	28.8
VAT	14.2	15.1	15.9	16.4	17.1	18.0
Corporation tax	10.4	10.0	10.5	10.9	11.3	11.7
Excise duties	5.4	5.9	6.1	6.3	6.4	6.6
Other	4.3	4.5	4.6	4.8	4.9	5.0
PRSI	10.5	11.1	11.9	12.5	13.1	13.8
Total	66.1	69.5	73.1	76.4	79.8	83.8

Sources: Department of Finance; and internal IFAC calculations.
Note: Tax revenue in Exchequer terms. Other includes motor tax, customs, capital gains tax and capital acquisitions tax. For PRSI, the gross figures including the excess over expenditure are shown. For 2020–2023, the PRSI figures refer to the total Social Insurance Fund figures, which in recent years have tended to be around €100 million and €200 million greater than the figure for gross PRSI including excess expenditure.

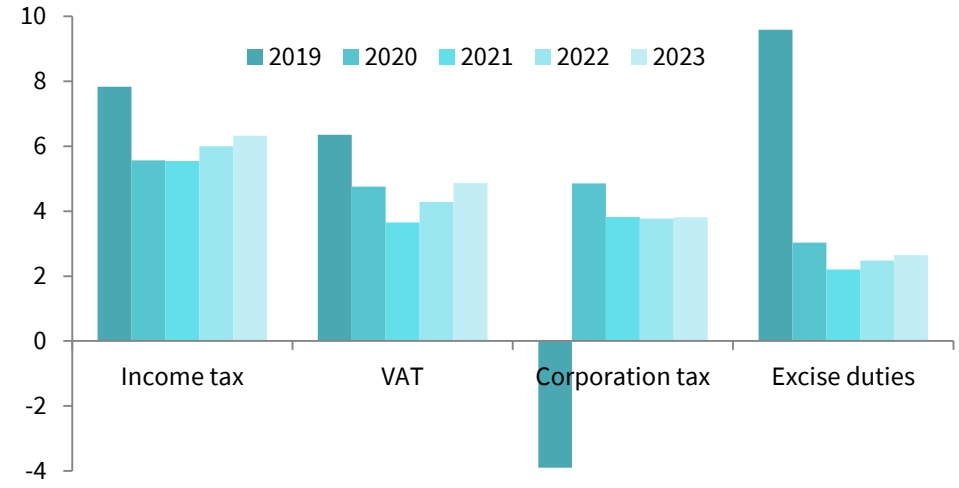
Appendix E provides a detailed overview on the drivers behind the tax forecasts. These include macro growth, policy changes, one-off items and other components such as judgement. It shows that the decelerating pattern of VAT forecasts for 2019–2021 is largely the result of weaker assumptions on the macro driver of VAT—namely the forecast in growth in personal consumption volume—which has been revised downwards since *Budget 2019*. PAYE is forecast to grow strongly, mainly driven by strong non-agricultural earnings and employment growth, while policy effects will negatively impact USC growth. Box I discusses how PAYE and USC forecasts change after applying an alternative assessment of the corresponding elasticities as developed in Conroy (2019).

In terms of **PRSI**, the estimate for 2019 is €11.1 billion, representing an annual growth of 6.2 per cent. For 2020–2023, PRSI revenue is projected to average €12.8 billion, in line with labour market forecasts.[60]

[60] For 2020–2023, the figures refer to the total Social Insurance Fund figures, which in recent years have tended to be around €100 million and €200 million greater than the figure for gross PRSI including excess expenditure.

Figure 3.14: Tax Forecasts

Percentage change (year-on-year)



Sources: Department of Finance; and internal IFAC calculations.

Box I: Forecasting Tax Revenue: a Reassessment of Elasticities

This Box examines the elasticities used in tax forecasting to map from tax bases, such as wage incomes, to tax revenue. Different revenues are forecast by using different macroeconomic drivers. For example, income tax is driven by the amount of income generated in the economy.

The sensitivity of the revenue collected to the macroeconomic driver is reflected in the elasticity of revenue to the tax base. This elasticity measures the endogenous percentage change in revenue following a 1 per cent change in the macroeconomic driver of that revenue source. Elasticities are conventionally estimated empirically using time series data on revenue collected and the associated macroeconomic driver.

A recent paper (Conroy, 2019) re-assesses this relationship by adjusting for the impact of policy changes based on a newly compiled dataset of budget-day estimates of tax policy changes. If policy changes are procyclical and negatively correlated to revenue growth (tax rates are cut in good times), this biases down the tax elasticities compared with the true relationship.

The new results suggest a long-run income tax (income tax combined with USC) elasticity of 1.4, with a short-run elasticity of 1.5 (Table I.1). This compares with conventional elasticities of 1.2 and 2.1 used by the Department to forecast USC and PAYE income tax respectively.

Table I.1: Comparison of Elasticities

	Values
Conroy (2019) estimates, combined income tax and USC	
Policy-adjusted long-run elasticity	1.4
Policy-adjusted short-run elasticity	1.5
Unadjusted long-run elasticity	0.8
Unadjusted short-run elasticity	1.0
Department of Finance estimates	
Income tax elasticity	2.1
USC elasticity	1.2

Sources: Department of Finance; and Conroy (2019).

Next, we consider the impact different assumed elasticities would have on the projections for future income tax and USC receipts. As the elasticity estimated in Conroy (2019) refers to USC

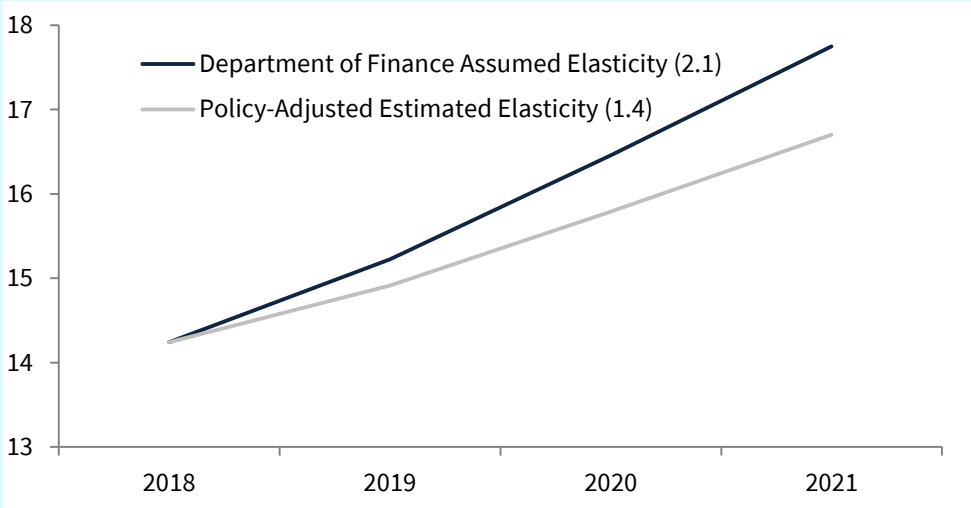
and income tax combined, this exercise examines the impact of applying that estimated elasticity to forecasts of both USC and income tax receipts separately. For illustrative purposes the estimated long-run elasticity (1.4) is used, as the estimated short-run elasticity (1.5) is not hugely different this would not substantially alter the results.

For PAYE income tax, the policy-adjusted estimated elasticity (1.4) is lower than that currently assumed by the department (2.1). This means that lower revenue forecasts would result from using the estimated elasticity (in a period of income growth). For 2019, the lower assumed elasticity would result in lower forecast growth in receipts of €310 million. By 2021, PAYE income tax receipts would be €1.0 billion lower if using this lower elasticity.

Looking next at USC, as the policy-adjusted estimated elasticity (1.4) is higher than the one currently used (1.2), this would lead to higher forecast receipts (as income is forecast to grow). For 2019, forecast receipts would be €20 million higher due to this change. In each subsequent year, the growth in USC receipts would be €20 million stronger also due to this change. This means that in 2021, USC receipts would be €61 million higher than would be the case if the lower elasticity were assumed.

Figure I.1: Sensitivity of Forecasts of PAYE Receipts to Differing Elasticities

€ billion



Sources: Department of Finance; and internal IFAC calculations.
Note: Forecasts for 2019 and beyond differ only in the elasticity applied.

On balance it would appear that using an elasticity of 1.4 for both income tax and USC would lead to lower forecast growth in receipts. In 2021, combined USC and income tax receipts would be almost €1 billion (4.8 per cent) lower if the estimated elasticity of 1.4 was used for both revenue sources. Figure I.1 shows how forecasts of PAYE receipts would diverge depending on the elasticity used, with the differences in forecasts accumulating over the years.

SPU 2019 notes that "a Tax Forecasting Methodology Review Group has been established to assess the Department of Finance's current tax forecasting processes. The Group's report will be published by end-year".

Non-tax revenues are estimated to reach €3.1 billion in 2019 (Figure 3.15). This is €0.5 billion higher than projected in *Budget 2019*, driven by increased expectations

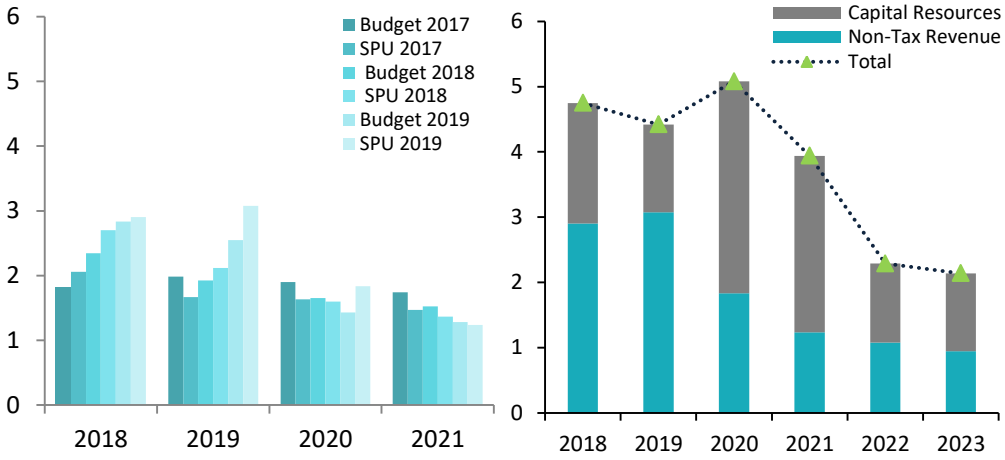
of payments from the Central Bank to the Exchequer.[61] However, a decline in non-tax receipts is forecasted for the outer years, as was the case in previous vintages, to stabilise at around €1.0 billion in 2022 and 2023. It is important to note that almost half of these Exchequer non-tax revenues will not impact the general government accounts (since they are classified as financial transactions).

Figure 3.15: Exchequer Non-Tax Revenues and Capital Resources

€ billion

A. Non-tax revenue vintages

B. *SPU 2019* forecasts



Sources: Department of Finance; and internal IFAC calculations.
Note: Almost all of the revenue from capital resources is estimated to not impact the general government balance (since it is treated as a financial transaction under current accounting rules), while the Exchequer cash position will be impacted. For non-tax revenue, this is the case only for almost half of the yearly revenue over 2019–2023.

Capital resources for 2019 are estimated to amount to €1.3 billion, €0.2 billion higher than previously forecast in *Budget 2019*. This is due to the rescheduling of expected receipts from the Irish Bank Resolution Corporation (IBRC), which will benefit the Exchequer position, but will not impact on the general government balance.[62] Over the period 2020–2021, a boost in capital resources is forecast, similar to *Budget 2019* forecasts. This is due to the winding down of the National Asset Management Agency (NAMA), which is expected to distribute its surplus.[63]

[61] This refers to the disposals of Floating Rate Notes (FRNs) by the Central Bank. FRNs were issued to substitute the promissory notes previously issued to recapitalise the Irish Bank Resolution Corporation (or Anglo Irish Bank and Irish Nationwide Building Society). While these exceptional revenues improve the Exchequer position, they are neutral from a general government perspective under the European statistical methodology.

[62] The receipts from the liquidation of IBRC are expected to amount to €225 million in 2019, and €100 million in 2020.

[63] Of the whole surplus that is to be paid into the Exchequer in that period, €0.5 billion will be paid in 2020 instead of 2021, as previously set out in *Budget 2019*.

Receipts from NAMA are projected to reach €2 billion in 2020 and €1.5 billion in 2021. However, NAMA has recently increased its projected lifetime surplus to €4 billion (from the previous forecast of €3.5 billion). After the cessation of the NAMA, capital resources are expected to decline in 2022–2023. While this revenue will impact the Exchequer accounts, the majority of the projected resources will not impact the general government balance (since they are classified as financial transactions).

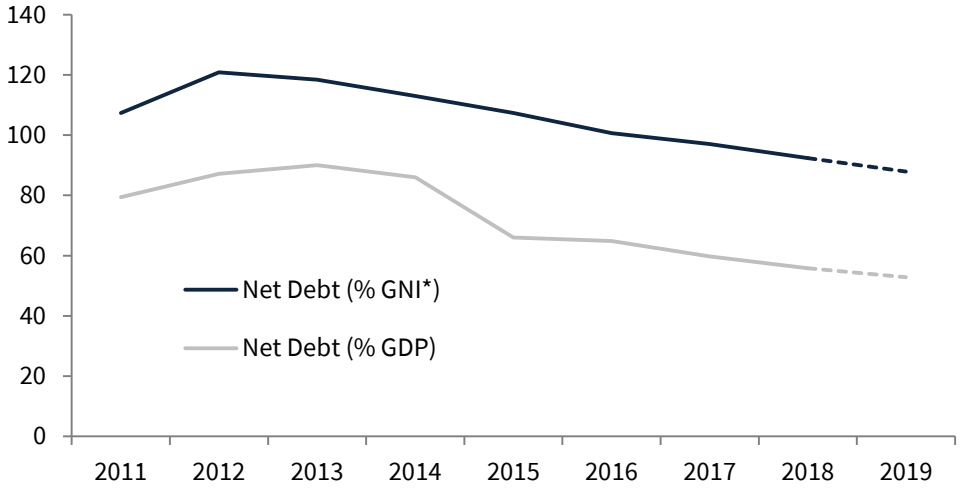
General Government Debt

The gross debt-to-GDP ratio has fallen substantially since 2012. Two factors have played a significant role. The first involves the liquidation of the IBRC, which led to lower liabilities being measured on the Government's balance sheet (in 2011, this had led to an increase in government liabilities of €20.9 billion; stripping out these liabilities, gross debt to GDP would have been 4 per cent lower). The second is related to the high level of measured GDP growth in 2015. While the *Stability and Growth Pact* reference value of 60 per cent is set in terms of debt-to-GDP, it is worth remembering that for Ireland this 60 per cent of GDP reference value would be equivalent to 97.4 per cent of GNI* (using 2017 nominal outturns for both variables).[64] Using GNI* or revenue as a denominator, government debt remains high relative to other OECD countries (see Figure 1.9 in Chapter 1). Given some of these distortions and the relatively high cash balances run by the NTMA, net debt to GNI* is a more informative measure. Using this metric, the decline in debt levels is more gradual since 2012, and debt is expected to fall to 87.9 per cent of GNI* in 2019 (Figure 3.16). The projections imply a steady reduction in the debt/GNI* ratio in the later years, although this is based on unrealistic technical assumptions for spending. The decline in the debt ratio would be shallower with more realistic spending profiles.

[64] Gross general government debt is forecast to fall below 60 per cent in 2020.

Figure 3.16: General Government Debt

% GDP/GNI*



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Data for the period 2019–2023 are projections as per *SPU 2019*.

3.4 Long-Term Prospects

At present, Ireland's demographic structure is comparatively more favourable than that of other EU countries, aided by a relatively young population and higher fertility rates. However, this trend is projected to reverse significantly in the coming decades, exerting pressure on the public finances if policy responses are not sufficiently undertaken.

Recent projections for Ireland by the European Commission point to an old-age dependency ratio that will double from 23 per cent in 2020 to almost 46 per cent in 2050 (Ageing Report, 2018), meaning that the share of working-age population capable of sustaining the retirement-age population, even allowing for positive net inward migration, is expected to diminish in the long term.[65] One of the implications is that pension needs will increase in relation to social contributions, significantly impacting overall spending. In particular, pension spending as a share of GNI* is projected to increase from 8.0 per cent in 2020 to 11.7 per cent in 2050 (Department of Finance, 2018e). Relatedly, the ageing of population will directly impact spending in healthcare, which is projected to increase from 6.6 per cent of GNI* in 2020 to 8.0 per cent in 2050. The rest of the spending areas related to ageing (education, long-

[65] The old-age dependency ratio is the share of retirement-age population over the working-age population.

term care and unemployment benefits) are all projected to follow an increasing trend.

While Ireland's total age-related spending is currently lower than the Euro Area average, this is projected to shift in the longer run. For 2020–2050, Ireland's age-related spending (as a share of GNI*) is expected to grow by 6.8 percentage points, whereas this growth for the Euro Area (as a share of GDP) will only amount to 2.3 percentage points. This long-run picture reflects that the ageing of population in Ireland is coming at a comparatively later stage relative to other Euro Area countries.

Anticipating the fiscal consequences of the ageing of population in Ireland, a number of policy measures have been implemented. These include reforms in public service pensions, state pensions and long-term care.[66] The latest *Country-Specific Recommendations* report for Ireland (European Commission, 2019b) outlined several risks of a rapidly-ageing population in the country. To address these ageing-related risks, it recommends: (i) a timely implementation of the presented roadmap for pension reform; and (ii) the implementation of the Sláintecare Programme in the health area. However, the Commission describes the health system as currently inefficient, struggling to meet demand and not delivering coordinated, integrated care. Overall, solid long-term projections are paramount in informing policy of these challenges, which must be addressed through sound policy responses.

3.5 Risks

While *SPU 2019* forecasts point to continuing improvements in the macroeconomic and fiscal outlook, substantial risks to the public finances remain. The most prominent and immediate risk to both the macroeconomic and fiscal outlook is Brexit. Box C details the fiscal costs associated with lower-than-anticipated economic activity due to Brexit. Other aspects of the external environment pose risks to the forecasts. Volatile bond market conditions and possible changes to the international corporation tax environment could pose significant fiscal risks. An additional risk relates to the Irish corporation tax receipts, which are very volatile

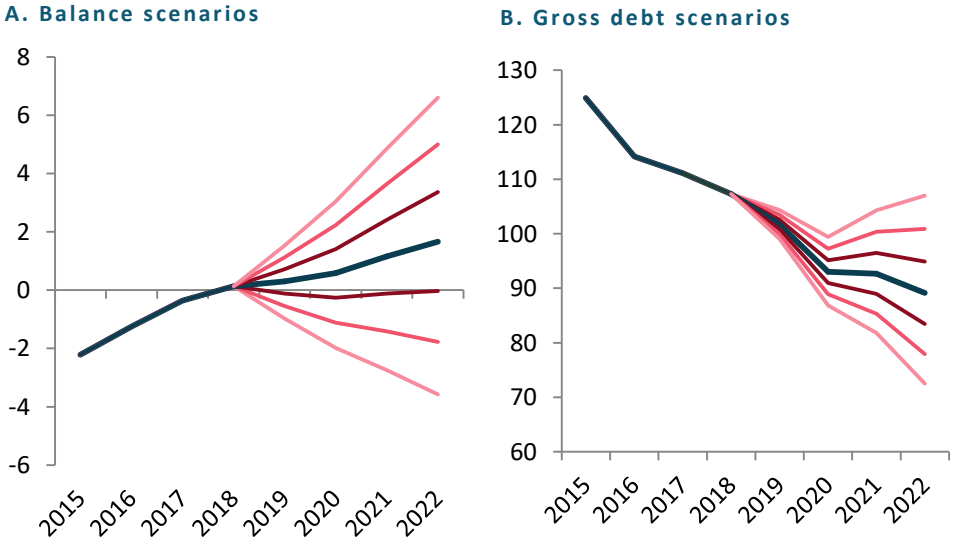
[66] The specific measures are summarised in *SPU 2019* (Chapter 8).

and are likely to fluctuate more with the global business cycle than the domestic one.

The reliance on potentially transient sources of revenue to fund permanent expenditure increases is a significant fiscal risk. In 2018, corporation tax recorded its highest ever share of Exchequer tax revenue (Figure 3.6). These unexpected corporation tax receipts were partially used to fund permanent increases in expenditure last year.

