Fiscal Assessment Report

December 2021

Managing the recovery

Irish Fiscal Advisory Council

Foreword

The Irish Fiscal Advisory Council was established as part of wider reforms of Ireland's budgetary architecture. It was 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. The Council is a public body, with the terms of its funding set out in the Fiscal Responsibility Act.

The Council's mandate 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 Government's fiscal stance set out 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's Chairperson is Mr Sebastian Barnes (Organisation for Economic Co-operation and Development). Other Council members are Prof. Michael McMahon (Professor of Macroeconomics at the University of Oxford and Senior Research Fellow of St Hugh's College), Ms Dawn Holland (Visiting Fellow, National Institute of Economic and Social Research), Dr Adele Bergin (Economic and Social Research Institute), and Mr Alessandro Giustiniani. The Council's Secretariat consists of Dr Eddie Casey, Mr Niall Conroy, Mr Kevin Timoney, Mr Killian Carroll, Ms Karen Bonner, and Dr Elliott Jordan-Doak. The Council would like to acknowledge the kind help from staff at the CSO, Central Bank of Ireland, ESRI, and the NTMA. The Council would also like to thank David Quin 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 26 November 2021. More information on the Irish Fiscal Advisory Council can be found at www.FiscalCouncil.ie.

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- **The Irish economy has continued to recover strongly from lockdown measures to help contain the effects of the pandemic.** Underlying domestic demand returned to the average levels observed in 2019 as of the second quarter of this year, with vaccinations progressing and restrictions eased. High-frequency data since July point to continued strong growth, a recovery in consumer services activities, and continued expansion elsewhere in the economy even as the number of Covid cases has again increased. However, the pandemic has been an uneven shock. New analysis in this report shows that overall earnings in sectors with below-average wages, such as tourism and hospitality, remain well below pre-pandemic trends whereas high-income sectors have seen little disruption to growth.

- **Risks to the economy over the medium term are broadly balanced.** Growth could be higher if scarring from the pandemic proves less severe than assumed, if wages grow faster, or if an unwinding of savings boosts consumer spending more than assumed in 2022. However, the potential for virus mutations, further restrictions to manage the pandemic, risks to foreign direct investment from international tax developments, and continued uncertainties around Brexit could weigh on growth prospects.

Budgetary assessment

- **The government forecasts a deficit of 5.9 per cent of GNI* in 2021.** The substantial narrowing of the deficit reflects strong revenue growth and lower pandemic-related spending. The balance could ultimately be more favourable than forecast in *Budget 2022*, with possible current and capital underspends and higher–than–forecast revenue likely.

- **For next year, *Budget 2022* forecasts a deficit of 3.4 per cent of GNI*.** This relies on a further expected recovery in revenues and lower allocations for Covid-related spending, together with a planned core Exchequer spending increase of €4.2 billion. There are significant upside risks to revenue from Income tax and VAT. Spending could be lower if contingency funding for Covid-related spending is not tapped.

- **Medium term spending projections in *Budget 2022* make welcome improvements in the forecasting approach.** The *Budget 2022* forecasts are consistent with the Government's announced fiscal plans and its newly introduced spending rule, while also making allowance for the cost of maintaining existing public services.

- **Accounting for maintaining existing levels of services provides a more realistic and informative picture of the public finances in line with the Council's past recommendations.** The Council had previously recommended that the Government fully account for 'Stand-Still' costs in its medium-term forecasts — the costs of maintaining public services and supports in real terms. By factoring in these costs and allowing sufficient budgetary resources to address them, the Government is now appropriately recognising demographic and price pressures that will arise in the coming years. However, additional detail on the assumptions and methodologies used would be informative in assessing the fiscal projections.

- **Over the medium term, the budget balance is set to reach close to balance by 2023 according to *Budget 2022* projections and to improve modestly thereafter to reach a surplus of 0.3% of GNI* by 2025.** This assumes that the economy continues to grow at a steady pace and that the Government follows its spending rule. Comparing 2025 fiscal forecasts to 2019 allows one to "look through" the Covid crisis. The substantial increase in public investment planned by the government over this period is assumed to be achieved without a deterioration in the budget balance due to strong growth of the economy, large corporation tax receipts, low interest rates and moderate increases in current spending, following the newly adopted spending rule.

- **Given low interest rates, strong growth and the improving general government balance, government debt is projected to fall at a steady pace but to remain high.** By 2025, gross general government debt is forecast to be 89.5 per cent of GNI*. This high level of debt leaves the public finances exposed to increases in borrowing costs.

Fiscal Stance

- **For 2022, the Government stuck to its planned €4.7 billion budgetary package as set out in the *Summer Economic Statement*.** The package included €1.6 billion to maintain the existing level of public services, an increase of €1.1 billion in government investment, and an additional €1.5 billion in new current spending measures. The remaining €0.5 billion is due to tax measures, including the Government's decision to raise tax allowances in line with inflation.

- **The Budget for 2022 strikes an appropriate balance between continuing to support the economy and keeping the public finances on a sustainable path.** As the Council noted in its *Pre-Budget 2022 Statement*, the *Budget 2022* package looked to be at the limit of what is prudent and remains appropriate taking account of the improved growth outlook, the final tax package, and the pace of increase in broader general government spending. The overall pace of expansion is modestly above estimates of the underlying potential growth rate of the economy. This should help to support the recovery. In addition, a temporary spending amount of €4 billion of Covid contingency reserves has been budgeted, which is prudent and should not impact the underlying budgetary position.

- **For the medium term, *Budget 2022* presents a clearer strategy than past budgets.** As set out in the July Summer Economic Statement, there are three key changes to the Government’s medium-term budget plans. First, more sound spending forecasts are used that allow for the cost of maintaining existing levels of supports amid demographic and price pressures. Second, the Government has introduced a spending rule that seeks to limit permanent Exchequer primary spending increases to an average of 5 per cent annually, broadly in line with the economy's trend growth rate. Third, the Government has set out public investment plans to 2030 in a new National Development Plan published in October. The Council welcomes these developments.

- **However, it is unclear how major commitments on health and climate change fit into the Government's medium-term strategy and whether sufficient resources have been allocated.** Despite the publication of the new Climate Action Plan in November, it remains unclear what the cost to the Government will be in halving Ireland's greenhouse emissions by 2030. While a substantial part of the National Development Plan's capital spending could contribute to these objectives, there may be significant additional costs to the State, particularly in encouraging the switch to electric vehicles and improving home energy efficiency. On health commitments, there is currently no clearly identified budget to continue implementing Sláintecare reforms in health beyond next year and there are no up-to-date estimates of the costs of implementing remaining reforms. In the areas of climate, housing and health, more detail is required on future plans and their expected impact and cost.

- **The lack of a plan to meet these commitments create risks to the implementation of the Government's fiscal plans in the years ahead.** Given the spending rule, the unallocated space for additional current spending is limited in the years ahead. The Budget suggests around €1.6 billion per year on average of new current spending remains to be allocated, while the Council's estimates that around €0.5 billion would remain once Stand-Still costs are met. Any additional spending beyond this level would either require tax increases or spending reductions in other areas to be consistent with a total expansion of 5 per cent, including tax measures. Failure to fully plan for future spending pressures may make it more difficult for the Government to stick to its spending rule.

- **The Government needs to follow through on its strategy and reinforce its new 5% Spending Rule.** The Government's medium-term plans have the potential to set the public finances on a prudent path. With revenues expected to recover strongly, the plans could allow the Government to respond to pressures in housing, health and climate change areas, bring public investment to record levels, and maintain existing levels of services, while also allowing for a steady pace of debt reduction averaging close to 3 percentage points for the net debt-to-GNI* ratio annually over the forecast period. However, Ireland has a poor track record of sticking to budgetary plans. If the Government's strategy is to be realised, the plans will need to be followed through on. To support this, the Government should set its new spending rule on a stronger footing. This includes backing it up through Departmental Expenditure ceilings, which have yet to be set out as is legally required, and linking it more closely to the domestic fiscal rules. Improvements to the framework could include giving it legislative backing and reinforcing the rule so that it captures non-Exchequer spending and the impact of tax changes.

- **Ireland faces several medium-term challenges, including an ageing population, alongside tackling climate change and improving public services.** The Government will have to contend with an Irish population that is rapidly ageing. This will put pressure on pensions and healthcare costs. The Commission on Pensions set out a preferred package of reforms that would restore the fiscal sustainability of the pensions system. The Government now needs to set out its responses and future plans for pensions. Furthermore, the recommendations postpone increases in the pension age and imply a significant increase in PRSI contributions. While legitimate, this option raises questions about the willingness of governments to impose these measures. Setting out a plan to phase in any PRSI increases over the coming years could make these measure more credible.