Figure 3.17: Budget Balance and Debt Paths under Different Growth Scenarios

%GNI*, general government basis



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Central line depicts the central forecasts from the Department of Finance. The outer lines depict how far the budget balance as a percentage of GNI* would be pushed away from the central forecasts under different shocks to real GDP growth in each year. The outer lines, as one moves further away from the central forecast, are for positive/negative growth shocks of 0.5, 1.0 and 1.5 percentage points, respectively. Positive shocks raise the balance; negative shocks reduce it.

Figure 3.17 shows how shocks to growth would impact on the general government balance and general government debt. A shock to GDP growth of 1.5 percentage points relative to *SPU 2019* forecasts each year from 2019 to 2022 would result in the general government balance being 5.2 percentage points of GNI* lower by 2022. All else being equal, this means that the public finances would remain in deficit out to 2022 as compared to a surplus of 1.7 per cent of GNI*. In the same scenario, the currently high gross government debt-to-GNI* ratio would remain close to current levels, in the absence of corrective policy action. A shock of this magnitude would not be exceptional given the historical volatility of Irish national income growth, for which a typical current year forecast error is close to 2 percentage points.

Table 3.6: Assessing the *SPU 2019* Fiscal Risk Matrix

Likelihood and Impacts from *SPU 2019*, unless stated:
high in red; medium in pink; low in grey

Assessment in SPU 2019 (or IFAC risk, when stated) and IFAC comments	*Likelihood*	*Impact*
Health overruns (IFAC risk) Recent years have seen a persistent pattern of large overruns in health spending. Over the period 2014–2018, current spending overruns have averaged €0.6 billion per year. The construction of the National Children's Hospital has involved a revision of the budgeted cost of close to €1 billion (see Box F) since the first estimation took place. A combination of unrealistic forecasts and a repeat of relaxation of ceilings have recurrently led to uncontrolled increases in spending, which can put the public finances at risk.		
Climate change and renewable energy targets Ireland seems unlikely to meet its 2020 emissions targets without purchasing more allowances, which could cost between €148 million and €455 million per year (Deane, 2017). Costs associated with missing later targets (2030) could be substantially higher (Curtin, 2016 estimates €2.7–€5.5 billion).		
Corporation tax concentration risks Corporation tax revenue more than doubled from 2014 to 2018. Given how quickly this revenue source has grown, there is a significant risk it could fall rapidly also. Corporation tax (as a share of Exchequer tax revenue) reached record levels in 2018 (estimated at 18.7 per cent). Given the large share of tax receipts accounted for by corporation tax, falls could be very significant. In addition, this tax is highly volatile and is strongly concentrated in very few companies (Box H), and it can be impacted by potential changes in the international tax environment. Taking all of this into account, ***the Council assesses that a high impact would be more appropriate***.		
Overruns on large projects (IFAC risk) A number of large capital projects in Ireland have encountered significant overruns from initial budgets (Box F). Recent examples include the National Broadband Plan (with a current overrun of €2.5 billion) and National Children's Hospital (with an ongoing overrun of close to €1 billion). These unplanned expenses need to be funded through revenue increases or savings elsewhere, which can put pressure in the public finances.		
Public sector pay (IFAC risk) The current public sector pay agreement is set to expire in 2020. Forecasts in *SPU 2019* do not allocate significant increases in Compensation of Employees after 2020. While some of the "Resources to Be Allocated" could be used on this item, it remains a risk to the public finances.		
Budgetary pressures This pressure refers to the risk of public expectations exceeding budgetary policy. Budgetary pressures may also arise due to demographics, eligibility factors and other demand side pressures. In-year spending increases would also exacerbate the problem. The political cycle may also increase near-term budgetary pressures. Given the pattern of overruns in the Department of Health and the payment of the Christmas bonus not having been budgeted for in 2019, ***the Council assess a high likelihood to be more appropriate***.		

Assessment in SPU 2019 (or IFAC risk, when stated) and IFAC comments	*Likelihood*	*Impact*
Reliance on transient revenues (IFAC risk)		
Failure to recognise the transient nature of certain sources of revenue could, if repeated, reduce the stability of tax revenues. This is particularly risky if transient revenue resources are used to fund long-term expenditure. For example, in 2018, higher-than-expected corporation tax revenue and interest savings, both of which might be deemed temporary, were largely devoted to funding overruns in the health sector (see Box D in IFAC 2018e).		
Sharper-than-expected growth in tax-rich sectors (IFAC risk)		
Pent-up demand in the housing sector is forecast to lead to strong growth in the construction sector. Given the tax-rich nature of housing output, due to its labour intensity and capacity for tax collection on new homes and housing transactions, rapid growth could imply a substantial increase in revenue.		
EU Budget contributions		
There is continuing uncertainty surrounding the impact Brexit will have on the contributions to the EU Budget. In addition, statistical reclassifications impacting on measured Gross National Income in Ireland could impact on EU Budget contributions.		
Changes to tax "drivers"		
Tax forecasts are dependent upon macroeconomic projections and other components. For example, corporation tax forecasts are driven by forecasts around the Gross Operating Surplus (GOS), and the elasticity associated with this. The GOS forecasts are subject to a high degree of uncertainty, namely that related to international trading conditions and currency markets. Hence, changes in the composition of those macroeconomic components can have important impacts on the tax forecasts.		
Litigation risk		
This risk refers to an adverse or unexpected outcome of litigation against the State, leading to increased expenditure. Bova *et al.* (2016) estimate that the contingent liability realisations could have an average fiscal cost of 6.1 per cent of GDP.		
Tax forecast and payment timeline asymmetry		
Timing in relation to certain tax receipts can lead to variation throughout the year. Another concern is posed in the estimation of the cost of tax measures. Although there is a risk of underestimation of the impacts of tax cuts, there is also a risk that estimated yields accruing from revenue-raising measures may be overly optimistic.		
Statistical classifications		
Ireland's compliance with the EU fiscal rules is measured under the ESA 2010 statistical framework. When statistical revisions take place, or decisions are made around guidance and classification of different items, including Eurostat, this might pose fiscal risks.		
Unexpected one-off revenues (IFAC risk)		
This risk refers to large, unexpected one-off government revenues being received. A recent example relates to Apple, which was ordered to pay €13 billion (plus €1.3 billion interest) to an escrow account related to unpaid taxes in Ireland. This is equivalent to 7.9 per cent of GNI* in 2017. Given that this one-off receipt is not budgeted for, it represents a positive fiscal risk.		

Assessment in SPU 2019 (or IFAC risk, when stated) and IFAC comments	*Likelihood*	*Impact*
Spending pressures arising from a Hard Brexit (IFAC risk) While a Hard Brexit poses a large fiscal risk via lower economic activity, other fiscal risks arise from a Hard Brexit. Investment in physical infrastructure at the Border may be required in the event of a Hard Brexit. In addition, any government supports to sectors impacted most severely would also lead to additional spending. While some supports may be available from the European Commission, this still represents a risk to the public finances.		
Receipts from resolution of financial sector crisis The budgetary projections in *SPU 2019* do not include any assumed proceeds relating to disposals of the State's shareholding in a number of financial institutions. This provides an upside risk to the fiscal forecasts.		
Dividend payments *SPU 2019* identifies risks in relation to lower-than expected payments of dividends from the State's shareholding in banks and commercial semi-state companies. Such dividends are a function of business performance and outlook, over which the State has little control. If some of these assets are sold, then associated revenue streams would fall.		
Bond market conditions The long maturities and relatively fixed nature of debt (with 94 per cent of gross national debt being at fixed interest rates in June 2017) should insulate the public finances from a typical shock to interest rates on sovereign borrowings. More severe events in Italian or euro area bond markets could be more impactful, however. At high debt levels, external shocks such as a harder-than-expected Brexit could lead to self-reinforcing fears in bond markets.		
Contingent liabilities Contingent liabilities continued to fall in 2018, with the final Eligible Liabilities Guarantees expiring and the National Asset Management Agency redeeming the final €500 million of senior debt in 2017. Given their reduced level, ***the Council assesses a low impact to be more appropriate.***		

Sources: Department of Finance; and internal IFAC assessment.

Chapter 4

Assessment of Compliance with Fiscal Rules

4. Assessment of Compliance with Fiscal Rules

Key Messages

- The European Commission assesses compliance with the fiscal rules based on the Vade Mecum on the Stability & Growth Pact, using the EU's Commonly Agreed Methodology (CAM) for estimating the output gap. For some time, the CAM-based output gap estimates for Ireland have given an implausible estimate of the position of the economy in the cycle. Structural balance figures based on these estimates of the output gap are therefore not a reliable indicator of the underlying budgetary position.

- With that in mind, the Council has adopted a new "principles-based approach" to assessing Ireland's Domestic Budgetary Rule. This new approach addresses a number of issues that arise in assessing the EU fiscal rules, using the Vade Mecum. The Council's new approach makes the assessment simpler and more robust, including using the Department of Finance's alternative method, rather than the CAM, to measure potential output.

- On this basis, the Medium-Term Objective (MTO) of a structural balance of no less than –0.5 per cent of GDP was achieved in 2018 as the structural balance was +0.2 per cent of GDP. However, there was a significant deterioration in the structural balance in 2018, with the structural balance falling by 1.2 percentage points. Based on SPU 2019 projections, the structural balance is forecast to be +0.1 per cent of GDP in 2019 and, based on technical assumptions for expenditure growth (which may be unrealistic), is set to remain at the MTO from 2020–2023.

- Net expenditure breached the Expenditure Benchmark limit in 2018. Under the principles-based approach, net expenditure grew by 6 per cent, which is above the 5 per cent Expenditure Benchmark limit. Net expenditure is forecast to grow below the Expenditure Benchmark limit for 2019, but this would be at risk in the case of a large overrun in expenditure occurring again.

- The Council recommends at least adhering to the Expenditure Benchmark — as a minimum standard — based on the limit set under the Council's principles-based approach. This would help ensure that spending growth is in line with prudent and sustainable budget management.

- The Council assesses that an appropriate debt commitment would be helpful as an anchor for medium-term fiscal policy. The commitment should take into account sustainability concerns, and be well specified and time limited. It should be clearly indicated whether the debt commitment is a target or a ceiling.

- The Government's Medium-Term Expenditure Framework is not working. Repeated, procyclical revisions to expenditure ceilings look set to continue. This risks repeating the mistakes of the past, with revisions to expenditure ceilings now of a similar magnitude to those immediately prior to the crisis.

4.1 Introduction

The Council's mandate includes assessing compliance with Ireland's Domestic Budgetary Rule, as set out in the *Fiscal Responsibility Act 2012* (FRA), and the EU fiscal rules, as set out in the *Stability and Growth Pact* (SGP). This chapter examines the consistency of the projections outlined in the *SPU 2019* with Ireland's Domestic Budgetary Rule and with the preventive arm of the SGP. In particular it examines compliance in relation to the Medium-term Budgetary Objective (MTO), the Expenditure Benchmark, and the Debt Rule.

The assessment in this chapter examines compliance with Ireland's Domestic Budgetary Rule based on the Council's new "principles-based approach" to the budgetary rule, using the Department's GDP-based estimates of potential output in *SPU 2019* and considering the Council's own assessment of one-off/ temporary measures.[67] While legal compliance with the EU fiscal rules is assessed based on the *Vade Mecum on the Stability & Growth Pact*, using the EU's Commonly Agreed Methodology (CAM) for estimating the output gap, the Council has identified a number of short comings with this methodology, and therefore has opted to base its assessment of the Domestic Budgetary Rule on a framework that is more appropriate for Ireland.

Budget 2019 incorporated a one-off windfall of €0.35 billion for corporation tax in 2018, relating to a change in International Accounting Standards, and this is incorporated in the Council's assessment of the fiscal rules.[68] Additionally, *SPU 2019* incorporated a one-off expenditure of €0.2 billion for 2018 relating to the payment of arrears to medical consultants following the settlement of a court process. Table 4.1 provides a summary assessment of compliance with the Domestic Budgetary Rule and the Debt Rule.

[67] See Appendix F for a summary of the Council's "principles-based approach". For a more detailed outline of the Council's new "principles-based approach", to the domestic budgetary rule, and the Council's reasoning for taking this approach, see Box A of *Ex-Post Assessment of Compliance with the Domestic Budgetary Rule 2018* (IFAC, 2019a).

[68] The treatment in this chapter differs from that of the Department of Finance, presented in the documents for *SPU 2019.* The Council assesses that an adjustment should be made to account for the one-off nature of the windfall in order to arrive at the underlying structural balance.

Table 4.1: Assessment of compliance with the fiscal rules[1, 2, 3]

Per Cent of GDP unless stated. For deviations, negative values = non-compliance

	2017	2018	2019	2020	2021	2022	2023
Corrective Arm							
General Government Balance Excl. One-Offs	-0.2	0.0	0.2	0.4	0.7	1.0	1.3
General Government Debt	68.5	64.8	61.1	55.8	55.4	53.2	51.6
1/20th Debt Rule Limit	81.9	71.5	67.9	64.2	60.0	60.0	60.0
Debt Rule met?	Y	Y	Y	Y	Y	Y	Y
Preventive Arm & Domestic Budgetary Rule							
Structural Balance Adjustment Requirement							
MTO for the Structural Balance	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**
Structural Balance	1.5	0.2	0.1	-0.1	0.1	0.1	0.3
MTO met?	Y	Y	Y	Y	Y	Y	Y
Minimum Change in Structural Balance Required	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Change in Structural Balance	1.0	-1.2	-0.2	-0.2	0.3	0.0	0.1
1yr Deviation (€bn)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
1yr Deviation (p.p.)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2yr Deviation (€bn)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2yr Deviation (p.p.)	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Expenditure Benchmark							
(a) Reference Rate of Potential Growth (% y/y)	3.5	3.4	3.4	3.4	3.2	3.1	3.0
(b) Convergence Margin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(a-b) Limit for Real Net Expenditure Growth (% y/y)	3.5	3.4	3.4	3.4	3.2	3.1	3.0
GDP Deflator used	0.4	1.5	1.5	1.7	1.7	1.6	1.6
Limit for Nominal Net Expenditure Growth (% y/y)	**3.9**	**5.0**	**4.9**	**5.1**	**4.9**	**4.7**	**4.7**
Net Expenditure Growth (% y/y)	5.1	6.0	3.3	3.6	3.2	3.1	2.8
Net Expenditure Growth (Corrected for one-offs) (% y/y)	4.8	6.0	3.6	3.6	3.2	3.1	2.8
1yr Deviation (Corrected for one-offs) (€bn)	-0.6	-0.7	1.0	1.2	1.4	1.3	1.7
1yr Deviation (Corrected for one-offs) (% GDP)	-0.2	-0.2	0.3	0.3	0.4	0.4	0.4
2yr Deviation (Corrected for one-offs) (€bn)	0.1	-0.6	0.1	1.1	1.3	1.4	1.5
2yr Deviation (Corrected for one-offs) (% GDP)	0.1	-0.2	0.0	0.3	0.4	0.4	0.4
Limit for Nominal Net Expenditure Growth (€bn)	**2.6**	**3.5**	**3.7**	**4.0**	**4.0**	**4.0**	**4.1**
Net Expenditure Increase (€bn)	3.4	4.2	2.5	2.8	2.6	2.6	2.4
Net Expenditure Increase (Corrected for one-offs) (€bn)	3.2	4.2	2.7	2.8	2.6	2.6	2.4
Current Macroeconomic Aggregates							
Real GDP Growth (% y/y)	7.2	6.7	3.9	3.3	2.4	2.5	2.6
Department's alternative Potential GDP Growth (% y/y)	7.4	4.1	3.1	2.6	2.2	2.0	2.2
Department's alternative GDP Output Gap	-2.9	-0.5	0.2	0.8	1.0	1.4	1.8
GDP Deflator Used (% y/y)	0.4	1.5	1.5	1.7	1.7	1.6	1.6

Sources: CSO; Department of Finance; and internal IFAC calculations.

Notes: [1]All figures are presented on a General Government basis. The approach to assessment here differs from previous FAR assessments. Assessments examine the *SPU 2019* revenue and expenditure plans, using the Council's principles-based approach to the Domestic Budgetary Rule and considering the Council's views on one-off/temporary measures. For more information about the changes to the Council's assessment approach see Appendix F of this report and Box A of IFAC's *Ex-post assessment of compliance with the domestic budgetary rule 2018* (IFAC, 2019a). In 2017, a one-off expenditure of €0.2 billion in relation to a refund of domestic water charges is included in the Council's assessment. A one-off windfall of €0.35 billion in corporation tax revenue for 2018 is included in the Council's assessment of the structural balance as well as a one-off expenditure of €0.2 billion, in 2018, due to a settlement in relation to pay arrears for medical consultants. The outlier for Potential GDP Growth for 2015 is replaced by the average of the 2014 and 2016 rates in the expenditure benchmark, as discussed in the June 2017 FAR (IFAC, 2017c). [2] The 1/20th Debt Rule requires that the debt-to-GDP ratio should make annual progress toward the reference value of 60 per cent of the GDP. A transition period applied until the end of 2018.

[3]Figures in grey indicate that the Council assesses these forecasts as largely the result of technical assumptions on expenditure, which may be unrealistic (see Chapter 3).

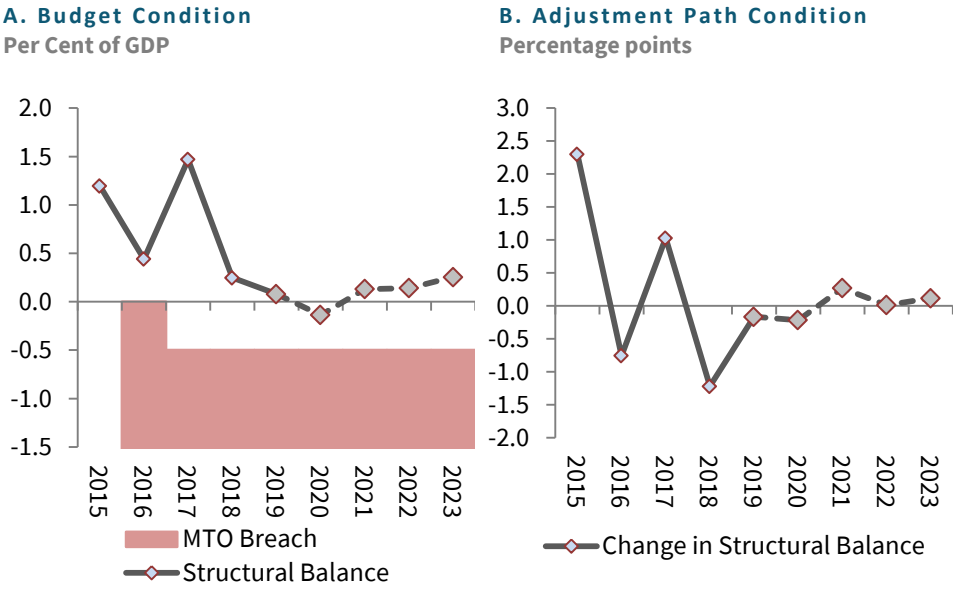
4.2 *Ex-Post* Assessment for 2018

This section reviews the Council's *ex-post* assessment for 2018, which was carried out in IFAC's *Ex-post assessment of compliance with the domestic budgetary rule 2018* (IFAC, 2019a). This assessment was based on the Council's new principles-based approach to the Budgetary Rule as outlined in Box A of the Council's *ex-post* assessment (IFAC, 2019a) and summarised in Appendix F.

MTO and Structural Balance Adjustment Requirements

The Council assessed that the MTO, of a structural balance of no less than –0.5 per cent of GDP, was achieved in 2018, with a structural balance of +0.2 per cent of GDP. As the MTO was achieved in 2018, the adjustment path condition did not apply. Despite the achievement of the MTO there was a significant deterioration of the structural balance in 2018, with the structural balance falling by 1.2 percentage points (Figure 4.1). This was despite a considerable over performance of corporation tax, which is counted under these methods as structural improvements in revenue, but these receipts may not be linked to the underlying economy. As a result, the degree to which there was deterioration in the underlying structural balance for 2018 is, to some extent, masked by this over performance of corporation tax.

Figure 4.1: Assessment of compliance with the budgetary rule



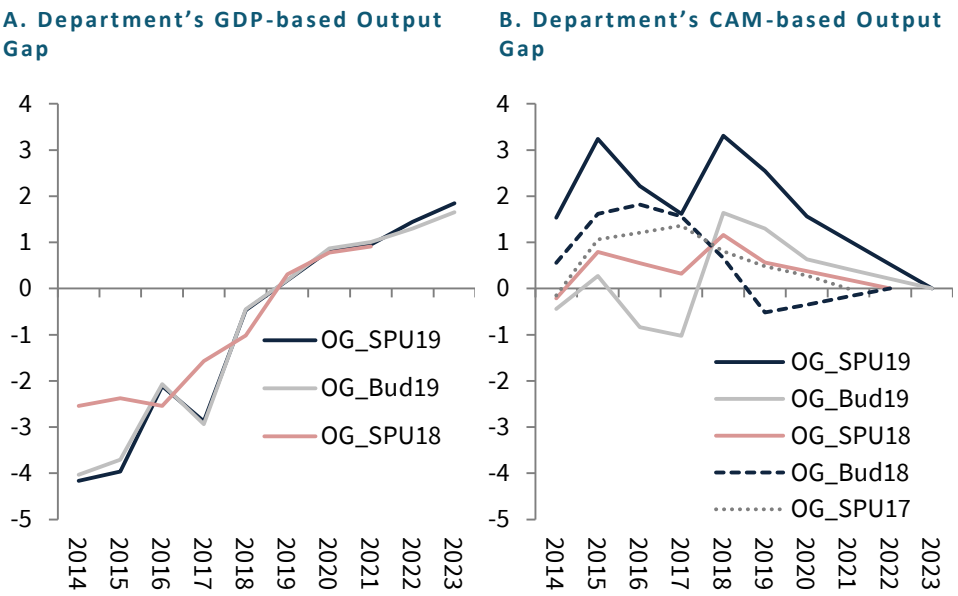
Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: The MTO for Ireland 2017-2022 is set at -0.5 per cent of GDP. This was achieved in 2017 and 2018, so the adjustment path condition is not assessed as the requirement is to simply remain at the MTO. Dashed lines represent forecasts that are largely as a result of technical assumptions on expenditure, which may be unrealistic (Chapter 3).

While the sample size is currently small, the Department's GDP-based estimates of the output gap appear less prone to significant revisions than the CAM-based estimates of the output gap. In particular, overtime and across vintages, the Department's estimates are very similar (Figure 4.2).[69] By this metric, and given the more plausible path of the Department's GDP-based output gap estimates, these estimates are a more reliable basis for assessing the fiscal rules.

With the output gap closing, and the cyclical position of the economy close to balance in 2018, a larger general government surplus would have been required to maintain the structural balance at the same level as in 2017 (Figure 4.3). Instead, the actual improvement in the budget balance was insufficient to prevent a sharp deterioration in the structural position.

Figure 4.2: Output gap vintages

Per Cent of GDP



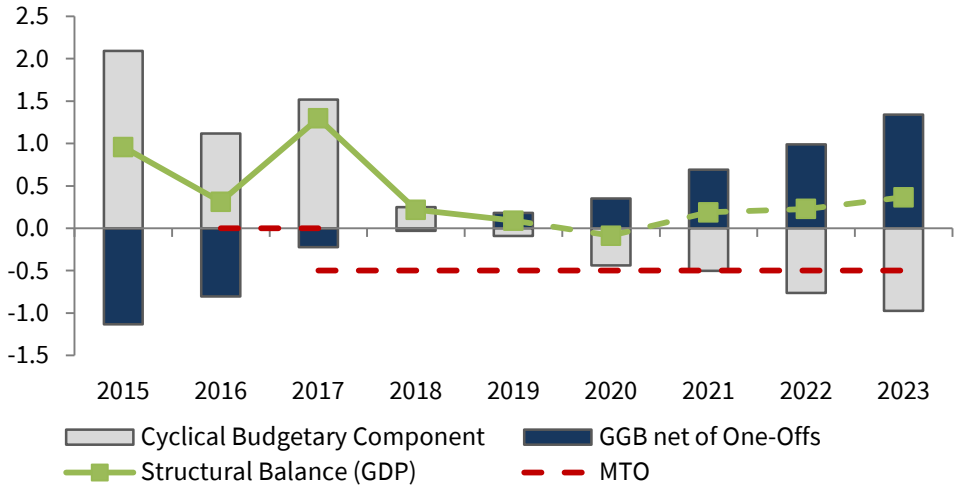
Sources: CSO; Department of Finance; and internal IFAC calculations.

Note: The Department's GDP-based estimates of the output gap are based on the mid-point of its suite of GDP-based models. The *SPU 2018* vintage of the output gap for the Department's GDP-based estimates was at the early stage of the development of these estimates and included an additional model not included in the Department's suite of models in subsequent vintages. The CAM-based estimates of the output gap involve closure of the output gap over the medium-term. As a result, the output gap returns toward zero at the end of each forecast horizon.

[69] The *SPU 2018* vintage of the output gap for the Department's GDP-based estimates was at an early stage of the development of these estimates. At the time, it included an additional model that is no longer included in their suite of models as of the subsequent two vintages.

Figure 4.3: Structural balance decomposition

Per Cent of GDP



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: GGB is the general government balance. The cyclical budgetary component is estimated as: –0.588 x output gap, where the output gap is the Department of Finance's GDP-based output gap. Dashed lines represent forecasts that are largely as a result of technical assumptions on expenditure, which may be unrealistic (Chapter 3).

Expenditure Benchmark

The Expenditure Benchmark is used as a measure of progress toward the MTO. While the Expenditure Benchmark does not technically apply, under the *SGP,* when the MTO is exceeded (provided overachievement was not as a result of windfalls), the Council still assesses compliance with the Expenditure Benchmark as it is useful in assessing the stance of fiscal policy. In particular, given that there is considerable uncertainty about the exact position of the structural balance for Ireland (see Box K), the Expenditure Benchmark can, at times, provide a better indication of the prudence of fiscal policy. However, the Expenditure Benchmark is not without its faults (see Barnes & Casey, 2019), and as such, the Council recommends that the Expenditure Benchmark should–at a minimum–be considered an upper limit, and may at times be beyond, what the Council would deem prudent.

For 2018, the limit set under the Expenditure Benchmark, using the Council's principles-based approach, was a growth rate of 5.0 per cent. Net Expenditure, less one-off expenditure items, grew by 6.0 per cent in 2018, 1.0 percentage point faster than the limit provided by the Expenditure Benchmark.[70]

[70] This limit is based on the Council's new Principles-based approach to the Domestic Budgetary Rule, which was not available at the time policy was set for 2018 (*Budget 2018*). However, the Government was also not in compliance with the Expenditure Benchmark limit that was available

Table 4.2 shows the contributions of each of the adjustments made to general government expenditure to arrive at net expenditure, the assessed growth rate under the rules. One of the key adjustments to arrive at the net expenditure figure is the smoothing of capital investment (GFCF). Actual increases in GFCF are removed from the spending figure, and replaced by the four year average of GFCF, to smooth out the cost of large projects. Had this adjustment not applied to reflect the consistent build up in public investment in Ireland, net expenditure would have grown by 6.8 per cent in 2018, significantly above the limit set by the Expenditure Benchmark. The discretionary revenue measures partially offset the other adjustments made, but these measures were not sufficient to bring expenditure below the Expenditure Benchmark limit for 2018.

The Council's November 2018 FAR (IFAC, 2018e) had deemed the Expenditure Benchmark for 2018 complied with based on forecasts presented in *Budget 2019*. Since then, the CSO has released provisional outturn data for 2018 showing higher than forecasted general government expenditure of approximately €0.8 billion (largely due to underestimated social payments), and lower than expected expenditure on gross fixed capital formation (GFCF) of approximately €0.3 billion. The combination of these two factors has caused the net expenditure figure to be higher than was previously outlined in the November 2018 FAR (IFAC, 2018e), and hence why a breach is now shown for 2018.

at the time policy was set (See Appendix Table G.1). As a result, the Council assesses that the Expenditure Benchmark was breached for 2018.

Table 4.2: Contributions of adjustments to net expenditure growth

Per cent of Net Expenditure

		2017	2018	2019	2020
Walk to Net Expenditure Growth (Net of one-offs)					
ΔGGE	**General Government Expenditure Growth**	**3.0**	**6.6**	**4.5**	**2.9**
-ΔInt	Interest	0.5	0.8	0.6	0.6
-ΔEU	EU Co-Financed Current Spending	-0.1	0.0	0.0	-0.1
-ΔGFCF	Public Investment (GFCF)	-0.1	-1.7	-1.6	-0.4
+ΔavGFCF	Four-Year Avg of Public Investment	0.7	0.8	1.0	0.9
-ΔUC	Cyclical Unemployment Expenditure	1.0	0.6	0.1	0.1
-DRMs	DRMs	0.1	-1.2	-1.3	-0.4
	Net Expenditure Growth	5.1	**6.0**	**3.3**	**3.6**
-ΔOOE	One-Off Expenditure Items	-0.3	-0.1	0.3	0.0
ΔNE	**Net Expenditure Growth (Net of one-offs)**	**4.8**	**6.0**	**3.6**	**3.6**
	Limit for Net Expenditure Growth (% y/y)	**3.9**	**5.0**	**4.9**	**5.1**

Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Rounding may affect totals. All figures are in nominal terms and are expressed as a percentage of the previous year's net expenditure (less adjustment for DRMs), unless otherwise stated. Δ indicates the change in the variable from year t-1 to year t. Limits presented here are based on the Council's principles-based approach to the Domestic Budgetary Rule. Figures in grey indicate that the Council assesses these forecasts as largely the result of technical assumptions on expenditure, which may be unrealistic (see Chapter 3). A negative number for DRMs indicates that, in net terms, revenue raising measures were introduced. These discretionary revenue measures reduce the measured level of net expenditure growth under the Expenditure Benchmark thereby allowing general government spending to grow at a faster rate.

Box J: An Assessment of Ireland's Compliance with the Fiscal Rules for 2018 under EU Methods

This Box assesses Ireland's compliance with the EU fiscal rules under EU methods. While the Commission's formal assessment of Ireland's compliance with the EU fiscal rules was not available at the time of writing this report, the figures underlying the Commission's assessment were. The Commission will make its formal assessment of Ireland's 2018 Ex-post compliance with the EU fiscal rules in June 2019.

For a number of years, the Council and others have identified problems in assessing the EU fiscal rules for Ireland. In particular, the Council has questioned the plausibility of the CAM estimates of potential output and the output gap which are central elements in assessing compliance with the EU fiscal rules. Typically, the CAM-based estimates of the output gap for Ireland are procyclical, subject to large revisions and to ad hoc changes in the methodology, often with questionable merit.

Since 2016, Ireland has been subject to the Preventive Arm of the *Stability and Growth Pact*, which has estimates of potential output and the output gap at its core. While the CAM-based estimates of the output gap have been dubious for some time, the implications of these estimates in terms of compliance/non-compliance with the rules have not been as severe as they are now.

At this juncture, taking into account some recent methodological changes, the CAM-based estimates of the output gap are particularly implausible for Ireland. Given the availability of alterative estimates of the output gap for Ireland (Casey, 2018; Murphy *et al.* 2019), and the considerable differences between these more plausible estimates and the CAM-based estimates, the Council now uses these alternative estimates as part of its principles-based approach to assessing the rules.

The Output Gap

Between the European Commission's Autumn 2018 and Spring 2019 forecasts, there have been substantial revisions to the Commission's CAM-based estimates of the output gap. These revisions are largely as a result of methodological changes between the two output gap vintages. The changes are outlined below:

1. **Capacity Utilisation Indicator.** The Capacity Utilisation Indicator (CUBS) is a measure of how much excess capacity there is in the economy. It is used to detrend Total Factor Productivity (TFP). Previously, the CUBS series for Ireland was available only for 1985–2008 due to data availability issues. A new CUBS series has since been constructed by the Commission and now spans 1985–2018. This new CUBS series was included for the first time in the Commission's Spring 2019 estimates.
2. **A 2018 Dummy.** The Commission's Autumn 2018 estimates of the output gap include a dummy variable for 2018 which was used to detrend TFP. The Commission had previously included dummies for 2015 and 2017 on the basis of outturn data when growth rates were deemed to be higher than plausible.[71] The 2018 dummy was included due to a perceived, higher-than-plausible forecasted growth rate for 2018 of

[71] In 2015 and 2017 the headline growth rates were judged to be significantly distorted due to activities of the multinational sector and were deemed to be too high to be plausible growth rates for the underlying economy. As a result, dummies were required to take account of these distortions.

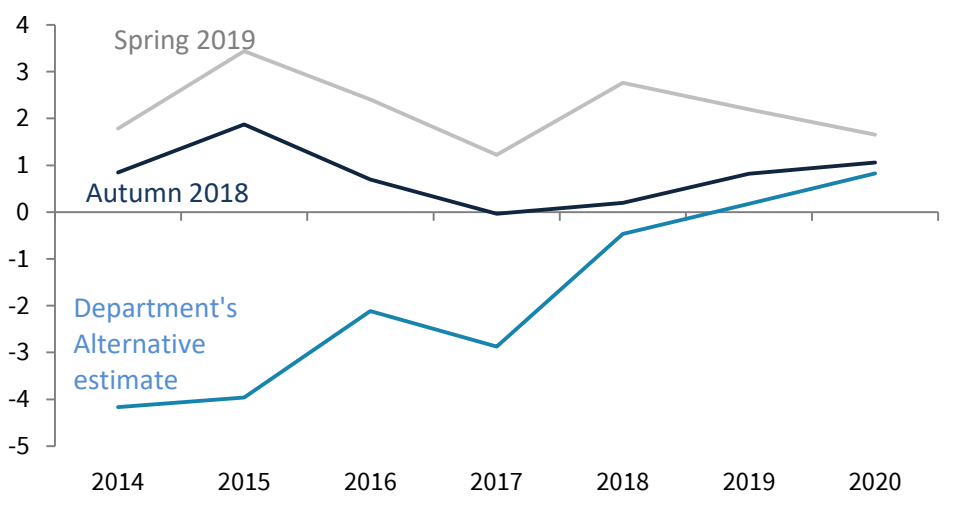
7.8 per cent. Subsequently, the preliminary outturn for 2018 showed a lower than expected growth rate for 2018 of 6.7 per cent. As a result, in the Commission's Spring 2019 forecasts, the decision was taken to remove the dummy for 2018.[72]

The use of the new extended CUBS series contributed approximately 0.8 percentage points to the upward revision in the output gap for 2018, while the removal of the dummy for 2018 contributed approximately 1.4 percentage points.[73]

Figure J.1 shows a comparison of the Commission's Spring 2019 and Autumn 2018 estimate of the output gap, alongside the Department's latest alternative GDP-based estimate of the output gap. Neither the Commission's Autumn 2018 nor Spring 2019 estimates of the output gap show particularly plausible paths for Ireland's output gap given the dynamics of the economy and the degree of slack in recent years. In particular, the Commission's Spring 2019 estimates of the output gap show a positive output gap in 2015 and 2018 which are of a similar magnitude to that shown in the run up to the crisis in 2007. Given other cyclical indicators available and the degree of slack in the economy, these estimates are especially implausible. This gap is then assumed to narrow over the coming years, despite expected overheating pressures.

Figure J.1: Comparison of output gap vintages

Per Cent of GDP



Sources: European Commission; Department of Finance; and internal IFAC calculations.
Note: Autumn 2018 and Spring 2019 relate to the Commission's CAM-based estimates of the output gap. The Department's alternative GDP-based estimate of the output gap is as presented in *SPU 2019.*

The Structural Balance

Based on the Commission's Spring 2019 output gap figures the MTO was not achieved. The structural balance for 2018 is estimated to be –1.4 per cent of GDP, below the MTO of a structural balance of –0.5 per cent of GDP (Figure J.2). Based on these figures, Ireland is expected to be considered to have a significant deviation from the MTO for 2018.

Given that a significant deviation from the MTO has occurred, and there is a breach of the Expenditure Benchmark based on the EU's methodology (see below), there is a possibility of

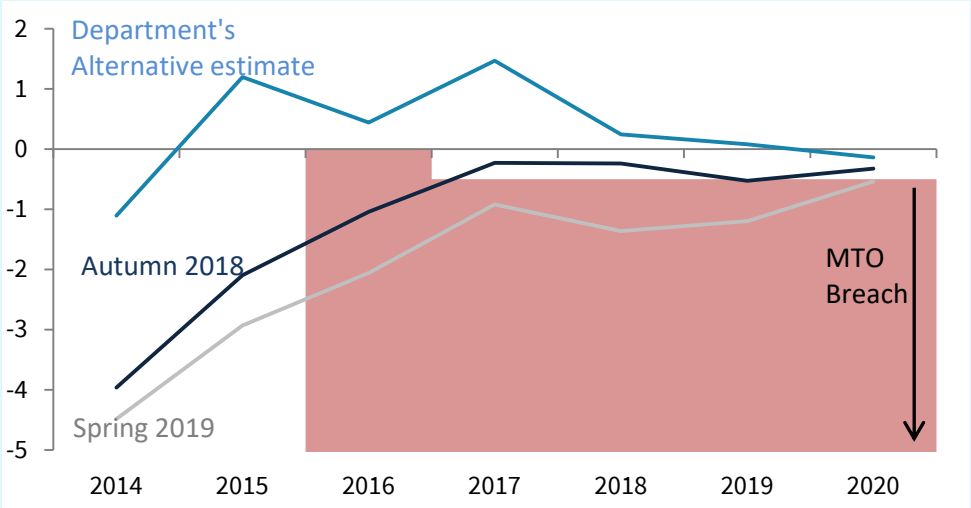
[72] The dummy for 2017 was included based on outturn data showing a growth rate of 7.2 per cent, which at the time was deemed, by the Commission, to be an implausible growth rate for the underlying economy. Whereas, the growth rate of 6.7 per cent for 2018 is deemed, by the Commission, to be a plausible growth rate for the underlying economy.

[73] Based on analysis carried out by the Department of Finance.

the imposition of sanctions for this non-compliance, although this is unlikely.

Figure J.2: Comparison of structural balance vintages

Per Cent of GDP



Sources: European Commission; Department of Finance; and internal IFAC calculations.
Note: Autumn 2018 and Spring 2019 relate to the estimates of the structural balance using the Commission's CAM-based estimate of the output gap, taking into account the Council's view of one-offs. The Department's alternative GDP-based estimate of the structural balance is as presented in Table 4.1.

The Expenditure Benchmark

While the Council has a number of issues with the measurement of the structural balance under the CAM, and with assessing compliance with the MTO based on these estimates, the assessment of compliance with the Expenditure Benchmark is more consistent between the EU approach and the principles-based approach. Both suggest there was a breach of the Expenditure Benchmark for 2018.

While the CAM output gap estimates are the legal basis for assessing compliance with the EU fiscal rules, given the issues raised above, relating to the plausibility of these estimates and subsequently the assessment of the structural balance, the Council believes that due consideration should be given to alternative estimates of the output gap and what these imply for the structural balance estimates in the Commission's overall assessment of compliance. Furthermore, under the Council's principles-based approach, which uses alternative estimates of the output gap, the Council has deemed that the Domestic Budgetary Rule has been complied with for 2018 (IFAC, 2019a).

4.3 In-year Assessment for 2019

This section assesses whether the Department's plans for 2019, based on forecasts in the *SPU 2019,* are compliant with the fiscal rules. The Debt Rule will apply in full for the first time in 2019, following the end of a three year transition period from 2016–2018.

Based on *SPU 2019* estimates the structural balance is currently forecast to comply with the MTO in 2019 with a modest margin. Net Expenditure growth is projected to be below the limit set by the Expenditure Benchmark.

MTO and Structural Balance Adjustment Requirements

As the MTO was achieved for 2018, there is no adjustment requirement for 2019. A structural balance of +0.1 per cent of GDP is currently forecast for 2019. This will see the structural balance largely unchanged from 2018. However, a degree of caution is required in interpreting this forecast compliance. Given that an MTO breach lies within the range of structural balance estimates (see Box I), there is a need to control spending to ensure that expenditure overruns do not occur again and the structural balance does not deteriorate further than currently planned.

Expenditure Benchmark

Net expenditure growth for 2019 is currently forecast to be 3.6 per cent, which is below the Expenditure Benchmark limit of 4.9 per cent. The low net expenditure growth figure for 2019 is partially as a result of the breach in 2018 leading to a much higher base for 2019.

Additionally, in general government terms, expenditure was €0.8 billion higher, in 2018, than forecast in *Budget 2019,* but *SPU 2019* forecasts of general government expenditure for 2019 do not appear to have been adjusted upward significantly in light of this higher level of spending which occurred in 2018 (see Chapter 3). It is therefore possible that the 2019 figure for general government expenditure is an underestimation.