- **The over-reliance on corporation tax receipts to fund public services that has built up in recent years should be reduced.** One-in-five euros of tax receipts were from corporation tax in 2020, and more than a half of those receipts were from ten corporate groups. This concentration, coupled with the ongoing volatility of receipts and their vulnerability to international tax developments is a source of serious concern. The international agreement to new tax reforms, including a 15 per cent minimum tax rate, carries risks in both directions. Future corporation tax revenues and investment in Ireland might be reduced, but there is also a risk that the reliance on corporation tax receipts continues to build. It would be wise to treat any unexpected revenues in much the same way that Norway treats its proceeds from oil revenues — essentially as a finite and volatile resource. The Government should allocate any further excess corporation tax receipts, potentially including any increase due to the rise in the minimum corporation tax rate to 15 per cent, to the Rainy Day Fund. This would help to limit, and potentially reduce, the over-reliance on corporation tax receipts that has built up.

Fiscal Rules

- **The exceptional circumstances clause in the fiscal rules has been active since the Covid-19 pandemic began.** This flexibility in the rules has allowed for an appropriate fiscal response to the pandemic in 2020 and 2021.

- **In 2022, Government plans look set to comply with the fiscal rules.** The deficit is forecast to be 1.8 per cent of GDP. This is below the 3 per cent deficit limit in the SGP. In addition, the structural deficit is forecast to be 0.2 per cent of GDP, which is at the Medium-term Budgetary Objective (MTO) of a structural deficit of no more than 0.5 per cent of GDP over the medium-term, the fiscal rules look set to be complied with.

- **The Government has failed to publish three-year expenditure ceilings in the Expenditure Report, as was typically done in the past.** The failure to publish these ceilings as part of the budget process represents a backwards step. This decreases transparency. It undermines the Government's new spending rule as it means that Departmental expenditure ceilings, including in key areas such as health, are not fixed in line with the overall budgetary plan but instead as part of a technical exercise.

Summary Table of Budget 2022 Economic and Budgetary Projections

% GNI* unless otherwise stated

	2019	2020	2021	2022	2023	2024	2025
Macro forecasts							
Real GNI* growth (%)	2.6	-3.5	4.7	5.2	3.5	3.3	3.2
Nominal GNI* growth (%)	9.0	-3.4	7.1	7.9	5.7	5.3	5.2
Nominal GNI* (€bn)	216	208	223	241	254	268	282
Output gap (% of potential)	2.1	-2.2	-0.7	-0.4	-0.2	-0.2	-0.1
Potential output growth (%)	4.7	9.3	14.3	4.6	3.8	3.7	3.6
Budgetary forecasts							
Balance	0.8	-8.8	-5.9	-3.4	-0.4	-0.1	0.3
Balance (€ billion)	1.8	-18.4	-13.3	-8.3	-1.1	-0.3	0.9
Balance ex one-offs [1]	0.8	-1.4	0.0	-0.6	-0.1	0.1	0.4
Balance ex one-offs [1] (€ billion)	1.8	-3.0	0.1	-1.5	-0.3	0.2	1.1
Revenue ex one-offs [1]	40.9	40.5	41.6	39.9	39.9	39.7	39.3
Expenditure ex one-offs [1]	40.0	41.9	41.5	40.5	40.0	39.6	38.9
Primary balance ex one-offs [1]	3.0	0.4	1.5	0.8	1.3	1.4	1.5
Revenue growth ex one-offs [1] (%)	6.4	-4.4	10.0	3.6	5.6	5.0	4.1
Primary expenditure growth ex one-offs [1] (%)	6.0	2.2	7.0	5.4	4.3	4.6	3.7
Gross debt ratio (% GNI*)	94.6	104.7	106.2	99.2	96.7	93.3	89.5
Net debt ratio (% GNI*)	81.0	89.3	90.4	88.2	85.9	82.3	79.2
Gross debt (€ billion)	204	218	237	239	246	250	252
Cash & liquid assets (€ billion)	29	32	35	26	27	30	29
Net debt (€ billion)	175	186	201	212	219	220	223
Fiscal stance							
Structural primary balance[2]	1.9	-1.0	0.3	0.8	1.1	1.3	1.5
- change (p.p.)	-0.4	-2.9	1.2	0.5	0.3	0.2	0.2
Net policy spending growth (%)	5.3	0.5	6.9	5.3	3.9	4.3	3.3
Real net policy spending growth (%)	4.4	1.0	4.7	3.3	2.2	2.3	1.2
Change in net debt ratio (p.p.)	-8.5	8.3	1.1	-2.1	-2.3	-3.6	-3.1
Fiscal rules							
Spending Rule	✓	xc	xc				
Structural Balance Rule	✓	xc	xc				
Overall Assessment	✓	xc	xc				

Sources: CSO; Department of Finance forecasts; and Fiscal Council workings.
Notes: Output gaps and potential output estimates, including those used for the structural balances, are based on the Department of Finance's preferred alternative estimates. xc = Exceptional circumstances apply for these years, meaning that a temporary deviation from the requirements of the fiscal rules is allowed. [1] These figures exclude one-offs. One-offs that the Council considers relevant are excluded to assess the underlying fiscal position. These include Covid-related expenditure and expenditure and revenue related to the EU funds for the Brexit Adjustment Reserve and the National Recovery and Resilience Plan). [2] One-offs excluded here are the exact same as in Table S9.2.

Macro Assessment

The economic recovery has been faster than projected

1. MACRO ASSESSMENT

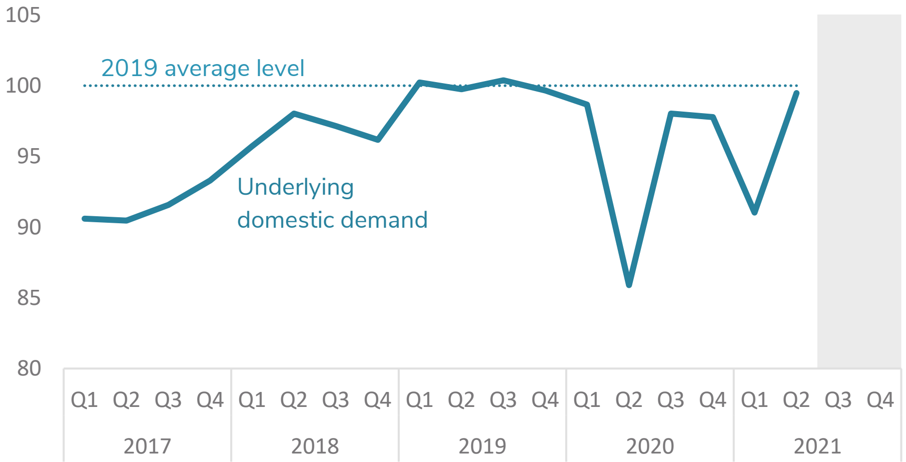
The economic recovery has been faster than projected

Domestic demand recovered to pre-pandemic levels over the summer

The Irish economy has recovered strongly from restrictions imposed due to Covid-19, both in 2020 and early 2021. Domestic demand returned to pre-pandemic levels in the second quarter, as vaccinations for Covid-19 progressed, and restrictions on activity were eased (Figure 1.1). This resilience has been driven by various factors. These include the significant fiscal support to households and firms provided by the Government, the relative strength of balance sheets prior to the pandemic, and continued strong growth in high-skill sectors throughout Covid-19.[1]

Figure 1.1: A rapid recovery in the domestic economy is ongoing in 2021

2019 = 100 (seasonally adjusted)



Sources: Central Statistics Office (CSO), and Fiscal Council workings.
Notes: Underlying (final) domestic demand is the sum of personal consumption expenditure, government net consumption, building and construction, and underlying machinery and equipment (excluding aircraft). Intangibles and aircraft are not included as they are distorted by the transactions of large multinational firms with a presence in Ireland (see Box C of the November 2018 *Fiscal Assessment Report*). Get the data.

High-frequency data since July suggest that the recovery has continued (Section 1.1). Economic growth is expected to remain robust over the medium term. As a result, official projections for the extent of lasting damage to the economy (or "scarring") from the pandemic are estimated to be modest (Section 1.2). While the outlook remains subject to a high degree of uncertainty, risks are deemed to be broadly balanced and are discussed in Section 1.3. The *Budget 2022* set of macroeconomic forecasts is assessed

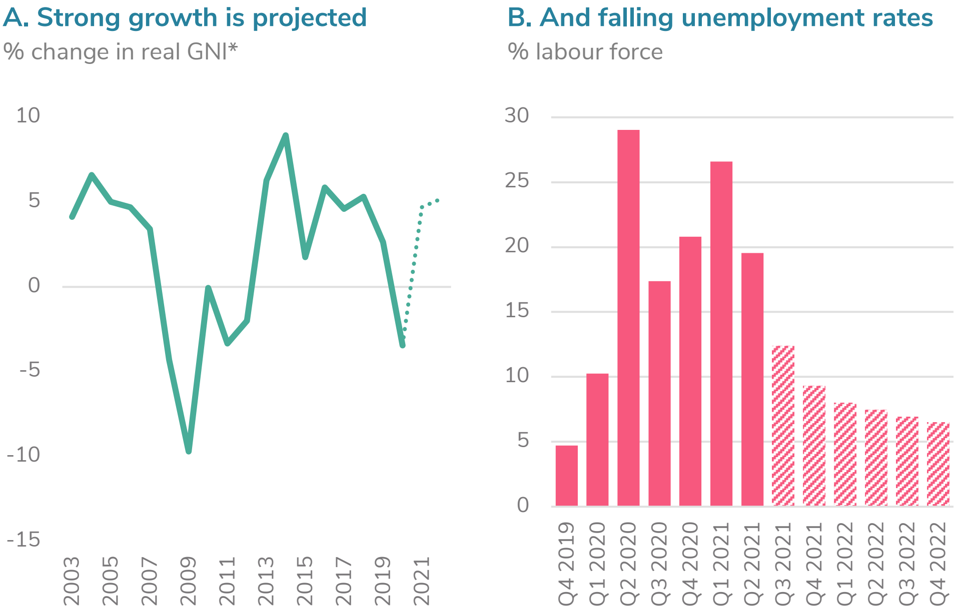
[1] These sectors include (but are not limited to) sectors with a significant presence of foreign-owned multinational firms, such as those in pharmaceuticals, and information and communication technology (ICT).

to be within an endorsable range. However, some matters arose as part of the Council's endorsement discussions with the Department of Finance, such as the implied effective tax rate on employees, and are reviewed in Section 1.4.

1.1 The short-term outlook

As noted above, the short-term outlook for the Irish economy is positive. Modified gross national income is projected to grow by 4.7 per cent in 2021 and by 5.2 per cent next year (Figure 1.2A). The CSO's upper-bound estimates suggest that unemployment rates have fallen to 7.9 per cent from a peak of 31.5 per cent in April 2020. The Department projects unemployment rates will decline to 6.5 per cent by Q4 2022 (Figure 1.2B).

Figure 1.2: The domestic economy is projected to recover



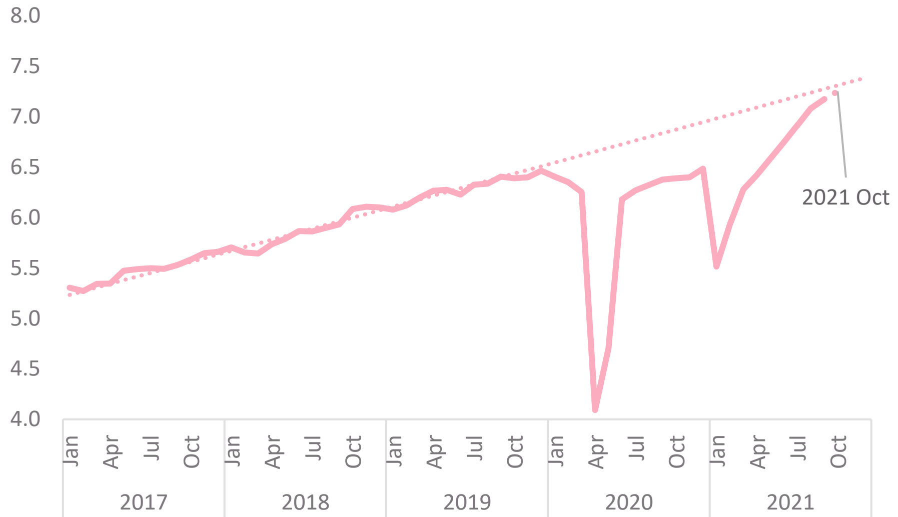
Sources: CSO; Department of Finance (*Budget 2022*) projections. Get the data.

Data for daily card spending and ATM withdrawals, deflated by consumer prices, have continued to recover in the third quarter, virtually closing the gap with the pre-crisis trend by October (Figure 1.3).

These real-time consumer spending data have provided forecasters of the Irish economy with a valuable and reliable indicator of economic performance since Covid-19 struck early in 2020. The data illustrate both the extent of the impact of Covid-19 shocks, and the swift speed of subsequent recoveries.

Figure 1.3: Spending on cards and ATM withdrawals close to trend

€ billion, HICP-deflated card spending and ATM withdrawals, 2015 prices (seasonally adjusted)



Sources: Central Bank of Ireland, and Fiscal Council workings.
Notes: Monthly spending on cards and ATM withdrawals are seasonally adjusted with Tramo-Seats. The linear trend is based on a sample period of 2015–2019. October 2021 is based on daily card spending and ATM withdrawals, and subject to revision when full-month data become available. Get the data.

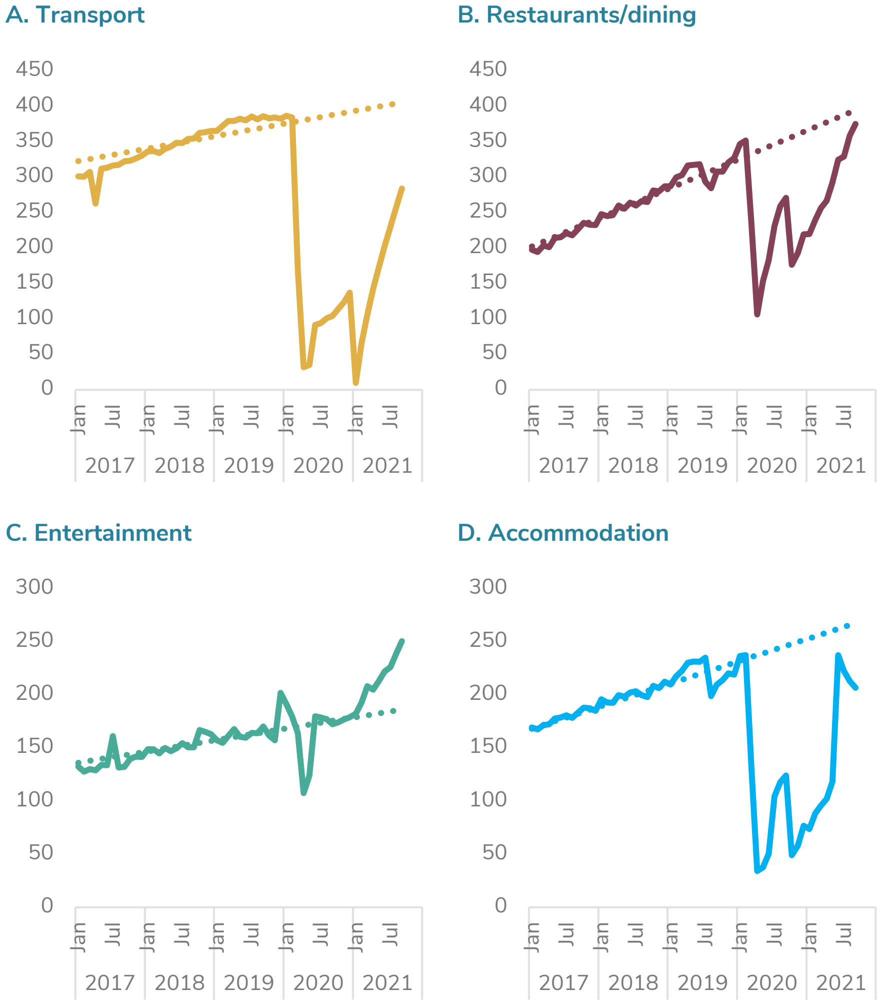
High-frequency indicators of consumer spending effectively recovered to trend by October

The credit and debit card data also show that some of the more vulnerable spending categories have regained significant activity in recent months. A caveat to note is that part of the activity for cards is also likely to be due to a shift to more card spending and less cash spending, accelerated by the pandemic. Spending on transport, accommodation, restaurants/dining, and entertainment collapsed when the pandemic hit (Figure 1.4). However, these areas of spending have since recovered substantially. Spending on entertainment now exceeds the pre-pandemic trend. Accommodation and restaurants spending almost recovered to its pre-pandemic trend in the late summer months. Transport remains well below pre-pandemic levels but has closed some of the gap in recent months. However, it is also not clear how far the pickup in spending will spread across the domestic economy as it would have in the past (for example, some spending on entertainment could be less for activities in Ireland and more for subscriptions to international media).