Given the possible underestimation outlined above, and the fact that between *Budget 2018* and year-end 2018, actual expenditure was approximately 3.4 per cent

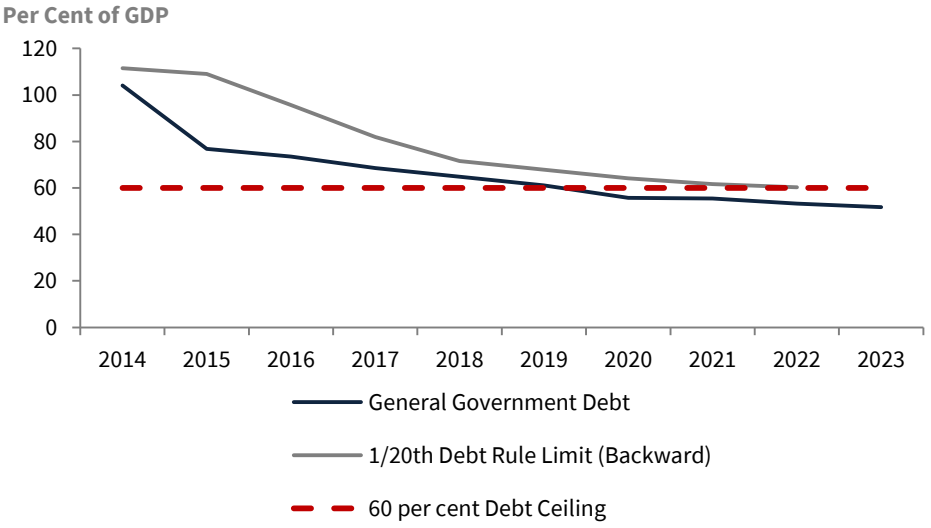
(€2.7 billion) larger than planned, there are risks that a repeat of this expenditure overrun would lead to a breach of the Expenditure Benchmark in 2019.[74]

Debt Rule

Following the exit of the *Excessive Deficit Procedure (EDP)* in 2015, Ireland entered into a transition period from 2016–2018, which limited the legal requirements for adherence to the Debt Rule. The Debt Rule applies in full for the first time in 2019. The Debt Rule essentially requires that the debt-to-GDP ratio be below 60 per cent of GDP or reducing each year by 1/20th of the gap above 60 per cent.[75] The Debt Rule is forecast to be complied with in 2019, with the debt-to-GDP ratio below the limit set by the backward-looking benchmark (Figure 4.4).

Given the nature of the distortions in the GDP figures for Ireland, relating to the multinational sector, the Debt Rule is unlikely to be a constraint on medium-term fiscal policy. The distortions also mean that the sustainability of Ireland's debt levels should not be judged using a debt-to-GDP ratio. Instead, a more appropriate measure of national income should be used, like GNI*.[76]

Figure 4.4: Compliance with the Debt Rule: Backward looking Benchmark



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: The figures show the Department of Finance's forecasts of the debt ratio from *SPU 2019*.

[74] Approximately €0.5 billion of this increase can be attributed to statistical reclassification of the Approved Housing Bodies, while a further €0.2 billion can be attributed to a one-off, not anticipated in *Budget 2018*.

[75] See Box F of the November 2018 FAR (IFAC, 2018e) for an explainer on the Debt Rule.

[76] See Box A of the June 2017 FAR (IFAC, 2017c) for details on ratios other than the debt-to-GDP ratio on which to assess sustainability.

In light of these issues with the Debt Rule, the Council assesses that a more appropriate debt commitment should be developed. The commitment should better reflect sustainability concerns, should be time limited (with a specific date at which the commitment would be achieved), and it should be clearly specified as to whether the debt commitment is a target or a ceiling. The Government had previously set a debt target of 55 per cent of GDP (which it subsequently dropped all mention of, without explanation). This target was not well specified, not time-bound and was not set against an appropriate denominator. As a result, this was not an appropriate target.

Box K: The Uncertainty in assessing Compliance with the Fiscal Rules

This Box attempts to illustrate the uncertainty in assessing compliance with the fiscal rules. A central issue when assessing compliance with the fiscal rules is that it relies on the estimation of unobservables, such as potential output and the output gap. Estimating these unobservables is inherently uncertain and no estimation technique can accurately capture the true position of these unobservables at any point in time. It follows that assessing compliance with the fiscal rules based on these unobservables is surrounded by some uncertainty regarding the position of the economy in the cycle.

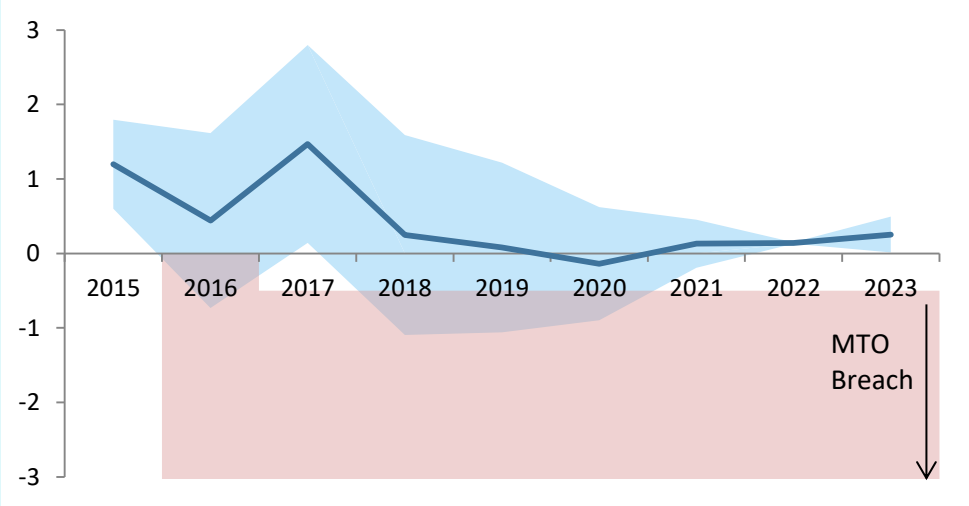
One advantage of the Council's new principles-based approach to the budgetary rule is that the framework is based on the Department's suite of GDP-based estimates of potential output. As the framework is based on a suite of models, the various estimates can be used to illustrate, to some degree, the uncertainty in the fiscal rules. By taking the maximum and the minimum of the estimates of potential output and the output gap, one can show a range of estimates of the structural balance and the Expenditure Benchmark. This is not possible with the potential output and output gap estimates produced using the CAM, as the estimates produced using the CAM are simply point estimates from a single model and so it is not possible to display a range of possible estimates.

Structural Balance Range

The Department's GDP-based estimate of the output gap is the mid-point of its two GDP-based estimates. Using these two estimates of the output gap it is possible to create a range of structural balance estimates. Figure K.1 shows the range of structural balance estimates using these output gap estimates. While the structural balance estimate using the mid-point of the output gap estimates shows that the MTO is met in all years, the range clearly overlaps with an MTO breach in some years. At its widest, the range of structural balance estimates is 2.7 percentage points in 2018, illustrating a considerable degree of uncertainty about a point estimate for the structural balance in that year.

Figure K.1: Structural balance range

Per Cent of GDP



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Blue shaded region contains the range of structural balance estimates using the Department's minimum and maximum of their alternative GDP-based output gap estimates. Blue line represents the structural balance estimate using the mid-point of the Department's alternative GDP-based estimates.

Expenditure Benchmark Range

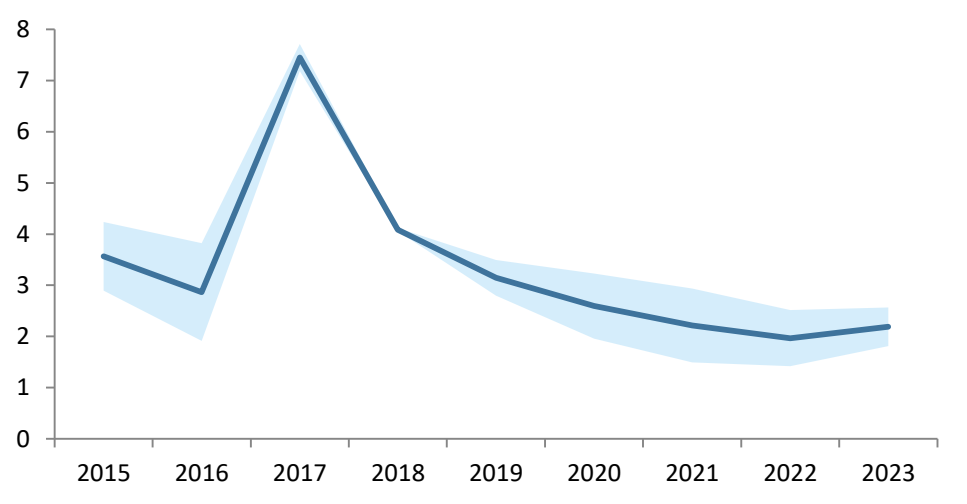
The reference rate for the Expenditure Benchmark is a 10–year average of potential output growth rates. Figure K.2 shows the range of potential output growth rates using the

Department's GDP-based estimates. The range of potential output growth rates, for the most part, lies between 4 per cent and 2 per cent growth, with potential output growth spiking in 2017. The range of potential output growth rates is at its widest in 2016, at 1.9 percentage points, while the range is at its narrowest in 2018 at approximately 0.1 percentage points. Again, there is considerable variability in the range of potential output growth rate estimates.

Using the 10-year average of the potential output growth rates reduces the variability in the reference rate for the Expenditure Benchmark, and ensures that the reference rate is not overly sensitive to individual point estimates of potential growth. However, one caveat of this is that the revisions to potential output growth estimates occur for the entire time horizon and usually in the same direction and so do not just affect individual point estimates of potential output growth (Barnes & Casey, 2019).

Figure K.2: Range of potential output growth

Real Percentage change (year-on-year)



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Blue shaded region contains the range of potential output growth estimates using the Department's minimum and maximum of their GDP-based output gap estimates. Blue line represents the potential output estimate using the mid-point of the Department's alternative GDP-based estimates. The outlier for Potential GDP Growth for 2015 is replaced by the average of the 2014 and 2016 rates, as discussed in the June 2017 FAR (IFAC, 2017c).

Figure K.3 shows the range for the Expenditure Benchmark limit using the Department's two GDP-based estimates of potential output. The dynamics of the range for the Expenditure Benchmark limit is considerably less erratic than that of the range for the structural balance, and is a clear indication of the power of taking the 10-year average in reducing the variability in the assessed rate. The range for the Expenditure Benchmark limit is relatively stable throughout the forecast horizon, with the range at its widest in 2019, at 1 percentage point (narrowest is 0.8 percentage points). Assessing compliance with the Expenditure Benchmark over this horizon is relatively more clear cut than assessing the structural balance, with the net expenditure growth being either completely above or below the range for the Expenditure Benchmark limit in all years.[77]

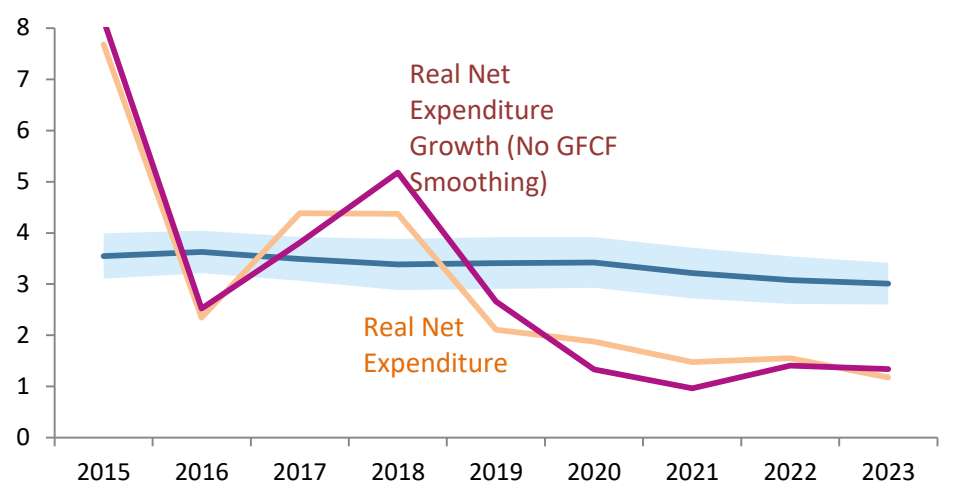
The uncertainty in estimating the position of the economy in the cycle and its potential growth rate mean that, while the principles-based approach to the rules is a good guide for policy, policymaking should take a prudent approach and not rely too heavily on minimal compliance with the rules. A safety margin, in terms of compliance with the rules would be helpful for

[77] For one year, 2017, the non-GFCF smoothed net expenditure growth was marginally inside the Expenditure Benchmark range. However, this is not the assessed figure in terms of the rules.

prudent policy given the uncertainty illustrated.

Figure K.3: Expenditure benchmark range

Percentage change (year-on-year)



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Blue shaded region shows the range of the Expenditure Benchmark limits using estimates of the minimum and maximum potential output growth rates from the Department's alternative GDP-based estimates. Blue line represents Expenditure Benchmark limit in real terms using the mid-point of the Department's alternative GDP-based potential output estimates.

4.4 *Ex-Ante* Assessment for 2020-2023

This section assesses compliance of the Department's forecasts for 2020–2023 with the fiscal rules. However, the forecasts for expenditure, and therefore the government balance, are based on unrealistic technical assumptions for these years and therefore the consistency of these projections with the rules does not provide much meaningful guidance (see Chapter 3).

MTO and Structural Balance Adjustment Requirements

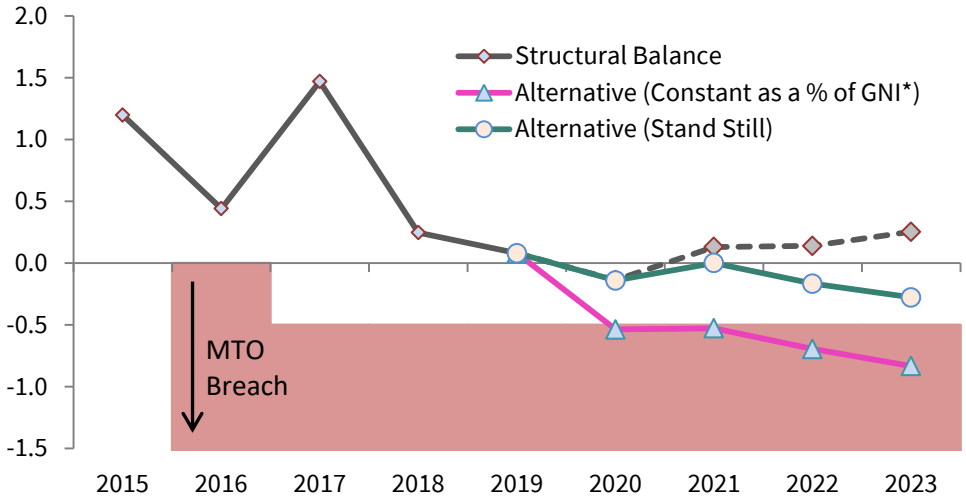
The MTO for 2020–2022 is now set as a structural deficit of 0.5 per cent of GDP. Based on the latest government forecasts, the MTO will be achieved for all years. As such, no adjustment requirement will apply for these years. The structural balance is forecast to stay relatively constant over the forecast horizon, fluctuating marginally with increases in the general government balance largely offsetting the cyclical component (Figure 4.2).

These projections suggest that the room under the fiscal rules for additional spending or tax cuts beyond those in current technical projections will be relatively limited in the coming years unless these are offset by additional revenue-raising measures or efficiency gains.

As an illustration, Figure 4.5 shows alternative paths for the structural balance, based on the alternative scenarios for general government expenditure presented in Table 3.3 (Chapter 3). Both alternative scenarios show a less benign path for the structural balance. In particular the scenario which shows general government expenditure remaining constant as a share of GNI* shows a sharp deterioration in the structural balance in 2020, and declining further by 2023. In this scenario, the structural balance would breach the MTO in each of the years, 2020–2023.

Figure 4.5: Alternative scenarios for the structural balance

Per cent of GDP



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: The "Alternative (Constant as % GNI*)" scenario the shows structural balance which would arise from holding general government expenditure constant as a share of GNI*, using GNI* forecasts from *SPU 2019*. The "Alternative (Stand Still)" scenario shows the structural balance which would arise when adding in the additional IFAC Stand-Still costs for demographics and public sector pay over the pre-commitments for these items (and carryover costs) in *SPU 2019* forecasts. In both alternative scenarios general government revenue is adjusted to account for the increases in government expenditure (relative to *SPU 2019)*. This is done using the Council's Fiscal Feedbacks Model.

Expenditure Benchmark

Based on forecasts in *SPU 2019* the Expenditure Benchmark will be complied with for all years in the forecast horizon. However, these expenditure forecasts are largely based on technical assumptions and may be unrealistically low (see Chapter 3).

Debt Rule

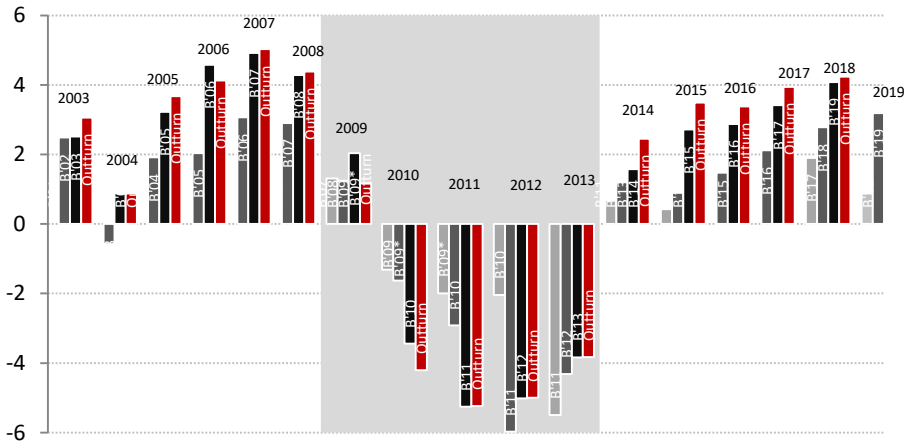
The debt-to-GDP ratio is forecast to fall below the 60 per cent reference value in 2020, for the first time since 2008. Once this happens, compliance with the Debt Rule requires that the debt ratio remain below 60 per cent. This is forecast to be the case for 2021–2023.

4.5 Medium-Term Expenditure Framework

The Medium-Term Expenditure Framework (MTEF) is a reform introduced after the crisis years and is legislated for in the *Ministers and Secretaries (Amendment)* Act 2013. The MTEF was introduced to provide a better mechanism for managing expenditure over the medium-term and ensure that the Expenditure Benchmark is adhered to. The MTEF requires the Government to set limits to overall public expenditure for the following three years, while Ministerial expenditure ceilings are established to ensure aggregate expenditure remains within overall limits.

Figure 4.6: Change in gross expenditure ceilings (relative to initial ceiling)

€ Billions



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Note: Bars show the change in forecasts from various budgets followed by outturns, versus the earliest budget forecast for that year (e.g., B'15 = expenditure forecasts in Budget 2015 minus the earliest forecast for the specified year). Grey shaded region covers crisis period 2009-2013. Red bars relate to the change in outturn expenditure versus the earliest forecast for expenditure for the year specified above.

Figure 4.6 shows the change in gross expenditure forecasts since 2003. There is a clear cyclical pattern in the revisions to these expenditure forecasts. The change in the initial ceiling to outturn for 2018 mirrors the change seen in 2006, with a €4 billion increase over the initial ceiling. This pattern which could continue in 2019, echoes the mistakes of the past, undermines the credibility of these ceilings and indicates that these ceilings are seen by government departments as a "soft budget constraint".

It is inevitable that policy priorities will change from year to year, but it is not prudent budgetary management to continuously allocate increases in funding across all departments, beyond already-budgeted-for increases. Instead, funding

should be appropriated to individual departments within the overall ceiling (which in itself should be realistic), to reflect policy changes. This has not been the case, with quite significant upward revisions to expenditure ceiling across all departments in recent years. Revisions to the expenditure ceilings have been particularly large for each of the four largest government departments (Appendix H).

Appendices

Appendix A: Debt Sustainability Analysis

This appendix looks at the sustainability of Irish debt by considering (1) the probability range for debt outcomes based on historical forecast errors, and (2) a number of common stress scenarios. Estimates are produced using the Council's Fiscal Feedbacks Model (IFAC, 2012) and the baseline scenario is taken to be that produced in the Department's latest set of forecasts. It is intended that this appendix will be extended to assess other variables relevant for debt sustainability in future reports.

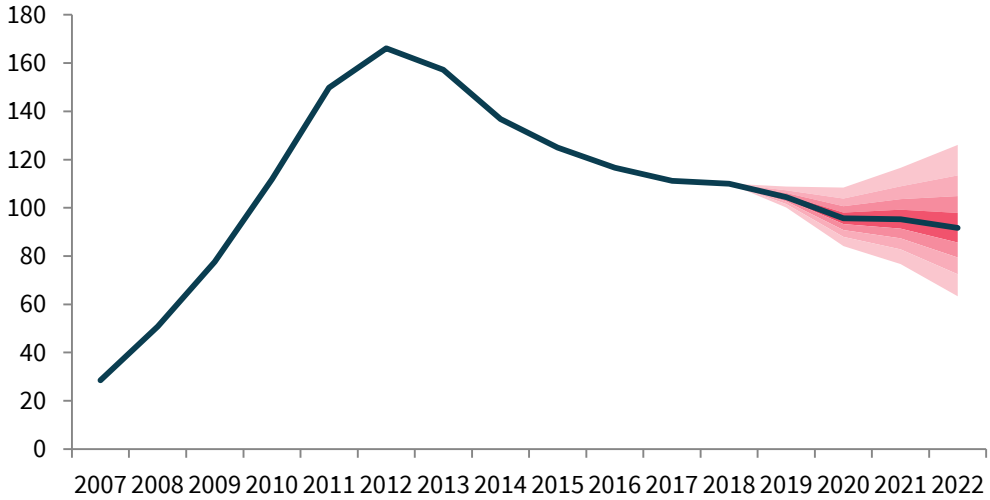
Probability Distribution for Debt Forecasts

A useful way to illustrate uncertainty and the impact of alternative growth paths on the government debt ratio is through the use of a fan chart.

Figure A1 below takes the Department of Finance's latest debt forecasts as the central line. The width of the fan represents the range of possible outcomes for the debt-to-GNI* ratio based on past forecast errors.[78] For example, according to this, there is an estimated 20 per cent probability that the debt ratio would not fall below current levels by 2022, in the absence of offsetting policy adjustments.

Appendix Figure A1: Probability Outcomes for Government Debt

% GNI*, general government basis



Source: Department of Finance; internal IFAC calculations.
Note: Line shows outturns and central forecasts, while bands show 20 per cent, 40 per cent, 60 per cent, and 80 per cent likelihood ranges, respectively, as one moves outward from the central forecasts. Forecast errors based on 2001–2007; 2011–14 sample of Department of Finance forecast errors.

[78] While there are some limitations with these charts, as described in Annex A of IFAC (2012), they do serve to highlight the uncertainty surrounding the fiscal position.

Stress Scenarios

Another useful way to examine debt sustainability is by exploring a number of common stress scenarios (see IMF 2018, for example). All scenarios assume that policy settings are not adjusted in response to the shock. We consider six stress scenarios and their impact on the forecast debt ratios (Figure A2) and annual gross funding requirements (Figure A3) below:

1. **"Growth" shock**: A shock equivalent to one standard deviation of the historical nominal GDP growth rate over the period 2000–2017 (excluding 2008–2009 and 2015) is considered for two consecutive years (-4.6 percentage points per annum relative to baseline).

2. **"Primary Balance" shock**: A shock to the primary balance equivalent to half of the historical standard deviation of the underlying primary balance in per cent of GDP over the period 2000–17 (excluding 2008–2009 and 2015) is considered for the full forecast period (-2.4 percentage points). An increase in average effective interest rates of 0.25 percentage points is assumed for every 1 per cent of GDP worsening in the primary balance.

3. **"Interest" shock**: A standard 2 percentage point shock is applied to the marginal interest rate on government debt over the entire forecast period.

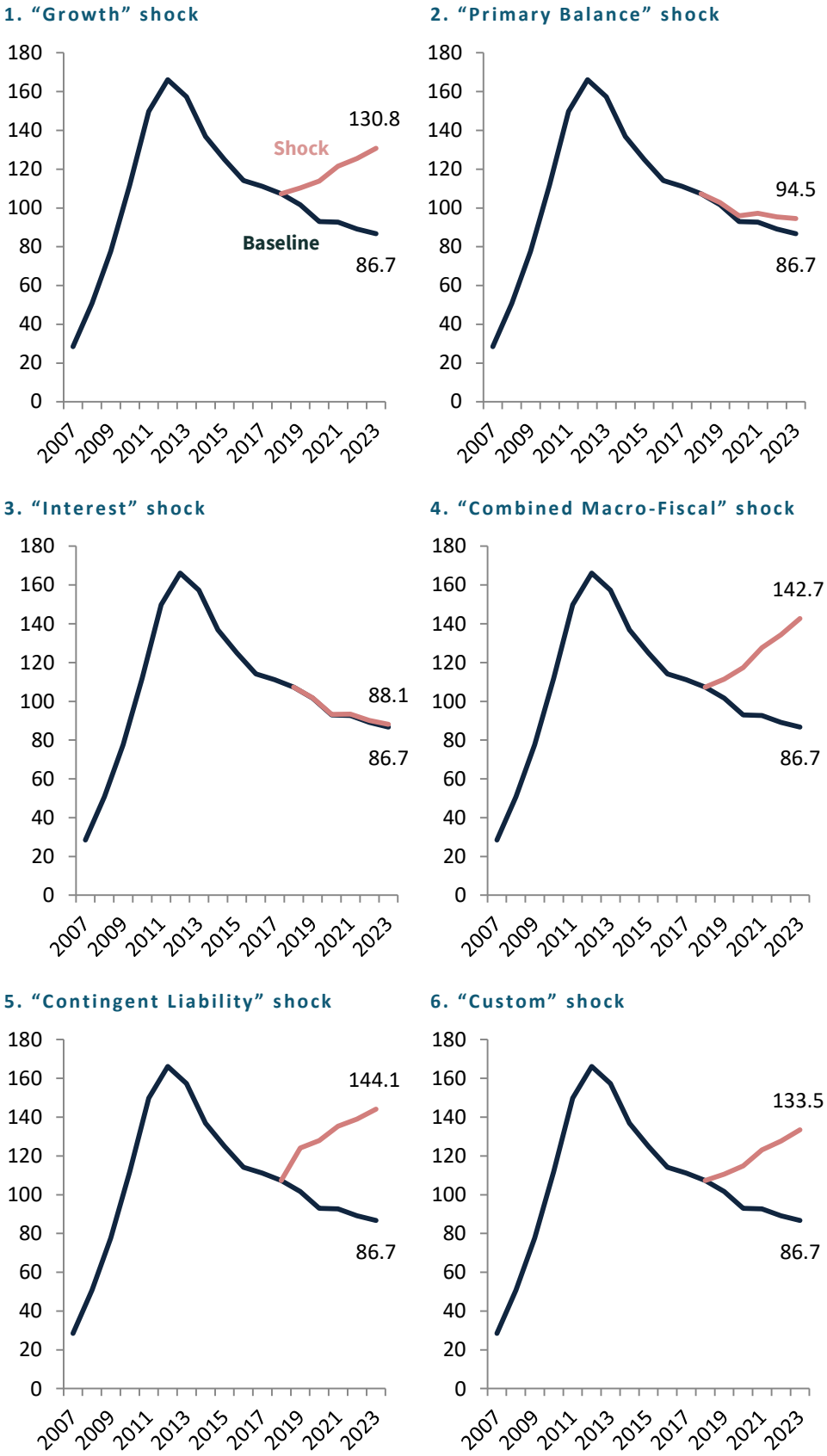
4. **"Combined Macro-Fiscal" shock**: Combines the three shocks above.

5. **"Contingent Liability" shock**: This extends the "Growth" shock above with a one-off increase in public spending equal to 10 per cent of domestic bank assets (i.e., the "Irish-Headquartered Group" of credit institutions as defined by the Central Bank of Ireland). This can be considered a tail risk as domestic banks have strengthened their capital buffers.

6. **"Custom" shock**: This draws on the analysis outlined in Box C of IFAC (2018a) and assumes that five large, foreign-owned multinational enterprises exit Ireland at the same time. A primary balance deterioration of €1.7 billion is assumed along with the "Growth" shock above.

Appendix Figure A2: Stress Scenarios for Government Debt

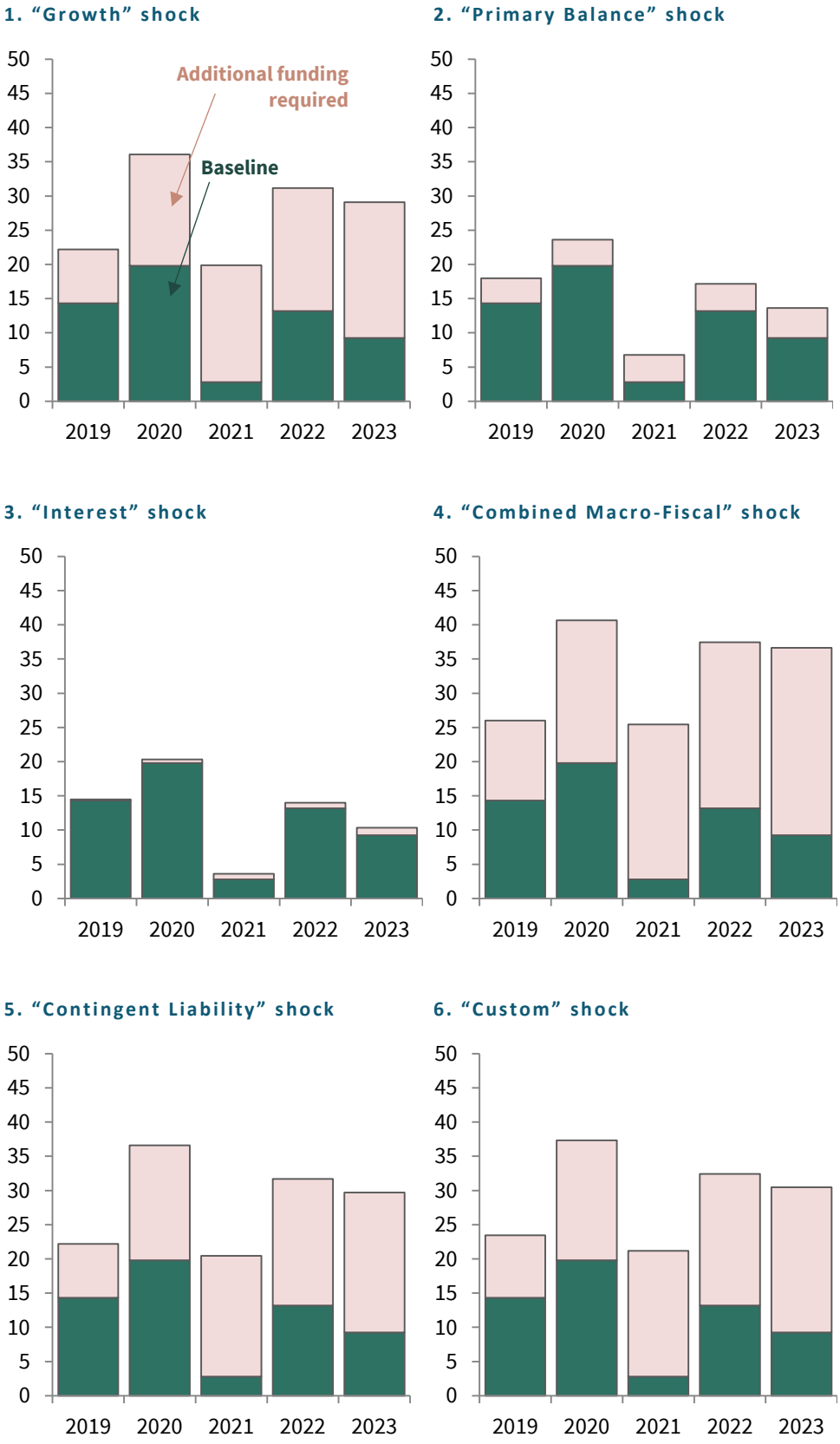
% GNI*, general government basis



Sources: CSO; Department of Finance; and internal IFAC calculations.

Appendix Figure A3: Stress Scenarios for Funding Requirements

€ billions, estimated annual gross funding requirements



Sources: CSO; Department of Finance; and internal IFAC calculations.
Notes: Gross funding requirements estimated as rollovers plus Exchequer borrowings.

Appendix B: Timeline for Endorsement of *SPU 2019* Projections

Date	
14 March	CSO releases *Quarterly National Accounts* estimates for Q4 2018.
20 March	The Secretariat and Department of Finance meet the CSO to clarify technical details of latest *Quarterly National Accounts* estimates.
25 March	The Secretariat receive Department of Finance technical assumptions underpinning *Budget 2018* forecasts.[79]
28 March, AM	After consideration by the Council, Benchmark projections are finalised by the Secretariat prior to receiving preliminary forecasts from the Department of Finance.
28 March, PM	The Council receive preliminary forecasts from the Department in line with *Memorandum of Understanding* requirements.
29 March	The preliminary endorsement meeting takes place, with the Department of Finance presenting their forecasts to the Secretariat. A number of clarifications of a factual nature were requested.
3 April	The Council receives final forecasts from the Department in line with *Memorandum of Understanding* requirements.
4 April	The Council meets to discuss the Department of Finance forecasts.
5 April	Department of Finance staff meets with the full Council and Secretariat to present their latest forecasts and to answer questions. The Council seeks information regarding a number of forecast components and assumptions used in models for alternative supply-side estimates. The Council then finalises a decision on the endorsement.
5 April	The Chair of the Council writes a letter to the Secretary General of the Department of Finance endorsing the set of macroeconomic forecasts underlying *SPU 2019*.
16 April	The Department publishes its forecasts in *SPU 2019.*

[79] These included assumptions related to oil prices, exchange rates, net expenditure by central and local government on current goods and services, and sources of forecasts for the growth of major trading partners.

Appendix C: The Council's Benchmark Projections (as of the morning of 28 March 2019)

Benchmark projections for 2018–2024

% change in volumes unless otherwise stated

	2018	2019	2020	2021	2022	2023	2024
Demand							
Underlying domestic demand[a]	5.7	3.4	2.8	2.5	2.4	2.5	2.4
GDP	6.7	3.0	3.5	3.4	2.8	2.6	2.3
…of which (p.p. contributions)							
Underlying domestic demand[b] (p.p.)	*2.1*	*1.8*	*1.5*	*1.3*	*1.3*	*1.3*	*1.2*
Underlying net exports[b] (p.p.)	*4.6*	*1.2*	*2.0*	*2.1*	*1.5*	*1.3*	*1.1*
Consumption	3.0	2.6	2.8	2.7	2.7	3.3	3.3
Government[c]	6.4	3.9	2.7	2.0	2.0	2.0	2.0
Investment	9.8	-1.7	1.4	1.1	0.9	0.3	-0.2
Underlying investment[a]	14.8	5.3	2.9	2.3	1.8	0.6	-0.4
Exports	8.9	7.3	4.3	4.6	4.2	3.9	3.8
Imports	7.0	7.8	3.7	4.2	4.2	4.1	4.1
Underlying imports[a]	7.2	10.4	4.3	4.8	4.8	4.7	4.6
Supply							
Potential output	3.8	3.4	3.8	3.5	3.3	3.3	3.1
Output gap (% potential output)	0.8	0.4	0.5	0.6	0.7	0.9	1.1
Labour Market							
Population	1.3	1.5	1.5	1.6	1.5	1.5	1.5
Labour force	1.8	1.6	1.5	1.9	2.1	2.1	1.6
Employment	2.9	2.1	1.8	1.9	2.0	2.1	1.7
Unemployment rate (% labour force)	5.7	5.2	4.9	4.9	4.9	4.8	4.8
Prices							
HICP	0.7	1.7	2.0	3.0	2.5	2.0	2.0
Personal consumption deflator	1.4	2.3	2.6	3.5	3.0	2.5	2.5
GDP deflator	1.5	2.6	1.8	2.1	2.1	2.0	2.2
Other							
Nominal GNI*[d]	15.1	4.5	4.3	4.7	4.4	4.1	4.0
Nominal GDP	8.3	5.6	5.3	5.5	4.9	4.7	4.6
Nominal GDP (€ billion)	318.5	336.3	354.3	373.8	392.3	410.7	429.4
Modified current account (% GNI*)[d]	4.8	5.0	4.4	4.0	3.6	3.0	2.6

Sources: CSO; and internal IFAC calculations.

Notes: [a] Underlying (final) domestic demand, underlying investment, and underlying imports exclude "other transport equipment" (mainly aircraft) and intangibles.[b] Underlying contributions to real GDP growth rates in percentage points—here underlying net exports includes the effect of changes in inventories, and excludes the effect of investment in aircraft and intangible assets.[c] As discussed in Chapter 3, the *SPU 2019* forecasts for the growth in volume of government consumption over the medium term may be too low.[d] IFAC estimates for 2018.

Appendix D: Imbalance Indicators

As part of its toolkit for examining the cyclical position of the economy, the Council uses a "modular" approach. While estimates of the output gap and potential output are useful summary measures, there is a danger that they may not reflect all available economic information which may point to possible imbalances in the economy. Specifically in response to the financial crisis, Borio *et al.* (2014) developed methods of estimating potential output using financial indicators, which capture the effect of the financial sector on the business cycle. This approach can be applied to other variables which may provide useful information on the cyclical position of the economy.

This appendix assesses some indicators of potential imbalances in the Irish economy. Within each module, a number of indicators are examined. Forecasts from *Budget 2019* are also included, where available. Four modules are shown here, namely:

(i) the labour market and prices;

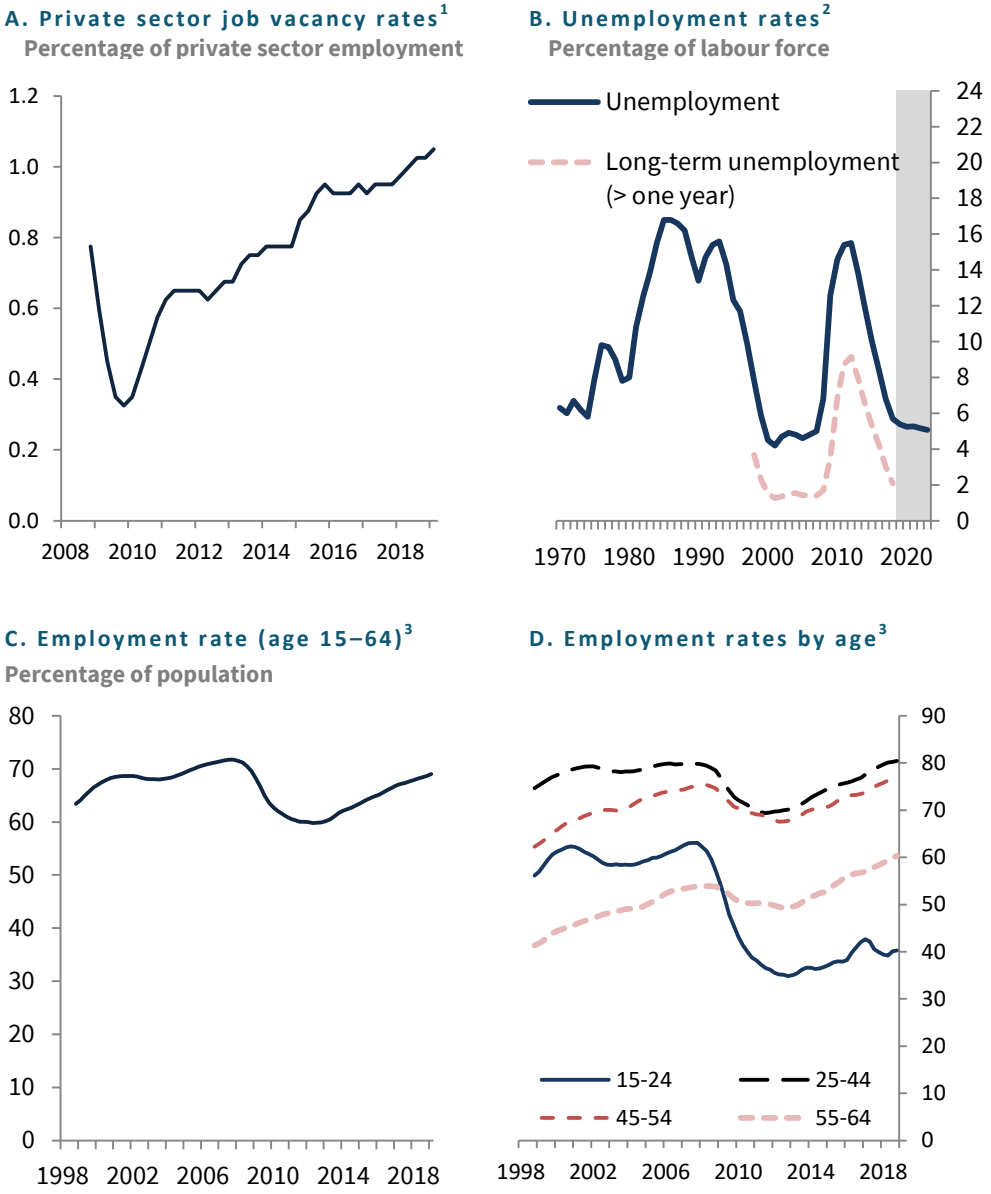
(ii) external balances;

(iii) investment and housing;

(iv) credit conditions.