Some of the more vulnerable areas of spending have recovered

Figure 1.4: Heaviest affected areas of spending also recovering

€ million, monthly credit and debit card spending (seasonally adjusted)



Sources: Central Bank of Ireland, and Fiscal Council workings.
Notes: Monthly spending on debit and credit cards (available to end-September 2021) are seasonally adjusted with Tramo-Seats. The linear trend is based on a sample period of 2015–2019. A caveat to note is that part of the increase in activity for cards is also likely to be due to a shift to more card spending and less cash spending, accelerated by the pandemic. [Get the data.]

Table 1.1 presents *Budget 2022* annual macroeconomic forecasts over the medium term. After a year of turbulence for the Irish economy due to the pandemic, the recovery beginning in 2021 is forecast to continue over coming years. A particularly rapid bounce-back in the labour market is expected in 2022, although the latest Covid-19 wave in Q4 2021 could delay a recovery for some of the worst-affected sectors.

Table 1.1: *Budget 2022* key macroeconomic forecasts

Year-on-year percentage change in volumes, unless otherwise stated

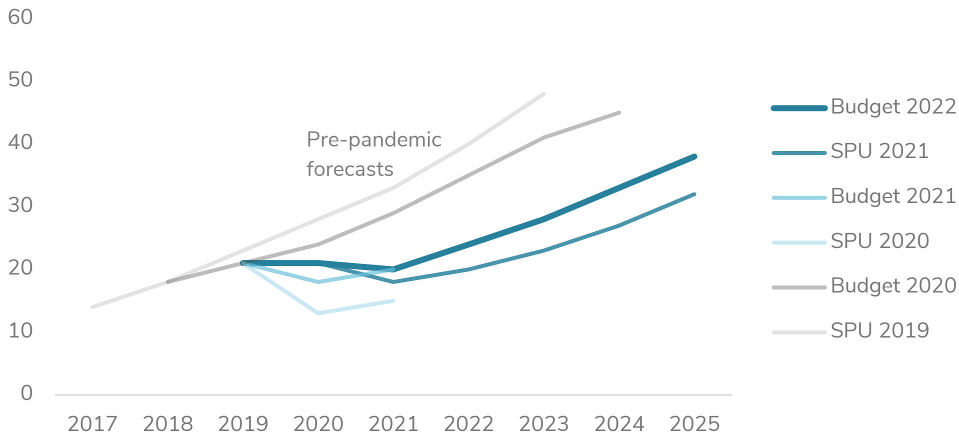
	2019	2020	2021	2022	2023	2024	2025
Modified gross national income (GNI*)	2.6	-3.5	4.7	5.2	3.5	3.3	3.2
Underlying domestic demand (UDD)	3.3	-4.9	5.2	6.3	4.0	3.8	3.6
Personal consumption	3.3	-10.4	6.8	9.6	3.6	3.4	3.2
Underlying investment	-0.4	-3.6	3.5	5.6	7.6	6.7	6.3
Compensation of employees (nominal)	7.1	0.5	6.9	6.0	5.6	5.8	5.9
Employment[a]	3.0	-16.7	7.8	13.2	2.7	2.6	2.2
Unemployment rate[a] (% labour force)	5.0	19.2	16.8	7.2	6.0	5.3	5.0
Inflation (HICP)	0.9	-0.5	2.3	2.2	1.9	2.1	2.2
Savings ratio (% disposable income)	10.3	25.4	20.5	12.5	10.9	10.4	10.1
Modified current account (% GNI*)	9.4	11.5	10.6	9.2	8.5	7.6	6.9
Output gap (% potential GDP)	2.1	-2.2	-0.7	-0.4	-0.2	-0.2	-0.1

Source: Department of Finance, and Fiscal Council workings.
Notes: [a] The unemployment rate and employment growth shown are based on the CSO's "upper bound" Covid-19 unemployment data.

Underlying investment is also expected to accelerate. New housing output is projected to ramp up over the medium term (Figure 1.5), nearly doubling by 2025. The pandemic's disruption to construction activity has slowed the expected expansion in housing, although the latest data for dwelling commencements indicate that this slowdown will prove temporary. With demand high and housing prices continuing to rise, it is possible that employment levels could return to pre-pandemic levels relatively quickly and boost output faster than is assumed by the Department. A possible downside risk could arise if demand for offices reduces amid greater levels of remote working leading to reduced construction in these areas.

Figure 1.5: *Budget 2022* forecasts a rapid increase in new dwelling completions, but less than was expected before the pandemic

Thousands



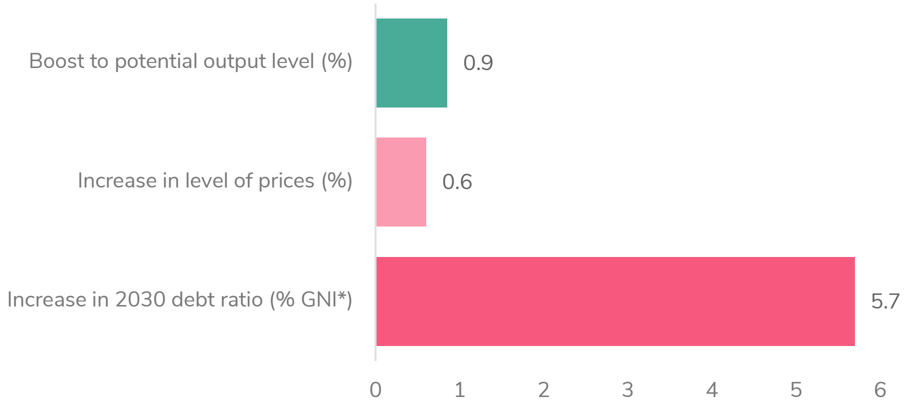
Sources: Department of Finance, Central Statistics Office, and Fiscal Council workings. Get the data.

The Government is planning a substantial increase in public investment in the coming years. The Government's plans are sizeable enough to drive up short-term activity through higher investment, but also to increase the total size of Ireland's capital stock — its equipment and infrastructure — such that it could have implications for overall economic activity over the long term. As shown in a new analytical note by Conroy, Casey and Jordan-Doak (2021), the additional public investment could boost the overall level of activity by around 1 per cent over the long run (Figure 1.6). But the additional activity would also add to inflation pressures. Prices across the economy would be expected to be higher by an estimated 0.6 per cent.

Higher public investment should boost economic activity

Figure 1.6: Public investment ramp-up to lift output, prices, and debt

Estimated impacts of additional public investment by 2030



Sources: Conroy, Casey and Jordan-Doak (2021). Get the data.
Notes: The estimated boost to real potential output shown is the median estimate from a variety of approaches. The increase in prices is for HICP levels by 2030. All estimates are compared to a scenario where public investment is held constant at its 2021 rate of 4.1 per cent of GNI*.

Furthermore, Conroy, Casey and Jordan-Doak (2021) find that 180,000 workers employed in construction would be required to achieve the Government's planned increases in public investment as set out in the National Development Plan. This would represent an increase of around 32,000 workers over 2019 levels. Getting to this level could be difficult, with limited numbers of unemployed construction workers domestically and risks that migration flows might not boost labour supply as it did in the past. There are risks that a tight labour market and low productivity in construction could reduce the benefits to growth and potentially undermine the value for money achieved in the Government's investments.

The pandemic has been an uneven shock. New analysis, presented in Box A, shows that earnings in sectors with below-average hourly earnings, such as tourism and hospitality, remained well below pre-pandemic trends as of the second quarter of 2021. By contrast, sectors with above-average hourly earnings, such as information and communication and financial services, have shown little disruption to strong growth in earnings visible before the pandemic.

The pandemic has been an uneven shock

The scarring effects of the crisis could be most relevant from a sectoral perspective. The worst-affected parts of the economy could see much-reduced levels of output for longer and could fail to reach their previous share of total activity.

As the Irish economy has re-opened in 2021, labour market conditions have improved but disparities between sectors have persisted. On the one hand, sectors less affected by the pandemic have continued to record growth in hours worked and wages. On the other hand, services sectors that require more face-to-face contact, such as hospitality and tourism, have witnessed a rapid increase in demand while the labour supply response has been sluggish. Firms in affected sectors have reported difficulty in sourcing sufficient staff, and private-sector vacancies have increased despite close to 78,000 recipients of Pandemic Unemployment Payments (PUP). This is similar to the experience in other countries and may be linked to a structural shift in people's willingness to work in certain areas of the economy, although the lasting effect and its impact on wages, particularly of lower-skilled workers, remains hard to assess.

Price inflation in the Irish economy and globally has been rising in recent months, largely reflecting the reopening of economies. Greater consumer demand, together with supply-chain constraints, have generated some pressures on prices. Given the strength of consumer demand and household incomes overall, firms that suffered lost revenue during lockdowns could be increasing prices in an effort to recover some of these losses. The restarting of economic activity has coincided with a surge in energy prices, which increases inflation both directly and through increased production costs for firms. This is reflected in the higher *Budget 2022* projection for annual HICP inflation of 2.3 per cent for 2021 and 2.2 per cent for 2022. It follows a fall in HICP of -0.5 per cent in 2020, and a generally low-inflation period spanning 2013–2019, where price increases averaged just 0.3 per cent. See

Price inflation has been rising

Section 1.4 for a further discussion of how prices are forecast over the medium term.

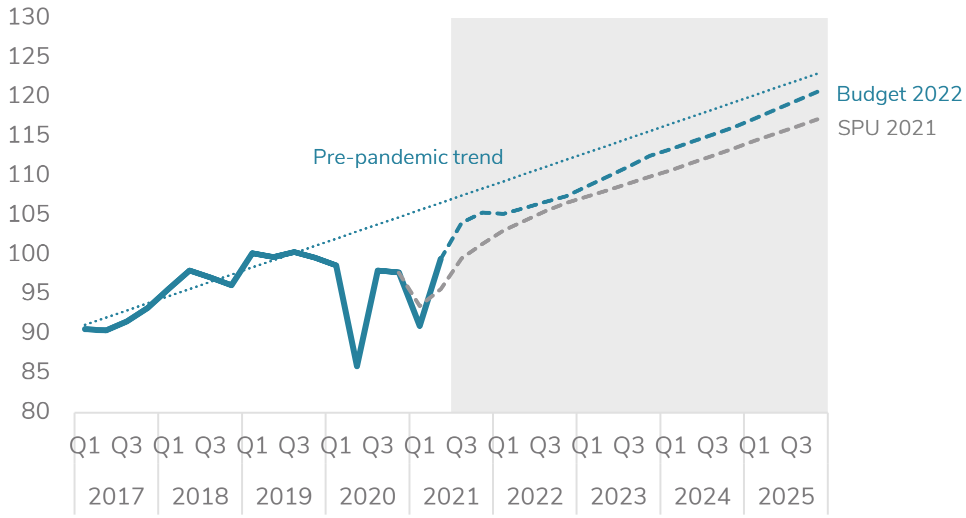
1.2 The medium-term outlook

A key question for the medium term is how much of a permanent loss in output and employment, labelled as "scarring", will result from changes brought about by the pandemic. Demand may switch between activities. For example, if people permanently switch to remote working, this will reduce the need for some travel, office space and city-centre facilities. Cashflow difficulties may force some firms to close. As a result, workers may lose their jobs and struggle to find new occupations, while business capital and know-how may be lost.

The Department of Finance's latest projections in *Budget 2022* are shown in Figure 1.7, and they forecast a stronger recovery in domestic demand compared to April's Stability Programme Update (*SPU 2021*). As a result, *Budget 2022* forecasts imply a lower level of scarring. This is driven by an increase to forecast levels of consumer spending over the medium term, which is partly related to the Department's more positive outlook for household incomes.

Figure 1.7: Less "scarring" is projected due to the pandemic

Underlying domestic demand, 2019 = 100 (seasonally adjusted)



Sources: Central Bank of Ireland, and Fiscal Council workings. Get the data.

However, Box A identifies upside risks to the Department's projections for aggregate employees' compensation, which is the key driver of household incomes. If the household savings ratio were to remain as projected in *Budget 2022*, this would in turn imply upside risk to consumer spending over the medium term. In addition, the savings rate could fall more strongly towards pre-pandemic levels.[2]

Scarring will depend on the transition from sectors where activity might be permanently lower

From a supply-side perspective, scarring will depend to a large degree on how well workers and capital can shift from sectors where activity might be permanently lower, to sectors less affected by the pandemic. Government policies may have a role in how smoothly this adjustment takes places.

The Government can play an important role in minimising the short-run impact of disruptions due to both Covid-19 and Brexit. The sizeable budgetary supports introduced in 2020 and 2021 have helped to prevent disruptions to the economy from resulting in scarring effects that could become more significant again through lost investment and permanent exits from the labour force or "hysteresis". This could be most relevant from a sectoral perspective, as the worst-affected parts of the economy — especially tourism, hospitality, construction, and the arts — might fail to reach their previous share of total activity.

The transition will be helped by the fact that some sectors have continued to grow strongly. Growth in sectors less affected by the pandemic could offset, or possibly even exceed, lost output elsewhere. As Box A shows, sectors with above-average hourly earnings have remained close to pre-pandemic trend levels throughout 2020 and the first half of 2021. But sectors with below-average hourly earnings are still showing significant impacts from the pandemic. There are upside risks to the Department's forecasts of employee earnings, given 1) the strength of income tax revenues to date; and 2) the likelihood that wages overall will remain strong even if some permanent losses in sectors with below-average hourly earnings are assumed.

[2] It is important to note that the pre-pandemic level of the savings ratio was likely to have been affected by macroprudential rules regarding residential property purchases, and possible precautionary savings arising due to Brexit. As a result, it is difficult to assess what an equilibrium level of the savings ratio will resemble over the medium term, and this adds to uncertainty to forecasts of the level of consumer spending over the medium term.

Box A: The impact of the pandemic on the composition of the workforce and compensation of employees

The pandemic has been an uneven shock for the Irish economy. Sectors that rely heavily on face-to-face contact, such as hospitality, food, and arts, have been severely affected, with significant output and job losses. However, sectors with higher earnings, including more export-oriented and high-tech sectors, have recorded a strong performance in terms of both output and wages.

These compositional aspects resulted in a sharp increase in real average hourly earnings in 2020 compared to 2019, as hours worked fell sharply (-10 per cent), but real (HICP-deflated) aggregate employees' compensation was flat. However, *Budget 2022* projects a sharp fall in real average hourly earnings in 2022, and forecasts this to remain below its pre-pandemic trend over the medium term. This is in contrast to the implied projection for a broader measure of productivity — real GNI* per hour worked — which returns to its pre-pandemic trend over the medium term.

Lower real average hourly earnings would be consistent with lower activity in sectors with above-average hourly pay, alongside a strong and rapid recovery in sectors with below-average hourly pay. Given the strength of sectors with above-average hourly earnings since the pandemic began, and projections for broad productivity relative to its pre-pandemic trend, this box notes that there are upside risks to *Budget 2022* forecasts for aggregate employees' compensation over the short and medium term.

Comparing the earnings performance of different sectors during the pandemic

Box D in the Council's May 2021 *Fiscal Assessment Report* (Fiscal Council, 2021a) drew on figures published by the Revenue Commissioners (Collins and O'Rourke, 2021) to explain the resilience of PAYE income taxes in 2020, despite the pandemic. The broad finding was that sectors on which PAYE receipts are most reliant, were the same sectors whose earnings were least affected by the pandemic in 2020.

This finding is corroborated by considering the development of (implied) hourly earnings by sector.[3] Table A1 lists the sector-level earnings per actual hour worked prior to the pandemic.

Table A1: Ranking pre-pandemic earnings per actual hour worked

€ compensation of employees per actual hour worked in 2019

Financial, insurance, and real estate activities	43
Information and communication	36
Public administration, education, and health	32
Professional, administrative and support services	30
Average	28
Industry (excl. construction)	26
Distribution, transport, hotels, and restaurants	20
Construction	14
Arts, entertainment, and other services	12
Agriculture forestry and fishing	3

Sources: CSO, and Fiscal Council workings.

Notes: Some sectors are combined due to data availability; for example, compensation of employees is available separately for real estate services and financial and insurance services, but actual hours worked data groups these sectors together. Agricultural, forestry and fishing hourly earnings are strikingly low, in large part due to the classification of many persons engaged in the sector as self-employed workers, meaning their earnings are included separately in household income as gross operating surplus/mixed income.