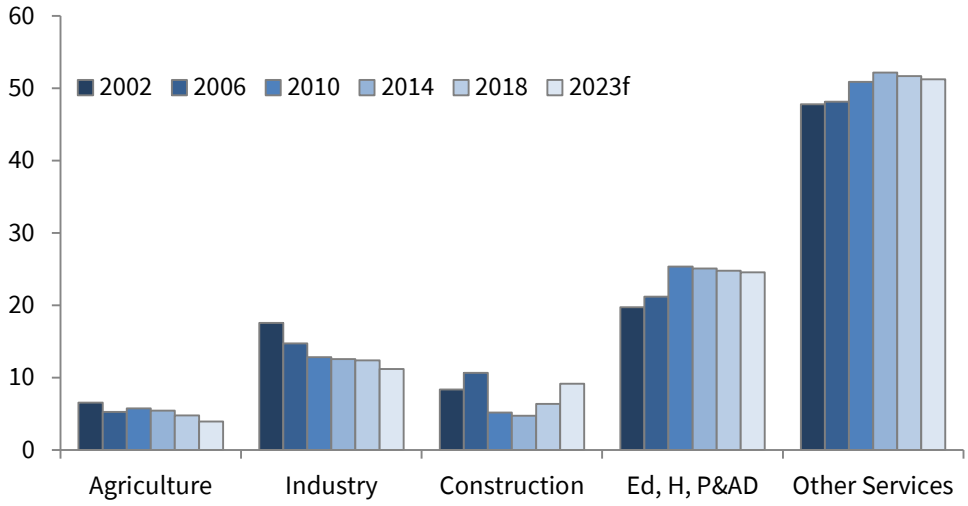
While this modular approach ensures that many potential sources of imbalance are examined, there are difficulties in assigning/estimating the relative importance (or weights) to attach to each of these imbalance indicators. Historical data may be a good guide to variables that explain previous business cycles, but not necessarily current or future ones.

Appendix Figure D.1: Labour market and prices indicators



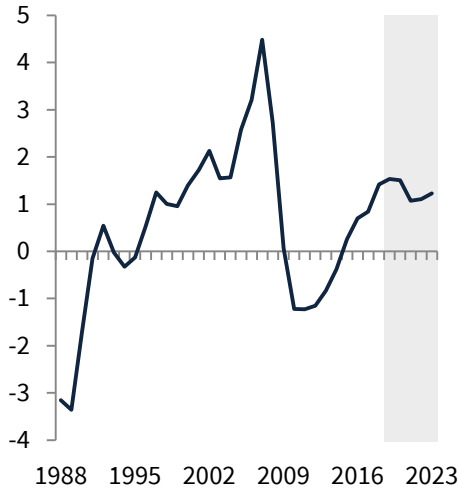
E. Sectoral employment concentration[4]

Percentage of total employment



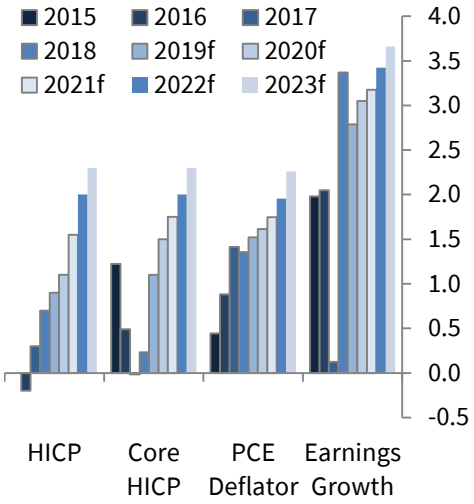
F. Net migration[4]

Percentage of labour force



G. Inflation measures[5]

Percentage change (year on year)



Sources: Central Statistics Office; Department of Finance; European Commission, AMECO.

Notes:

[1] Rates show the four-quarter moving average percentage of vacancies.

[2] Combined historical data from AMECO and CSO, including *Budget 2019* forecasts for 2018–2023.

[3] A four-quarter moving average is shown for employment rates. Employment rates by age grouping for 15-24 years, 25-44 years and 55-64 years are calculated as an average of quarterly employment rates (by five- or ten-year age groups), weighted by annual population estimates by corresponding age group.

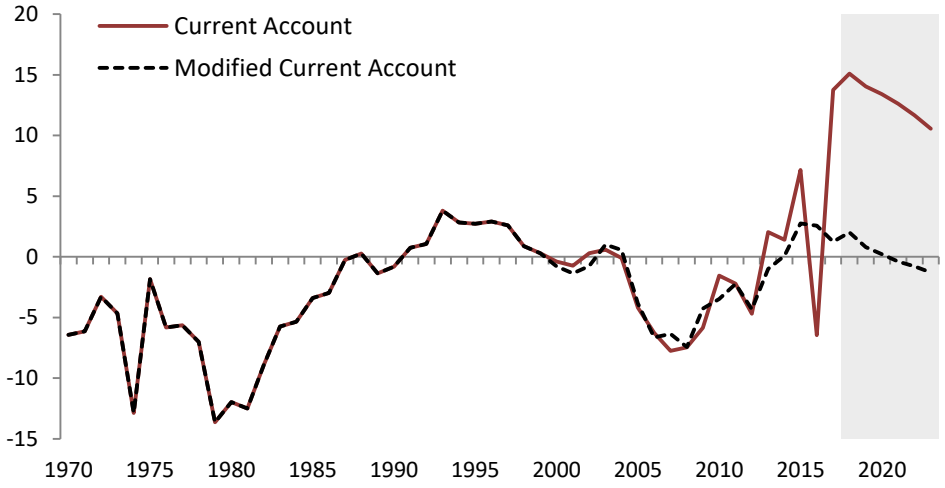
[4] Positive net migration indicates immigration exceeded emigration. Figures E and F include *Budget 2019* forecasts for 2018–2023.

[5] Earnings growth shown is a per-hour national accounts measure, based on compensation of employees and annualised employee hours. *Budget 2019* forecasts for 2018–2023 are included.

Appendix Figure D.2: Indicators of External Balances

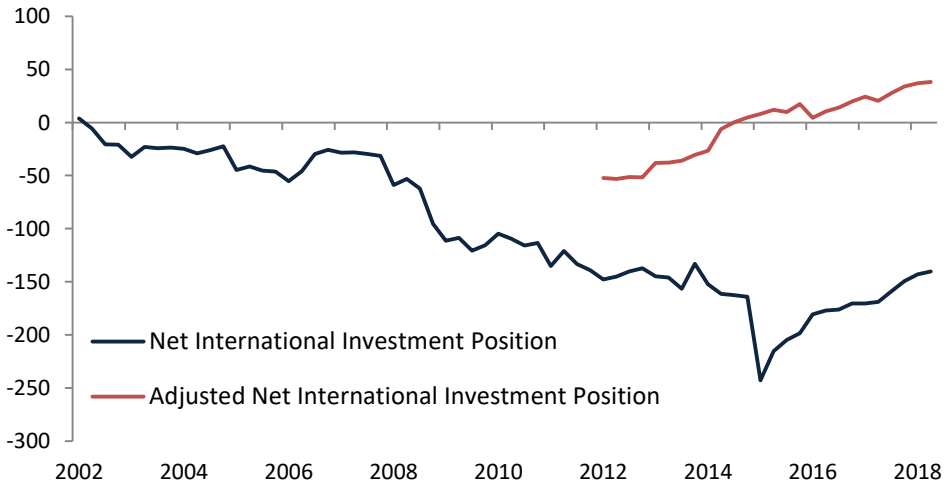
A. Current account and modified current account balances

Percentage of GNI*



B. Net international investment position

Percentage of GDP

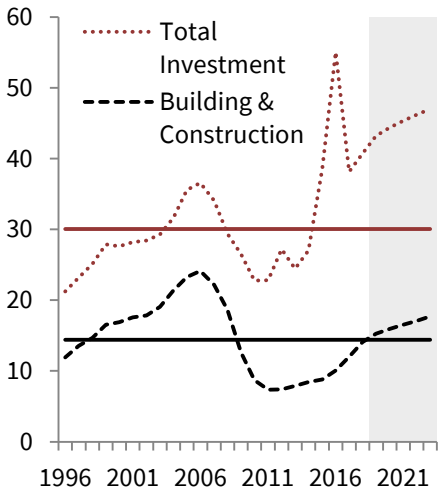


Sources: CSO; Eurostat and internal IFAC calculations.
Note: The modified current account balance excludes the estimated impact of redomiciled PLCs, depreciation on research & development related intellectual property (IP) imports, depreciation on aircraft leasing, imports of R&D services by foreign owned MNCs, and acquisitions of IP assets and aircraft for leasing. Adjusted measure of net international investment position excludes activities of the International Financial Services Centre and Non-Financial Corporations.

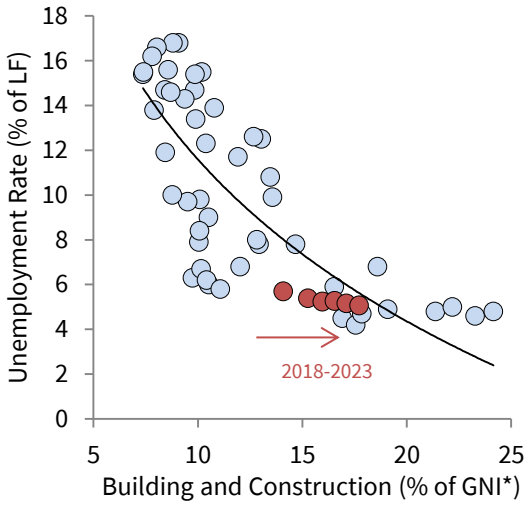
Appendix Figure D.3: Investment and Housing Indicators

A. Investment

Percentage of GNI*



B. Construction activity and employment

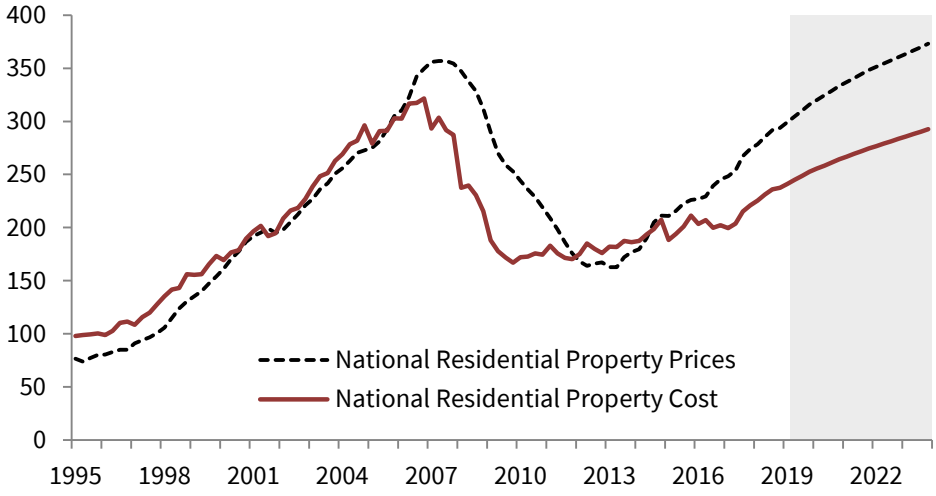


Sources: CSO; AMECO; Department of Finance; internal IFAC calculations.

Notes: Historical averages for investment ratios for 1970–2018 shown as horizontal lines in Panel A. In panel B, forecasts (2019–2023) are shown in red.

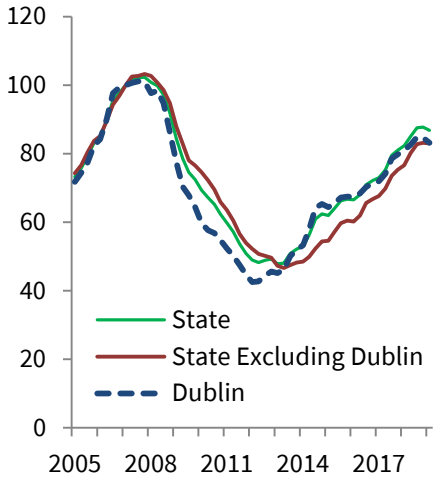
C. Irish residential property: prices and implied production costs

Euro, thousands

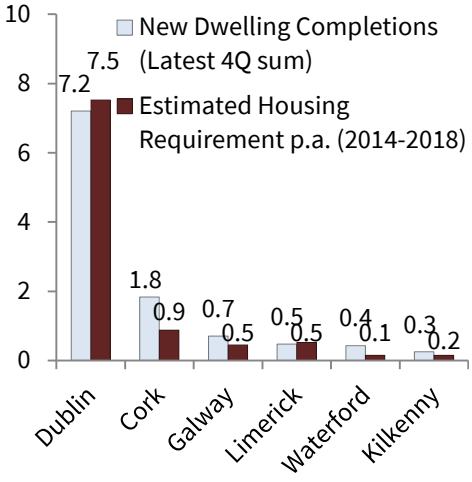


Sources: CSO; Society of Chartered Surveyors of Ireland; and internal IFAC calculations.

D. Real residential property prices (HICP adjusted)
Q1 2007 = 100

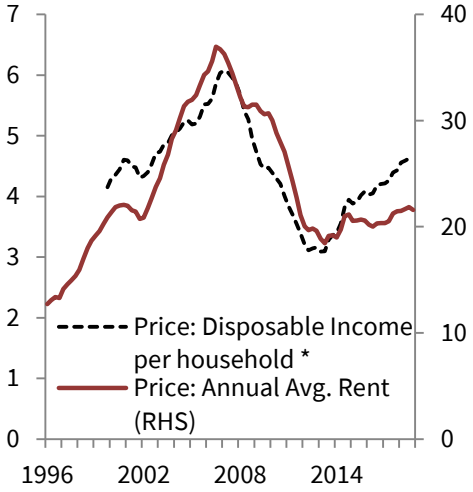


E. Estimated housing requirements and completions
Thousands

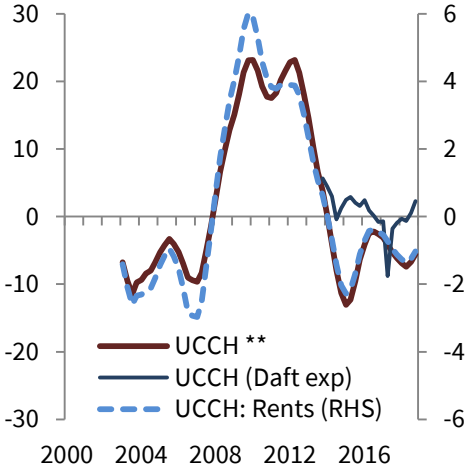


Sources: CSO, ESRI/PTSB, Housing agency estimates and Department of Housing, Planning, Community and Local Government; and internal IFAC calculations.

F. Housing valuation ratios
Ratio

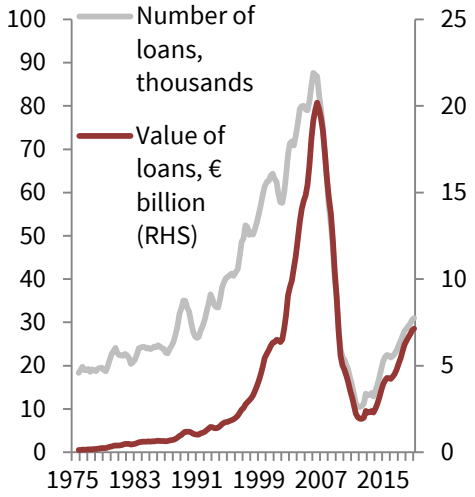


G. User cost of capital for housing (UCCH)



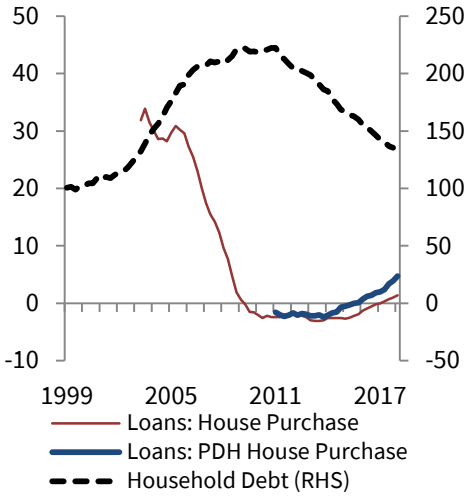
Sources: CSO, *Residential Property Price Index*; ESRI/PTSB *House Price Index*; RTB, *The RTB Rent Index Quarter 4 2017*; Housing agency estimates and Department of Housing, Planning, Community and Local Government; and internal IFAC calculations.

H. Annualised residential mortgage lending (first-time buyer and mover purchase loans)



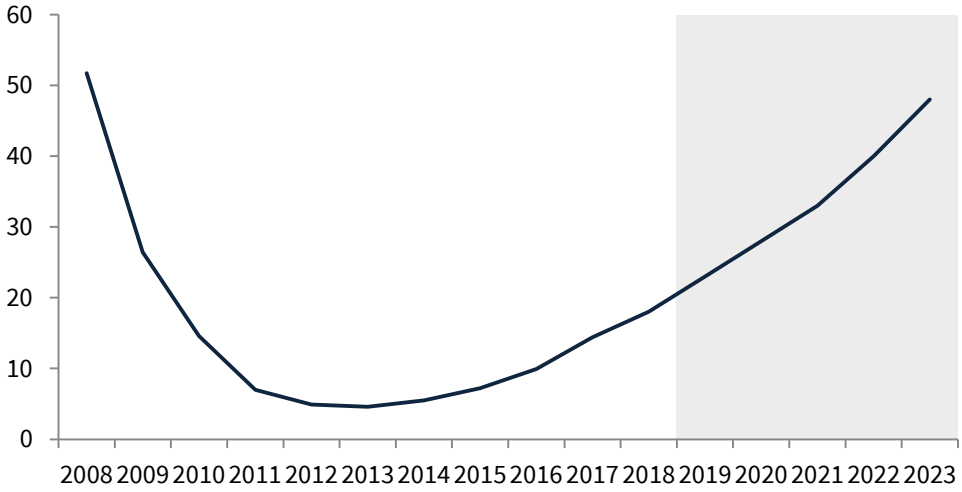
I. Loans to Irish households for house purchase

Percentage change (LHS) and percentage of gross disposable income (RHS)



J. Housing completions

Thousands

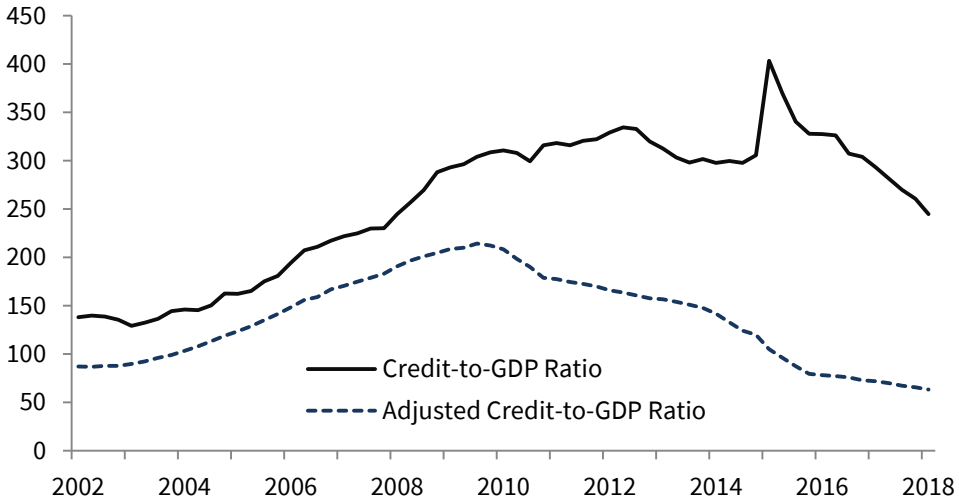


Sources: CSO, ESRI/PTSB, Central Bank of Ireland, IBF Mortgage Market Profile, Department of Housing, Planning, Community and Local Government; and internal IFAC calculations.
Note: Price to disposable income per household corresponds to average house prices divided by moving 4-quarter sum of adjusted personal disposable income per household – households are forecast based on population growth and assuming a constant share of households relative to population from Q1 2016 onwards. UCCH simple proxy corresponds to new mortgage rates less annual price change for the past 4 Qs. UCCH** includes first-time buyer taxes/subsidies; down-payments; depreciation/maintenance. UCCH (Daft exp) uses Daft.ie 12 month price expectations. Housing stock is proxied by Long-term loans; ESA-95 basis pre-2012.