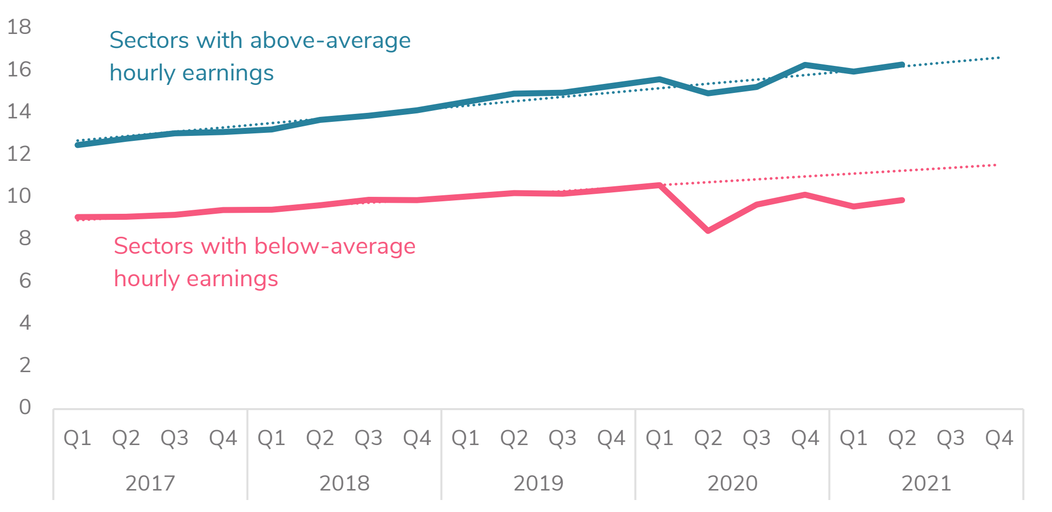
[3] This analysis uses the CSO's new data series on actual hours worked by sector, available here: https://data.cso.ie/table/QLF36

Four sectors had hourly earnings more than the weighted average of €28 per actual hour worked in 2019: financial, insurance, and real estate activities; information and communication services; public administration, education, and health; and professional, administrative and support services.

In Figure A1, sectors from Table A1 have been combined in two groups: those with above- and those with below-average hourly earnings. Comparing these two groups with their respective pre-pandemic (2014 Q1 – 2019 Q4) trends shows a limited impact from Covid-19 on the higher-paid sectors, where compensation continued to grow, with average hours worked broadly flat (-0.4 per cent) for 2020 and the first half of 2021 compared to 2019, and hourly earnings rising by 6.3 per cent for the same period. By contrast, an ongoing gap to trend is visible for sectors with lower hourly earnings, mainly reflecting a fall in hours worked of close to 16 per cent since 2019.[4]

Figure A1: Sectors with above-average hourly earnings have been resilient in terms of aggregate employees' compensation

€ billion values, seasonally adjusted



Sources: CSO, and Fiscal Council workings.

Notes: These sector groups are constructed based on the figures shown in Table A1. Trends shown are based on a sample of 2014 Q1–2019 Q4. Get the data.

Assessing the *Budget 2022* implied projections for real hourly earnings

Compensation of employees, total hours worked, and HICP inflation can be used to assess the implied *Budget 2022* forecast for real hourly earnings.[5] This provides a consistency check for forecasts of aggregate employees' compensation.

Real average hourly earnings increased sharply in 2020, reflecting the composition effects of the pandemic. As discussed above, this was primarily due to sectors that were most adversely affected by Covid restrictions, where a sharp rise in hourly earnings took place. As employment and hours worked recover in such sectors, this composition effect should unwind, either in part or

[4] Compensation of employees in 2020 included about €4 billion of earnings supported by the Government's wage subsidy schemes, introduced last year due to Covid-19. Firms eligible for wage subsidy supports are more likely to be in sectors with below-average hourly earnings, especially tourism/hospitality, construction, and arts/entertainment sectors. As a result, the finding that sectors with above-average hourly earnings have been more resilient is unlikely to be as a direct result of wage subsidy schemes. For more on wage subsidy scheme supports, see: https://www.cso.ie/en/releasesandpublications/fp/fp-c19isar/covid-19incomesupports-ananalysisofrecipientsmarch2020tomay2021/employmentwagesubsidyscheme/

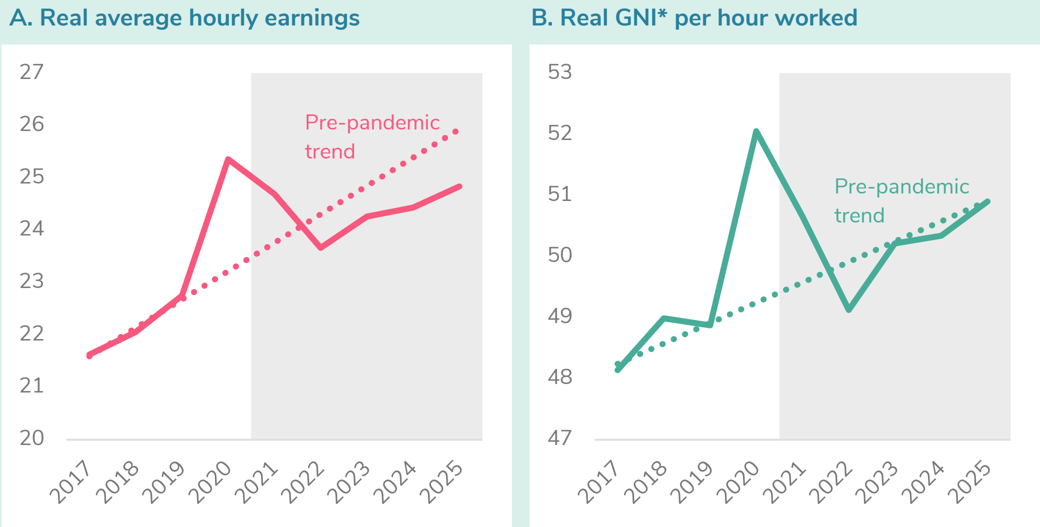
[5] Compensation of employees = real hourly earnings * hours worked * HICP deflator. Hours worked = employment * average weekly hours worked * number of weeks in a year.

in full. This could result in a return of real average hourly earnings toward their pre-pandemic trend from above.

However, as shown in Figure A2.A, *Budget 2022* forecasts a sharp fall in real average hourly earnings below its pre-pandemic trend next year, remaining on a lower trajectory over the medium term. By 2025, *Budget 2022* forecasts are over 4 per cent lower than the pre-pandemic trend.

By comparison, a broader measure of productivity in *Budget 2022* projections, such as real GNI* per hour worked (Figure A2.B), shows no difference compared to its pre-pandemic trend by 2025. As the path for real hourly earnings could be expected to evolve in a similar manner relative to overall productivity in the real economy, this suggests a relatively weak trajectory in *Budget 2022* for real hourly earnings.[6]

Figure A2: Budget 2022 projects a fall below trend for real hourly earnings, but not for broader productivity



Sources: CSO, and Fiscal Council workings.
Notes: Pre-pandemic trends are based on a sample period of 2014–2019. Get the data.

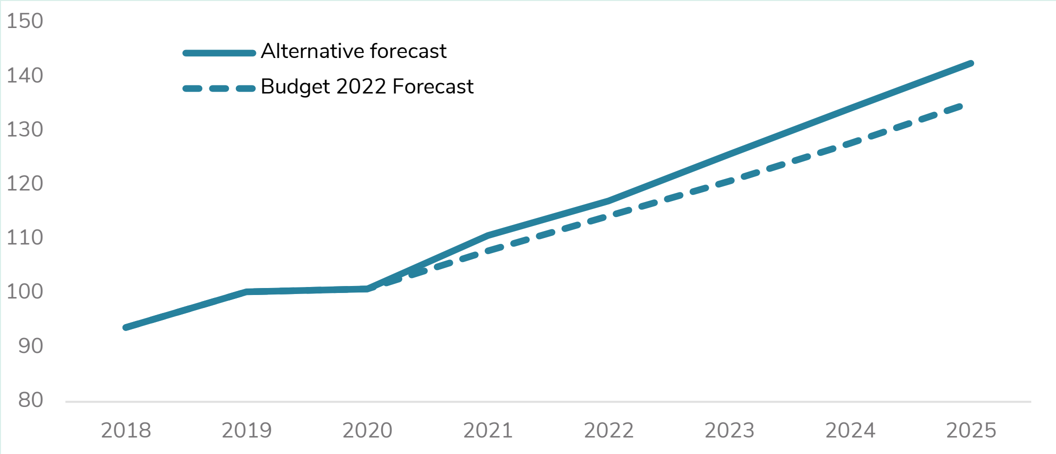
Budget 2022 projections for real average hourly earnings effectively imply lower activity in sectors with above-average hourly earnings, alongside a strong and rapid recovery in sectors with below-average hourly earnings. As a result, the above analysis suggests upside risks to aggregate employees' compensation over both the short term and the medium term.

A higher path for real hourly earnings — for example, getting close to trend from 2022 onwards — would be more consistent with recent developments in the labour market and overall earnings by sector, as portrayed in Figure A1. Figure A3 shows the difference to *Budget 2022* forecasts of aggregate employees' compensation as a result of this adjustment.