Appendix Figure D.4: Credit Indicators

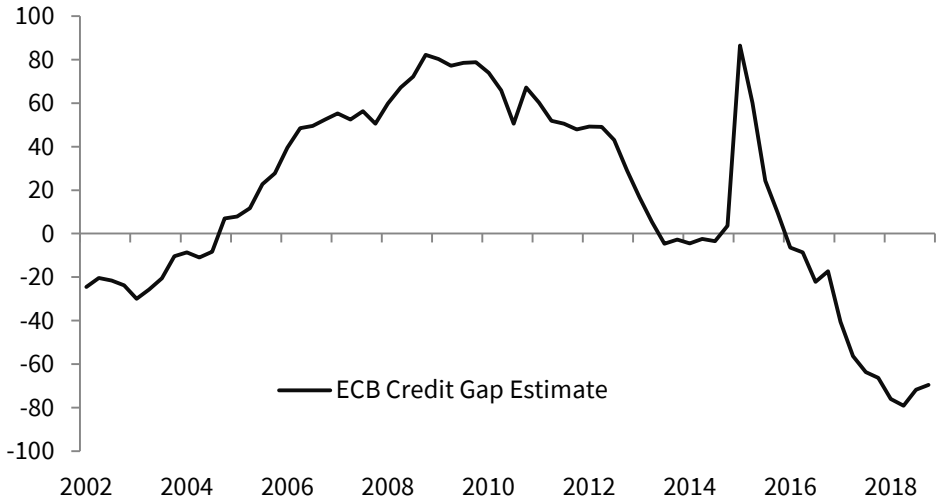
A. Private sector credit-to-GDP ratios

Per cent of GDP



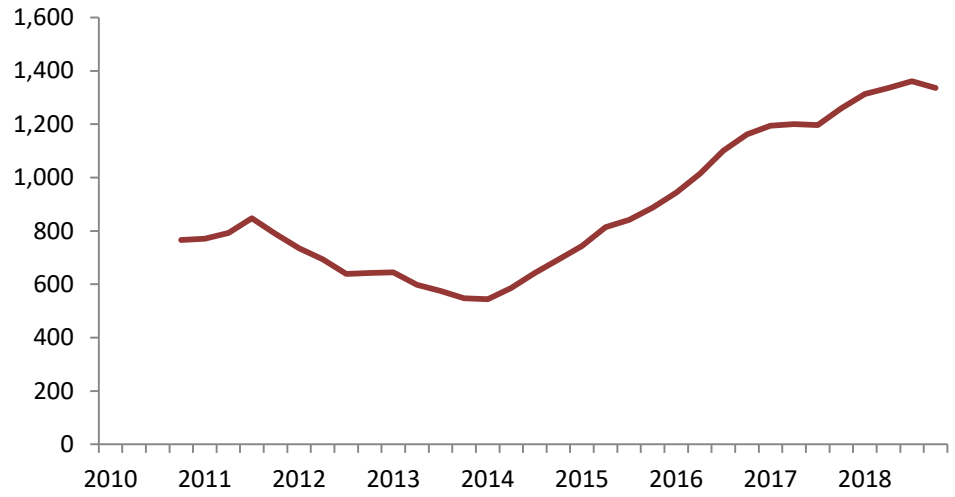
B. Private sector credit-to-GDP gap

Per cent of GDP

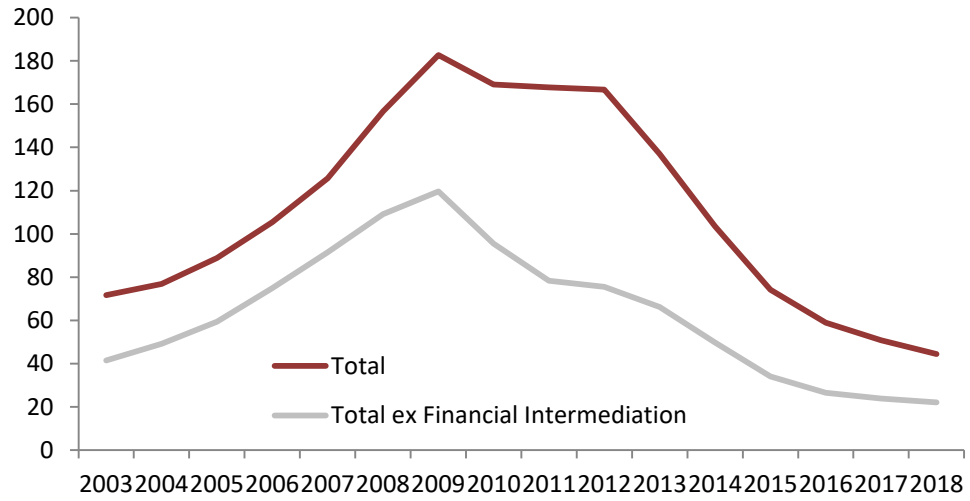


Sources: CSO; Central Bank of Ireland; European Central Bank; and internal IFAC calculations.

C. New credit advanced to Irish resident small- and medium-sized enterprises
€ billion (excluding financial intermediation, four-quarter sum)



D. Credit advanced to Irish resident private-sector enterprises
Per cent of GNI*

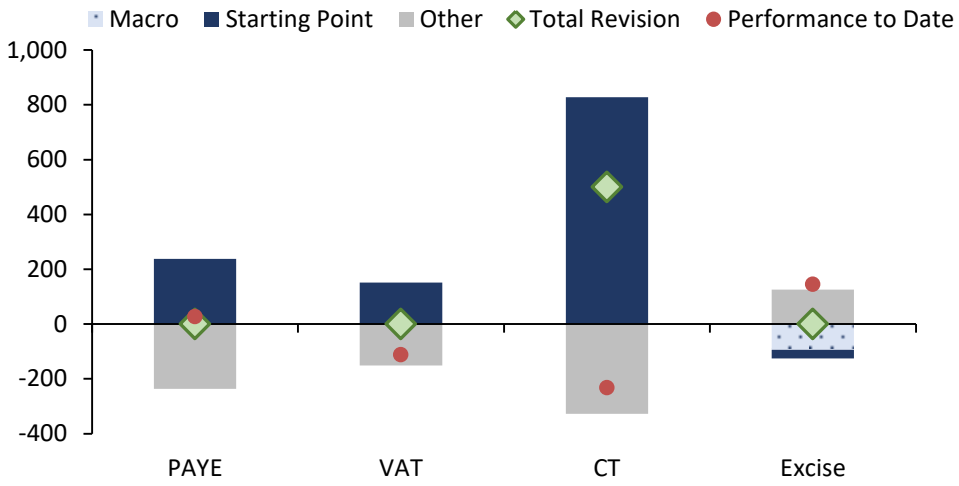


Appendix E: Tax Forecasts Decomposed

The first part of this Appendix explores the revisions to forecasts of the main tax heads for 2019. It shows how the 2019 forecasts in *SPU 2019* have changed relative to *Budget 2019.* Three categories are identified in this analysis as drivers of these revisions: (i) an update to the 2019 "**macro**" economic outlook relevant for each tax head; (ii) the error arising from an incorrect "**starting point**" estimate of 2018, which biases the 2019 forecast (a positive starting point means that the 2018 outturn was actually higher than expected at budget time); and (iii) an "**other**" source of revision, caused by use of incorrect estimates of any other component of the forecast. It is the residual of the "macro" and "starting point" errors.[80, 81] Appendix Figure E.1 also compares the total revision relative to the performance against the *Budget 2019* profile at end-April 2019.

Appendix Figure E.1: Tax Forecast Revisions in 2019: *SPU 2019* versus *Budget 2019*

€ million (*SPU 2019 – Budget 2019*)



Sources: Department of Finance; and internal IFAC calculations.
Note: The chart breaks down the total revision into the macro component, a starting point component and an "other" component. Performance to date shows the tax receipts at end-May 2019 relative to profile. A positive performance to date indicates taxes are higher than what was forecast at *Budget 2019* time.

The second part of this Appendix examines the latest tax revenue forecasts produced by the Department of Finance in *Budget 2019* for the projection horizon

[80] For a detailed description of the IFAC's forecast replication model, see Hannon (2014).

[81] The macro drivers for 2019 used in this exercise are based on the recent *SPU 2019* forecasts, as opposed to those projected at budget time. However, the Department of Finance's tax forecasts for 2019 use the macro drivers that were forecast in *Budget 2019.* The exercise is therefore based on the most up-to-date macroeconomic information for each tax source.

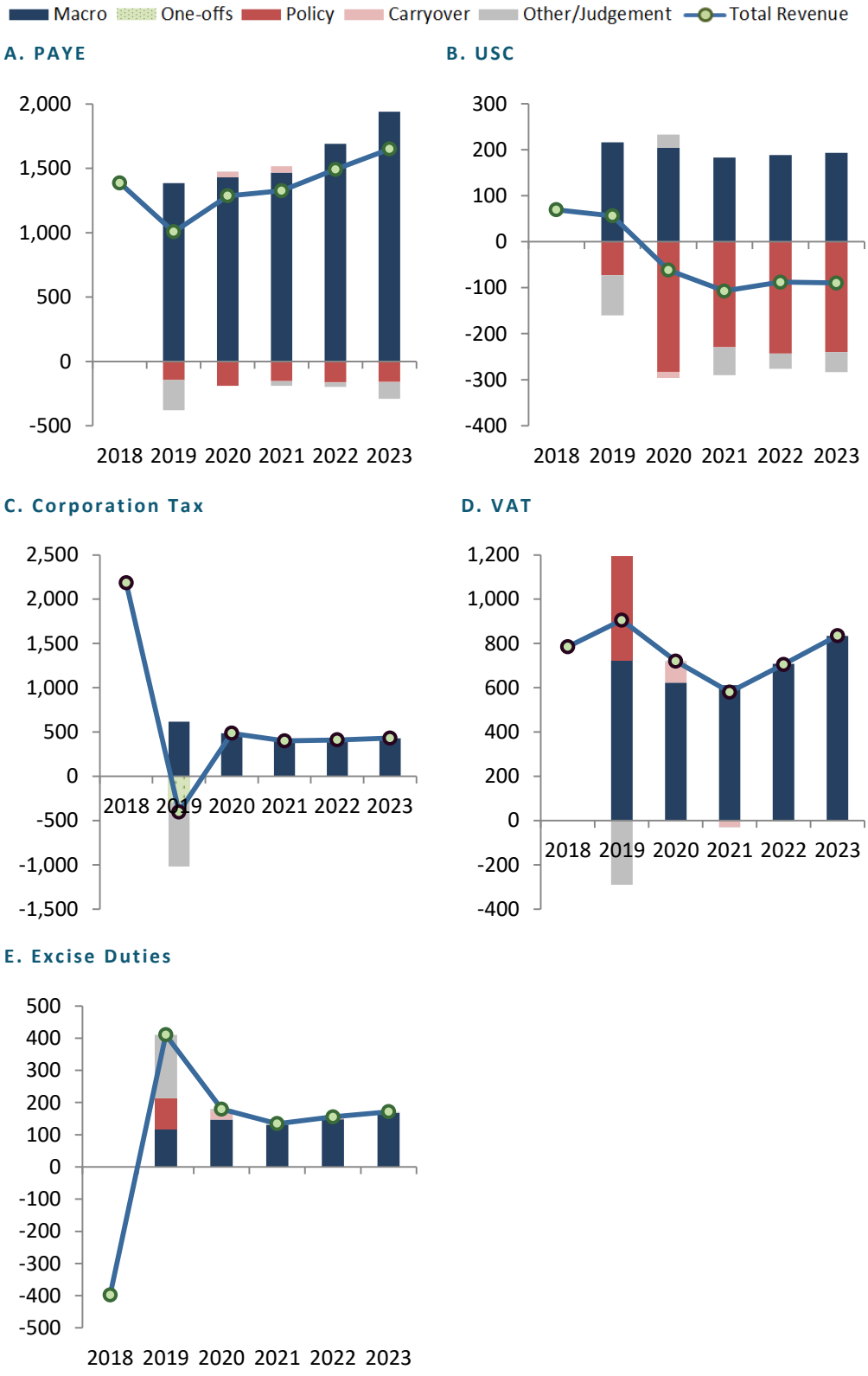
2018–2023. In particular, it shows the yearly changes in the forecasts of VAT, corporation tax, excise duties, and the PAYE and USC components of income tax (see Appendix Figure E.1).[82] For a detailed description of the IFAC's forecast replication model, see Hannon (2014).

The changes on the tax forecasts (year-on-year) are attributed to a number of components: (i) "**macro**" is the part of the forecast driven by the growth in the relevant macro driver (e.g. wage growth and its corresponding elasticity when analysing income tax); (ii) "**one-offs**" refer to non-recurring items that impact on expected tax receipts; (iii) "**policy**" impacts account for the estimated impacts from policy changes in a given year (e.g., discretionary tax cuts); (iv) "**carryover**" effects account for policy impacts carried over from previous years; (v)"**other**" represents potential elements affecting the forecasts (calculated as the difference between IFAC's internal forecasting exercise and that carried out by the Department of Finance), including judgement applied by the Department of Finance.

[82] The generic formula applied by the Department of Finance to forecast revenue is given by: $\mathrm{Rev}_{t+1} = (\mathrm{Rev}_t - \mathrm{T}_t) * (1 + \mathrm{B}_{t+1} * \mathrm{E}) + \mathrm{T}_{t+1} + \mathrm{M}_{t+1} + \mathrm{M}_t + \mathrm{J}_{t+1}$,
where revenue forecasts (Rev_{t+1}) depend on their lag stripped of one-off items (T_t), one-off items in the current period (T_{t+1}), the macro drivers (B_{t+1}) and their associated elasticity (E), current policy (M_{t+1}) and carryover policy impacts (M_t), and judgement (J_{t+1}). See Hannon (2014) for a discussion of this approach. Rewriting the formula in terms of annual changes yields: $\Delta\mathrm{Rev}_{t+1} = \mathrm{Rev}_t * \mathrm{B}_{t+1} * \mathrm{E} - \mathrm{T}_t * \mathrm{B}_{t+1} * \mathrm{E} + \Delta\mathrm{T}_{t+1} + \mathrm{M}_{t+1} + \mathrm{M}_t + \mathrm{J}_{t+1}$. In this way, yearly revenue changes for each tax head are attributed to the addition of: (i) the macro driver, which covers the parts of the formula affected by B_{t+1}; (ii) changes in one-off items, as shown in ΔT_{t+1}; (iii) current and previous policy changes ($M_{t+1}$and M_t, respectively); and other adjustments, mainly judgement, as covered in the component J_{t+1}.

Appendix Figure E.2: Tax Forecasts Decomposed

€ million, year-on-year change



Sources: Department of Finance; and internal IFAC calculations.

Appendix F: Summary of the Council's Principles-Based Approach to the Budgetary Rule

Appendix Table F.1: Outline of the Council's principles-based approach to the Budgetary Rule

Criteria	IFAC (New Approach)	IFAC (Old Approach)	European Commission Approach
Potential Output and the Output Gap	The Department's GDP-based estimates of potential output and the output gap.	The Department's CAM-based estimates of potential output and the output gap were used in all previous *Fiscal Assessment Reports*. For the *ex-post* Assessment, the European Commission's own CAM-based estimates were used.	The European Commission's own CAM-based estimates of potential output and the output gap.
Reference Rate for Expenditure Benchmark	Based on the Department's latest estimates of GDP-based potential output growth (i.e. not frozen).	Reference rate frozen by the Commission in spring of year *t-1*, for assessment of year *t.* The same reference rate is used for the *ex-post* assessment. For later years (e.g. years *t+2* onwards) IFAC uses the Department's CAM-based estimates of potential output.	Based on the European Commission's CAM-based estimates of potential output, frozen in spring of year *t-1.* No reference rate is set for *t+2* or later years.
Deflator for Expenditure Benchmark	Based on the Department's latest estimates of the demand-side GDP deflator (i.e. not frozen).	Based on the European Commission's estimates of the GDP deflator, frozen in spring of year *t-1.*	Based on the European Commission's estimates of the GDP deflator, frozen in spring of year *t-1.*
Adjustment Requirement and Convergence Margin	Based on the latest estimates of distance from the MTO in year *t-1* (i.e. not frozen). No negative convergence margin applied.	Compliance assessed based on the most favourable of the adjustment requirements and convergence margins in the spring or autumn of year *t-1*, or spring of *t+1* for the *ex-post* assessment (all based on the Commission's estimates of the output gap). No negative convergence margin applied.	Based on the European Commission's estimates of distance from the MTO that are frozen in either spring or autumn of year *t-1* (whichever is more favourable). For ex-post assessment, requirements can be unfrozen in spring of year *t+1* if these are more favourable in terms of compliance. Negative convergence margin allowed.
NAWRU	Assumed constant at 5.5%.	The Department's latest CAM-based estimates of the NAWRU.	The Commission's latest CAM-based estimates of the NAWRU.
Margin of Tolerance	No margin of tolerance.	No margin of tolerance.	0.25% of GDP from the MTO.
Budgetary Semi-Elasticity	0.588	0.522	0.522

Note: For a full explanation of the Council's Principles-based Approach (PBA) to the Domestic Budgetary Rule see Box A of *Ex-post assessment of compliance with the domestic budgetary rule 2018* (IFAC, 2019a).

Appendix G: Assessment of the Budgetary Rule under the EU Methodology[83]

This appendix examines the consistency of the projections outlined in the *SPU 2019* with Ireland's Domestic Budgetary Rule and with the preventive arm of the SGP. In particular it examines compliance in relation to the Medium-term Budgetary Objective (MTO).

The assessment in this appendix is based on the Council's interpretation of the *Vade Mecum* using the Department's CAM-based estimates of potential output and the output gap and considering the same one-off items as outlined in Chapter 4. As the assessment in this appendix is based on, *inter alia,* different estimates of potential output and the output gap, the assessment in this appendix may at times give contradictory signals about compliance with the Budgetary Rule when compared to the assessment in Chapter 4. It is the assessment that is presented in Chapter 4—not the assessment in this appendix—that represents the Council's view on compliance with the Budgetary Rule. Table G.1 provides a summary of the assessment of the compliance with the fiscal rules.[84]

[83] See Appendix F for a comparison of the Council's new principles-based approach and Council's old approach.

[84] This assessment is in line with Column 3 (IFAC Old Approach) of Appendix F, Table F.1.