[6] See Box C in Fiscal Council (2021a) for further analysis of productivity during the pandemic. A strong performance for real average hourly earnings suggests a positive productivity shock has occurred, whereas a weak performance is more consistent with negative productivity developments.

Figure A3: Adjusting Budget 2022 forecasts for aggregate employees' compensation

€ billion



Sources: Department of Finance and Fiscal Council workings.
Notes: The alternative projection for compensation of employees takes the Department's *Budget 2022* forecasts for employment, average hours worked, HICP, and adjusts implied real hourly earnings such that they return to close to pre-pandemic trend. Get the data.

1.3 Risks to the outlook

The Council assesses that risks to the economy are broadly balanced. The Department also notes that risks are "two-sided and are assessed as being broadly balanced".

Risks are broadly balanced

On the positive side, there are a number of reasons why both short- and medium-term growth might be higher than assumed. For instance, the recovery of sectors severely affected by the pandemic might be more pronounced than is currently expected, or the transition out of unemployment to employment in those sectors with high demand for labour might happen more rapidly than foreseen, meaning less scarring. A faster and larger unwinding of savings owing to pent-up demand could provide a significant boost to consumption in 2022. Services that had been restricted, such as hospitality, are projected to see a rise in demand. These sectors tend to attract less imports and have higher domestic multiplier effects so that increases in consumer spending in these areas could lead to larger-than-usual growth impacts. Finally, compensation of employees could also be stronger than forecast in *Budget 2022* (Box A) boosting consumer spending. Unlike the unwinding of excess savings, this impact would likely persist into the medium term. Eventually, in later years, overheating could become a risk, though slack in the labour market and a large current account surplus suggests the immediate risks are low.

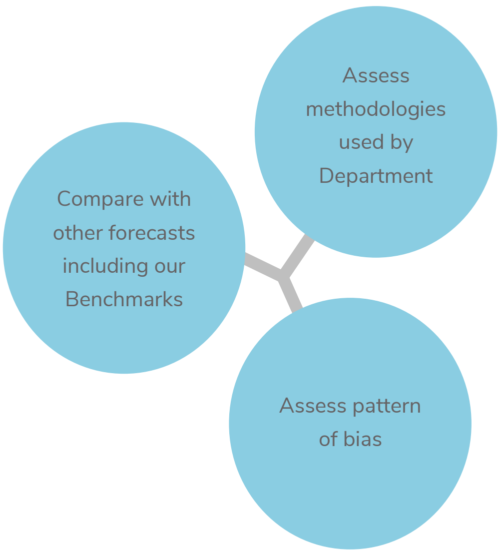
However, there is inherent uncertainty around Ireland's medium-term growth trajectory. As a small open economy, global risks, such as a financial shock, have the capacity to adversely affect the Irish economy.

On the negative side, a key downside risk is the potential for additional restrictions (beyond those already announced in November) owing to a surge in cases or virus mutations, which could require new vaccine development, and necessitate further lockdowns. International tax reforms could reduce foreign direct investment and government tax revenues, which could slow or even lead to negative growth in earnings for high-pay sectors of the economy, with considerable negative risks for local enterprises. Parts of Brexit's current trading agreement between the UK and the EU related to Northern Ireland could unwind, leading to disruptions to trade (Northern Ireland has remained within the EU's customs union and single market), and more generally, the new free trade agreement's adverse effects could be larger than assumed. Higher price inflation, even if transient, could lead to knock-on demands for higher wages, in turn reducing competitiveness and exports depending on relative changes in Ireland's trading partners. Capacity constraints could be an issue in the coming years, with the risk that these could constrain growth and raise price pressures. There are signs of tightness in areas such as construction, which the expanded public investment programme will most likely add to (Conroy, Casey and Jordan-Doak, 2021). While Ireland has often relied on inward flows of migration to respond to tightening labour market conditions, migration flows could respond more slowly to higher demand exacerbating risks.

1.4 Endorsement of the Department of Finance's macroeconomic projections

The Council's most recent endorsement exercise of the Department of Finance's macroeconomic forecasts was undertaken in September 2021.

The Council assessed that the Department's short-term forecasts for 2021 and 2022 were within an endorseable range, taking into account the methodology and plausibility of the judgments made.



However, there were some areas where issues were apparent under the Council's assessment of the 1) comparisons with the Council's Benchmark projections and other forecasts; 2) pattern of bias; and 3) the forecasting methodologies used by the Department. These mainly related to income taxes and compensation of employees. This section explores the key issues that arose in this latest endorsement exercise.

Background

The Department's provisional macroeconomic forecasts were completed on 17th September 2021 (see table S1a for details of the endorsement timeline). The Council and Secretariat discussed the forecasts with Department staff on 24th September 2021. On 29th September, the Department provided a final update of forecasts reflecting the estimated impact of policy changes envisaged in July's *Summer Economic Statement*, and no changes to the macroeconomic forecasts were made on Budget day (12th October).

The Department has in recent forecast rounds expanded its use of underlying economic measures that focus on the domestic economy. This is a welcome development, given the distortions that affect many headline indicators in Ireland reflecting the extensive role played by multinational enterprises. Unfortunately, many agencies and private bodies forecasting the Irish economy continue to focus on the largely irrelevant GDP measures. A wider move towards forecasting underlying measures would provide more meaningful and relevant projections and would help to strengthen the overall macroeconomic debate in Ireland.

Taxes-to-Income ratio

While the Council endorses the macroeconomic rather than the budgetary projections, there are some fiscal elements that enter the macroeconomic forecasts. Taxes on income and wealth are a key determinant of households' disposable income, which feeds into consumption and savings. The *Budget 2022* forecasts imply that income will grow considerably more slowly than the relevant income tax revenue in 2021.[7] This results in a sharp increase in the projected ratio of taxes to labour income, remaining elevated over the medium term (Figure 1.8).[8] This stretches the plausibility of the forecasts in the absence of any policy changes to raise tax rates, as normally income tax revenues would be expected to grow approximately in line with gross incomes (Conroy, 2020).

The Department's forecasts implied a sharp rise in effective tax rates, which stretched their plausibility

[7] Note that this measure is slightly broader than income tax examined in Section 2. The measure examined here includes not just income tax, but also capital gains tax, motor tax (on household cars) and the TV licence.

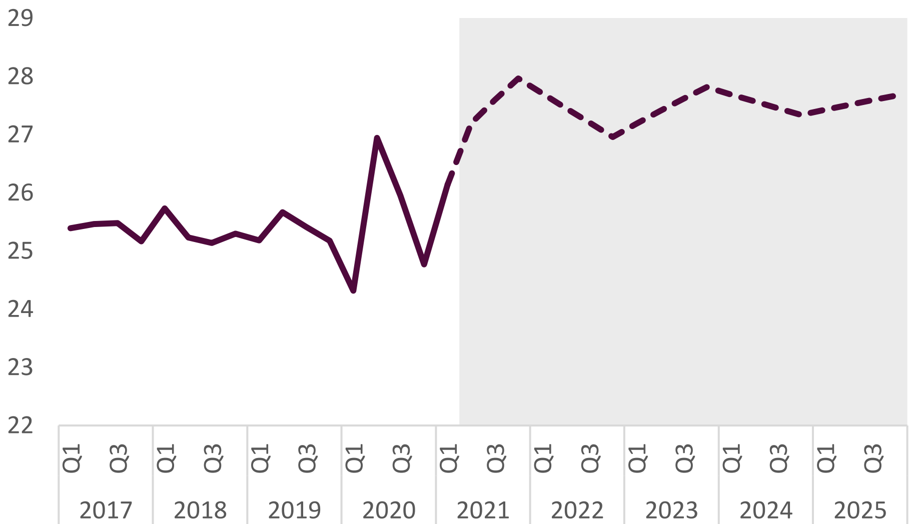
[8] Although *Institutional Sector Accounts* for Q2 2021 had not yet been published by the time of the endorsement decision, compensation of employees by sector has recently been included in the CSO's *Quarterly National Accounts*. While awaiting Q2 2021 data for taxes on income and wealth, the Council used data to end-August from the Department's monthly Fiscal Monitor as a proxy.

The level-shift implied for the ratio of income taxes to aggregate employees' compensation over the medium term was a key concern around the endorsement. There are a few potential explanations for such a forecast. As wages rise, less people may become exempt from income tax over time; more people might fall into the higher tax bracket; or a larger share of earnings could be taxed at the higher rate. However, these arguments did not seem to be driving the rationale for the Department's forecasts. The rise in the ratio also seemed inconsistent with the Government's commitment to index the tax system in later years, assuming the recovery takes hold as projected.