Appendix Table G.1: Assessment of fiscal rules under the EU methodology[1, 2, 3, 4]

Per Cent of GDP, unless stated. For deviations, negative values = non-compliance

	2017	2018	2019	2020	2021	2022	2023
Corrective Arm							
General Government Balance Excl. One-Offs	-0.2	0.0	0.2	0.4	0.7	1.0	1.3
General Government Debt	68.5	64.8	61.1	55.8	55.4	53.2	51.6
1/20th Debt Rule Limit	81.9	71.5	67.9	64.2	60.0	60.0	60.0
Debt Rule met?	Y	Y	Y	Y	Y	Y	Y
Preventive Arm & Domestic Budgetary Rule							
Structural Balance Adjustment Requirement							
MTO for the Structural Balance	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**
CAM Structural Balance	-1.1	-1.8	-1.1	-0.5	0.1	0.7	1.3
MTO met?	N	N	N	Y	Y	Y	Y
Minimum Change in Structural Balance Required	–	**0.4**	–	**0.7**	**0.0**	**0.0**	**0.0**
Change in CAM Structural Balance	0.9	-0.7	0.6	0.7	0.6	0.6	0.6
1yr Deviation (€bn)	–	-3.4	2.0	0.0	2.2	2.2	2.5
1yr Deviation (p.p.)	–	-1.1	0.6	0.0	0.6	0.6	0.6
2yr Deviation (€bn)	–	–	-0.7	1.0	1.1	2.2	2.3
2yr Deviation (p.p.)	–	–	-0.3	0.3	0.3	0.6	0.6
Expenditure Benchmark							
(a) Reference Rate of Potential Growth (% y/y)	3.3	3.4	4.5	4.7	4.6	4.5	4.2
(b) Convergence Margin	0.0	1.7	0.0	2.9	0.0	0.0	0.0
(a-b) Limit for Real Net Expenditure Growth (% y/y)	3.3	1.8	4.5	1.8	4.6	4.5	4.2
GDP Deflator used	1.2	1.3	1.3	1.9	1.7	1.6	1.6
Limit for Nominal Net Expenditure Growth (% y/y)	**4.5**	**3.1**	**5.9**	**3.7**	**6.4**	**6.1**	**5.9**
Net Expenditure Growth (% y/y)	4.1	5.3	2.9	3.4	3.1	3.1	2.8
Net Expenditure Growth (Corrected for one-offs) (% y/y)	3.9	5.3	3.2	3.4	3.1	3.1	2.8
1yr Deviation (Corrected for one-offs) (€bn)	–	-1.6	2.0	0.2	2.7	2.5	2.7
1yr Deviation (Corrected for one-offs) (% GDP)	–	-0.5	0.6	0.1	0.7	0.7	0.7
2yr Deviation (Corrected for one-offs) (€bn)	–	–	0.2	1.1	1.4	2.6	2.6
2yr Deviation (Corrected for one-offs) (% GDP)	–	–	0.1	0.3	0.4	0.7	0.7
Limit for Nominal Net Expenditure Growth (€bn)	**3.1**	**2.2**	**4.5**	**2.9**	**5.2**	**5.2**	**5.1**
Net Expenditure Increase (€bn)	2.8	3.8	2.2	2.7	2.5	2.6	2.4
Net Expenditure Increase (Corrected for one-offs) (€bn)	2.6	3.7	2.4	2.7	2.5	2.6	2.4
Current Macroeconomic Aggregates							
Real GDP Growth (% y/y)	7.2	6.7	3.9	3.3	2.4	2.5	2.6
CAM Potential GDP Growth (% y/y)	7.9	4.9	4.7	4.4	3.5	3.4	3.3
CAM Output Gap	1.6	3.3	2.5	1.6	1.0	0.5	0.0
GDP Deflator Used (% y/y)	1.2	1.3	1.3	1.9	1.7	1.6	1.6

Sources: CSO; Department of Finance; and internal IFAC calculations.

Note: [1] All figures presented on General Government basis. Assessments of *SPU 2019* revenue and expenditure projections using Department of Finance's latest CAM potential output estimates and considering Council's views on one-off/temporary measures. A one-off windfall of €0.35bn in corporation tax revenue for 2018 is included in the Council's assessment of the structural balance as well as a €0.2 billion expenditure one-off in 2018 in relation to a pay arrears settlement for medical consultants. The treatment here differs to that applied in the appendix of "Assessment of Compliance with the Domestic Budgetary Rule in 2019" (IFAC, 2019a), which used the Commission's Spring 2019 output gap estimates for the structural balance as these are the legal basis of ex-post assessments of compliance. The outlier for "CAM Potential GDP Growth" for 2015 is replaced by the 2014 and 2016 rate average in the expenditure benchmark (IFAC, 2017c).[2] The 2018 adjustment requirement was reset to 0.4 per cent of GDP based on the Commission's Spring 2019 output gap estimates. The Council assesses Expenditure Benchmark compliance without a negative convergence margin. The 2019 adjustment requirement is frozen by the European Commission at zero meaning the Commission will apply a negative convergence margin for 2019. The Expenditure Benchmark limits here therefore differ to those in the European Commission's opinion on Ireland's Draft Budgetary Plans.[3] The 1/20th Debt Rule requires that the debt-to-GDP ratio make progress towards 60 per cent of GDP. A transition period applies until end-2018. [4] Figures in grey indicate that the Council assesses these forecasts to be the result of technical assumptions on expenditure, which may be unrealistic (Chapter 3).

G.1 *Ex-post* Assessment of 2018

There have been substantial revisions to the CAM-based output gap, particularly for the 2018 estimate (see Figure 4.3).[85] These revisions have had a detrimental impact on the structural balance as estimated using the CAM.

MTO and Structural Balance Adjustment Requirements

The MTO of a structural balance of –0.5 per cent of GDP was not achieved for 2018. The structural balance deteriorated to -1.8 per cent of GDP in 2018. Adjustment requirements for year *t* are set in the spring of year *t-1.* These requirements can only be reset in autumn of year *t* or spring of year *t+1*, provided that these vintages imply a more favourable adjustment requirement in terms of compliance. The adjustment requirement for 2018 has now been updated, to 0.4 per cent of GDP, based on the European Commission's Spring 2019 estimates of the structural balance showing a more favourable initial distance from the MTO, than the previously frozen requirement. Despite this, a significant deviation, of 1.1 per cent of GDP, occurred for 2018. However, this deviation is largely as a result of an unrealistic output gap estimate, with the output gap estimate for 2018, of 3.3 per cent of GDP, now similar to the output gap, currently estimated under the same methodology, for 2007.

Expenditure Benchmark

The Expenditure Benchmark limit of 3.1 per cent growth for 2018 was breached, with net expenditure grew by 5.3 per cent. Net expenditure grew by 0.49 per cent of GDP more than the Expenditure Benchmark limit. This is marginally below the limit of what is considered a significant deviation (0.5 per cent of GDP) from the Expenditure Benchmark. In nominal terms, this was €1.6 billion more than the limit. As the MTO was not achieved for 2018, the European Commission will use the Expenditure Benchmark as part of an overall assessment of compliance with the EU fiscal rules.

[85] See Box J for details on the revisions to the output gap estimates.

G.2 In year Assessment of 2019

MTO and Structural Balance Adjustment Requirements

The MTO of a structural deficit of 0.5 per cent of GDP will not be achieved in 2019. The structural balance is currently forecast to be -1.1 per cent of GDP for 2019. While this estimate of the structural balance partially reflects changes in the output gap estimates between *SPU 2019* and *Budget 2019,* the *Budget 2019* estimates also showed the MTO not being met for 2019.

The adjustment requirement for 2019 was set in autumn 2018 based on the European Commission's Autumn 2018 forecasts, which–at the time–forecast that the MTO would be achieved for 2018.[86] This means that there will be no adjustment requirement for 2019, despite the MTO no longer shown to be achieved in 2018.

Expenditure Benchmark

The Expenditure Benchmark limit for 2019 is a growth rate of 5.9 per cent of GDP.[87] Net expenditure is forecast to grow by 3.2 per cent, below the limit set by the Expenditure Benchmark. This low forecasted growth rate is largely as a result of the Expenditure Benchmark being breached in 2018 and this larger than expected level for expenditure becoming the base for 2019. As the MTO is forecast to not be achieved for 2019, the Expenditure Benchmark will be assessed by the Commission as part of an overall assessment of compliance with the fiscal rules.

[86] The Commission's Autumn 2018 forecasts showed a structural deficit of 0.2 per cent of GDP in 2018.

[87] The European Commission have set the Expenditure Benchmark limit for 2019 at 7 per cent. The difference between the Council's limit and the European Commission 's limit was as a result of the European Commission applying a negative convergence margin for 2019, as the MTO was forecast to be overachieved in 2018 at the time the Expenditure Benchmark limit was set. The Council does not deem it prudent budgetary management to apply a negative convergence margin.

G.3 *Ex-Ante Assessment of 2020-2023*

The MTO is now set for 2020–2022 as a structural deficit of 0.5 per cent of GDP. Based on current forecasts this will be complied with, although these forecasts are based on expenditure figures which may not be realistic (see Chapter 3).

MTO and Structural Balance Adjustment Requirements

The MTO is currently forecast not to be achieved for 2019. This means that an adjustment requirement of 0.7 per cent will apply for 2020 in order to ensure the structural balance returns to the MTO in 2020. Based on current forecasts, this adjustment requirement will be complied with and the MTO will marginally be achieved for 2020, with a structural deficit of 0.5 per cent of GDP. However, this is based on estimates of expenditure that are unrealistically low. Furthermore, revisions to the output gap may jeopardise compliance further.

Current forecasts show compliance with the MTO for 2021–2023, but again, these estimates are based on dubious expenditure forecasts.[88]

Expenditure Benchmark

As there is an adjustment requirement for 2020, a convergence margin also applies for 2020. This convergence margin reduces the Expenditure Benchmark limit by 2.9 percentage points in 2020. The Expenditure Benchmark limit for 2020 is therefore a growth rate of 3.7 per cent. Net expenditure is currently forecast to grow by 3.4 per cent in 2020, marginally below the limit set by the Expenditure Benchmark. Given the unrealistic expenditure forecasts, there are serious risks of slippage for 2020.

For 2021–2023, net expenditure is currently forecast to be well below the limits set by the Expenditure Benchmark, but these forecasts are unrealistically low (see Chapter 3).

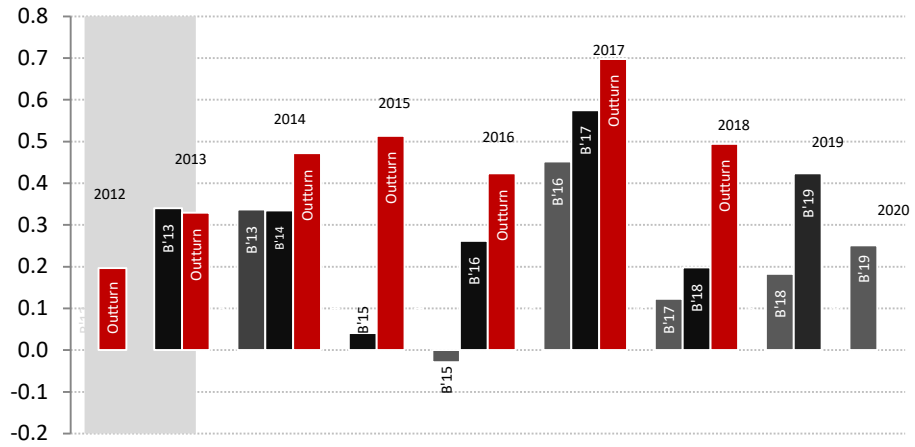
[88] This is assuming that the MTO will be kept constant at a structural deficit of 0.5 per cent of GDP for 2023. The MTO for 2023–2025 will not be set until 2022.

Appendix H: Gross Current Expenditure Revisions in Selected Departments

This appendix shows the change in the forecast gross current expenditure by the four largest departments by current expenditure (the Department of Employment and Social Protection, the Department of Health, the Department of Education and Skills and the Department of Justice). Significant upward revisions have occurred in expenditure ceilings in recent years, for each of the four largest departments.

Appendix Figure H.1: Change in gross current expenditure ceilings: Department of Employment Affairs & Social Protection Group

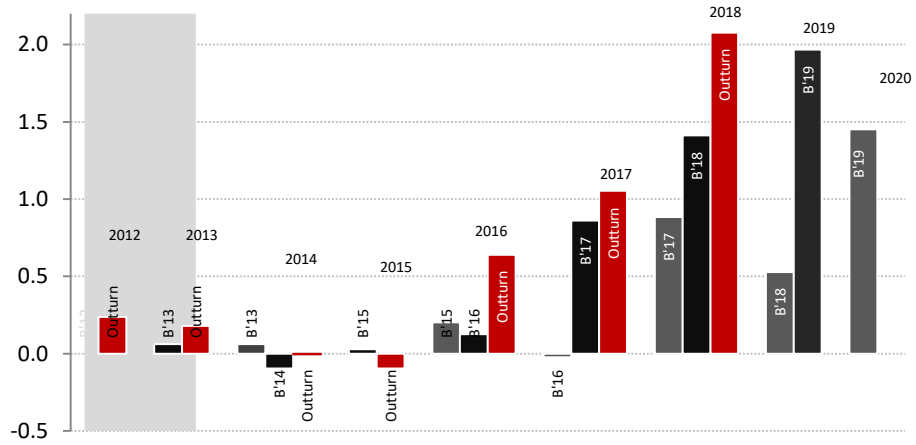
€ Billion



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Bars show the change in forecasts from various budgets followed by outturns, versus the earliest budget forecast for that year (e.g., B'15 = expenditure forecasts in *Budget 2015* minus the earliest forecast for the specified year). Grey shaded region covers crisis period up to 2013. Red bars relate to the change in outturn expenditure versus the earliest forecast for expenditure for the year specified above the bars.

Appendix Figure H.2: Change in gross current expenditure ceilings: Department of Health[89]

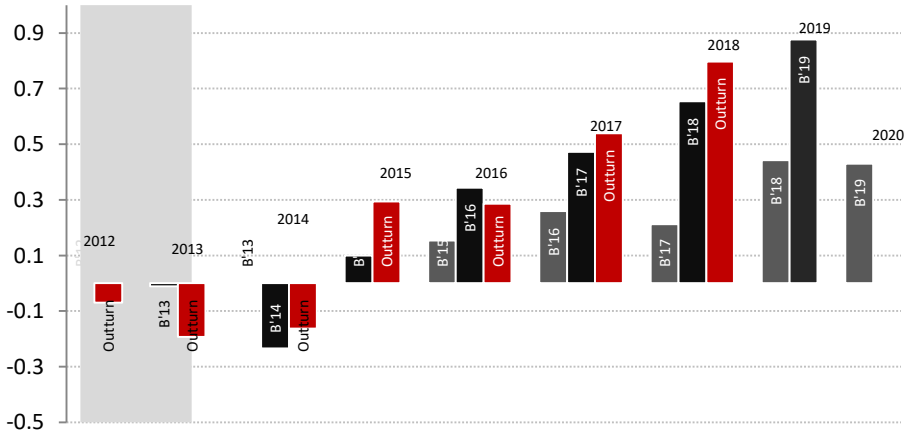
€ Billion



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Bars show the change in forecasts from various budgets followed by outturns, versus the earliest budget forecast for that year (e.g., B'15 = expenditure forecasts in *Budget 2015* minus the earliest forecast for the specified year). Grey shaded region covers crisis period up to 2013. Red bars relate to the change in outturn expenditure versus the earliest forecast for expenditure for the year specified above the bars.

Appendix Figure H.3: Change in gross current expenditure ceilings: Department of Education and Skills

€ Billion

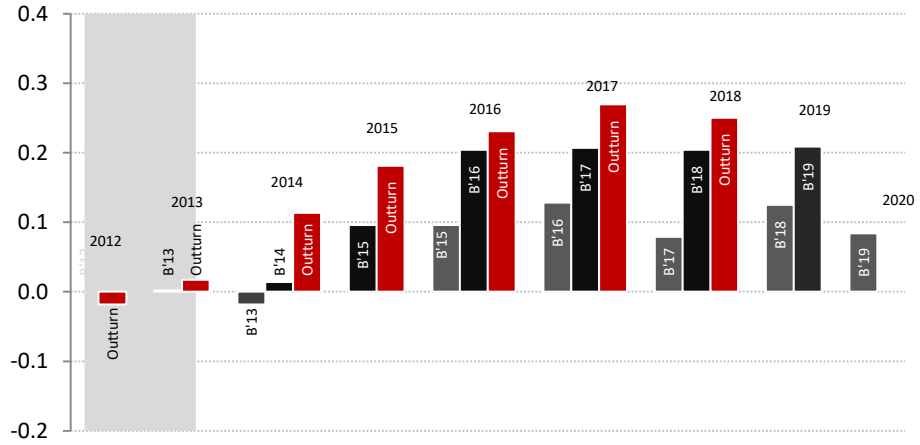


Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Bars show the change in forecasts from various budgets followed by outturns, versus the earliest budget forecast for that year (e.g., B'15 = expenditure forecasts in Budget 2015 minus the earliest forecast for the specified year). Grey shaded region covers crisis period up to 2013. Red bars relate to the change in outturn expenditure versus the earliest forecast for expenditure for the year specified above the bars.

[89] Between *Budget 2014* and year-end 2014, more than €500 million was transferred from the Health vote to the Children and Youth Affairs vote. As the bars in the graph indicate the change from the earliest budget forecast to the outturns, this transfer means the outturns shown for 2014, 2015 and 2016 are approximately €500 million lower than would otherwise be the case.

Appendix Figure H.4: Change in gross current expenditure ceilings: Department of Justice

€ Billion



Sources: CSO; Department of Finance; and internal IFAC calculations.
Note: Bars show the change in forecasts from various budgets followed by outturns, versus the earliest budget forecast for that year (e.g., B'15 = expenditure forecasts in *Budget 2015* minus the earliest forecast for the specified year). Grey shaded region covers crisis period up to 2013. Red bars relate to the change in outturn expenditure versus the earliest forecast for expenditure for the year specified above the bars.

Glossary

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

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

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

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

Discretionary Revenue Measures (DRMs): The estimated current year impact of any discretionary revenue raising/decreasing measures (e.g., tax increases/cuts).

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

Exchequer: The Central Fund of Ireland. It is the Irish central government's main treasury account and it is recorded on a cash basis. The Exchequer represents only a portion of the total government financial position. Receipts into the Central Fund consist of Exchequer tax and non-tax revenues, EU receipts and other capital receipts. Central Fund expenditure includes Departmental spending, wages and pensions of the President, the C&AG, and the judiciary, running costs of the Oireachtas, debt servicing costs, and EU Budget payments.

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

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

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

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

Medium-Term Budgetary Framework: An institutional fiscal device that lets policymakers extend the horizon for fiscal policymaking beyond the annual

budgetary calendar (typically 3-5 years). Targets can be adjusted under Medium-Term Budgetary Frameworks (MTBF) either on an annual basis (flexible frameworks) or only at the end of the MTBF horizon (fixed frameworks).

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

Modified current account balance: The current account balance adjusted to subtract (1) net factor income of re-domiciled PLCs, as well as depreciation of R&D imports, traded intellectual property, and leased aircraft; and (2) to add back the cost of imported investment in net aircraft related to leasing, R&D-related intellectual property, and the imports of R&D services. The adjustments in (1) apply to net primary income, whereas those in (2) affect net exports of merchandise and services. The idea is to better reflect domestic activities/resources rather than those related to foreign-equity owners. Depreciation of foreign-owned domestic capital is an operating cost of foreign-owned firms, and therefore does not affect the resources generated by domestic residents.

Modified gross national income: Gross national income (gross domestic product less net factor income from the rest of the world, and taxes net of subsidies) adjusted for foreign-owned primary income in the balance of payments, which affects net factor income from the rest of the world. The adjustments to primary income subtract the impact of net factor income of re-domiciled PLCs (as this income reflects future dividend payments to foreign-equity owners that will not accrue to Irish residents); depreciation of R&D-related service imports and trade in intellectual property; and depreciation of aircraft for leasing (depreciation of foreign-owned domestic capital is an operating cost of foreign-owned firms, and therefore does not affect the resources generated by domestic residents).

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

Net Policy Spending: A measure of government expenditure which reflects the level of spending that is under the control of government, and which takes into account any offsetting tax changes (be they discretionary revenue-raising or revenue-decreasing measures). Interest spending, cyclical unemployment spending, and one-off and temporary measures (as assessed by the Council), are all largely considered to be beyond the control of government.

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

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

Potential output: The maximum level of economic output that is sustainable in the medium to long run, where “sustainable“ implies that output, when at its potential, is not unduly influenced in any particular direction by imbalances in the economy, be they external, internal or financial. An alternative definition, often used by

Central Banks, is that potential output is the level of economic output that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate.

Primary budget balance: The budget balance net of interest payments on General Government debt.

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

Principles-based approach: The approach that the Council takes when assessing compliance with Ireland's domestic Budgetary Rule. The principles-based approach differs to the European Commission's approach to assessing compliance with the EU fiscal rules across a number of strands (removing some layers of complexity; availing of the Department of Finance's alternative method for estimating potential output and the output gap; and drawing on the latest available information to a greater extent).

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

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

Significant deviations: "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.

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

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

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

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

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

Underlying budget balance: The general government budget balance with one-off items removed. The one-offs are those assessed by the Council as being applicable.

Underlying domestic demand: An aggregate measure comprising consumer spending plus investment plus government consumption, and excludes investment in intangibles and aircraft, both of which have high import content.

Underlying net exports: A measure comprising the difference between exports and imports, excluding those related to intangibles and aircraft, both of which have high import content.

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