In addition, the use of quarterly forecast profiles for both incomes and tax revenues (as used in Figure 1.8) can provide a valuable tool for assessing the plausibility of a given full-year forecast.

Figure 1.8: *Budget 2022 weak compensation forecasts imply an unrealistic upwards shift in the ratio of household taxes to incomes*

Taxes as a share of aggregate employees' compensation



Sources: CSO, Department of Finance, and Fiscal Council workings. Get the data.

Notes: The historical data are taxes on income and wealth (available until Q1 2021 at the time of the endorsement, and seasonally adjusted manually using Tramo-Seats), divided by aggregate employees' compensation (available until Q2 2021). For the forecast horizon, implied quarterly forecasts are constructed such that the total across quarters adds up to Budget 2022 annual forecasts, starting from the last available outturn. The measure of taxes on income and wealth is broader than just income tax, hence the ratio shown here is slightly higher than that shown in Figure 2.3.

Income taxes performed very strongly in 2021 in the first eight months of the year, reaching a level above their pre-pandemic trend (Figure 2.4). This strength underpins the Department's forecast for income taxes growth this year (+14.8 per cent). By contrast, the Department's forecasts for both aggregate employees' compensation (6.9 per cent) and capital income net of depreciation (3.4 per cent) remains considerably slower.[9] Given strong tax revenues, household incomes appear likely to outperform the Department's projections for 2021 (as discussed in Box A). Figure A3 shows an alternative forecast for aggregate employees' compensation.

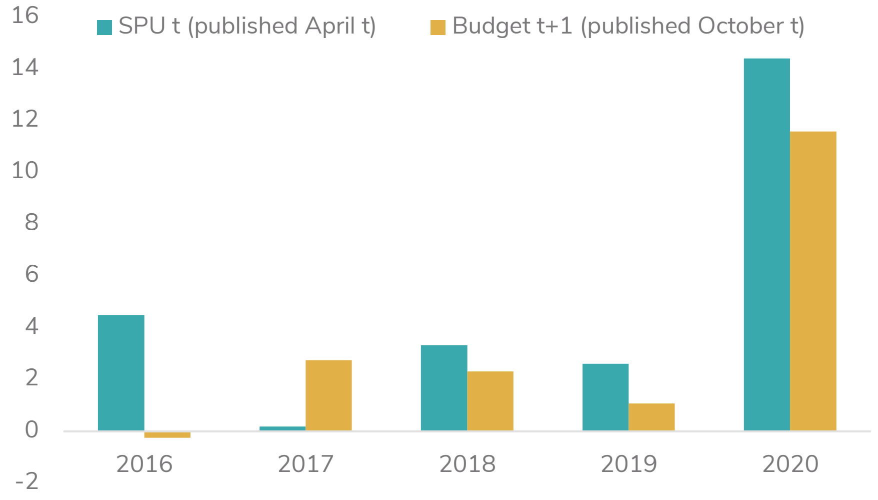
Taken together, this would imply that the tax-income ratio would be lower than suggested by Figure 1.8, which would align more closely with historical precedent. Figure 2.3 shows an alternative path for the ratio, incorporating the alternative forecast of aggregate employees' compensation shown in Figure A3.

As shown in Figure 1.9, the Department's projections for aggregate employees' compensation have often been significantly lower than outturns, even prior to the pandemic-affected 2020. This indicates a systematic pattern of downwards bias in the gross income projections (although 2020 was exceptional). A number of previous forecasts have shown rising tax-income ratios, although this ratio has been relatively stable over time. This suggests a tendency to underpredict both real personal disposable income and household consumption spending, or a disconnect between the forecasting methodologies for tax, income, and consumption of households. This can result in a downward bias to forecasts for levels of consumer spending and/or household savings. This is something that the Council will continue to monitor in subsequent assessments.

[9] The Department expected that the progressivity of income taxes explained the sharp increase in taxes as a share of labour income, and that some of the tax buoyancy reflected self-employed earnings that would not be included in labour income. However, the relative increase in the tax share is even larger in 2021 when using compensation of employees plus capital income as the denominator — this ratio grows 8.1 per cent, compared to 7.4 per cent for taxes as a share of just compensation of employees.

Figure 1.9: Official forecasts have tended to underestimate same-year aggregate employees' compensation

€ billion (positive figure = income greater than forecast)



Sources: CSO, Department of Finance, and Fiscal Council workings.
Notes: The chart shows the latest outturns for aggregate employees' compensation less the Department's in-year forecast. This does not correct for revisions to historical data that may have influenced the magnitude of forecast errors in some cases. Get the data.

Inflation risks

The outlook for inflation is a key area of uncertainty for the outlook, given tightness in energy markets and supply-chain bottlenecks post-Covid. The Department's short-term forecasts are informed by models on six sub-components of HICP, whereas its medium-term forecasts are judgement-based. The faster growth in prices observed in the months leading up to the endorsement was assumed to be a transitory feature of the economic recovery from the pandemic. This expectation was aligned with that of central banks, including the European Central Bank, the Bank of England, and the US Federal Reserve.

The 'Economic and Fiscal Outlook' for *Budget 2022* includes a scenario for higher inflation due to higher energy prices, prolonged global supply-chain disruption, and stronger short-term domestic demand. This results in an increase in HICP growth for 2021 of ¼ of a percentage point, and about 1¼ percentage points in 2022. For the expected impact of an inflation shock over the medium term, the Department uses the COSMO model of the Irish economy to analyse a 1 percentage-point shock to inflation, which is 50 per cent attributed to the price of oil. This results in lower consumer spending and non-traded output, higher unemployment, and a lower general government balance.

The modelled effects of inflation primarily reflect an impact of lower real household disposable income and lower demand for labour by firms. However, consumer price inflation in the Euro area has underperformed relative to central-bank targets for several years, with weaker anchoring since 2013 identified by Byrne and Zekaite (2019). In the context of a price level far below target, the effect of a temporary increase in inflation on consumer spending could be less than would be conventionally modelled. However, it is also possible that people might be surprised by the higher price level and assume that it is permanent, leading to lower consumption.

Of greater importance to the outlook is the possibility that demand might continue to exceed supply. This could lead to second-round effects, whereby higher wages are sought fuelling higher prices again. This could mean that the recent rise in prices could prove less transitory than expected.

While an increase in inflation has considerable macroeconomic implications, the fiscal implications could also be significant. Debt servicing costs have been repeatedly revised down in recent years. However, a significant increase in inflation would increase the probability that policy rates would be tightened, which, if it happens, would be expected to lead to a rise in government borrowing costs. Tax revenues may also rise in the short-term as higher prices generate more taxes. However, this could be offset by an increase in government spending, with the government facing rising costs for both current and capital spending and also pressures to compensate for reduced purchasing power.

Box B: Modelling inflation in Ireland

This box explores the use of a formal forecasting model for developing inflation projections for the medium term as compared to the *Budget 2022* forecasts, which are largely based on judgement. Inflation is modelled on unemployment, external prices, and inflation expectations.

Figure B1 presents market-implied expectations for ten-year inflation in France, derived using benchmark and inflation-linked bond yields. France's inflation expectations are shown as its inflation-linked bond market is the most liquid for the Euro area. After a period of decline over much of the past decade, inflation expectations over the coming ten years have recently reached 2 per cent, the highest level since April 2014. Byrne and Zekaite (2019) present evidence of weaker anchoring of inflation expectations after 2013 and emphasise that well-anchored expectations are important to ensure against inflationary or deflationary spirals.

Figure B1: Inflation expectations have risen rapidly since the pandemic began

% (France implied ten-year breakeven inflation rate)

Sources: Refinitiv Eikon, and Fiscal Council workings. Get the data.

Notes: The chart shows France's implied ten-year breakeven inflation. It is calculated using the following formula: 100 * ((1 + nominal ten-year bond yield in %) / (1 + real ten-year bond yield in %) – 1). The real ten-year yield refers to the yield on a generic French HICP-linked government bond, whose coupon adjusts for the level of HICP. The breakeven is therefore the implied ten-year compound average rate of inflation for which a nominal government bond compensates an investor relative to the real yield on the inflation-linked bond.

Modelling medium-term inflation in the Irish economy

Galstyan (2021) conducts an empirical investigation into inflation determinants. Focusing on Ireland, it notes the significant role that domestic slack has in influencing price inflation over the medium term.

Based on Galstyan's findings, HICP inflation can be forecast in a quarterly error-correction model based on inflation expectations, and seasonally adjusted unemployment rates and price inflation on imports of goods and services.[10] The sample period used here covers the period Q1 1990 to Q2 2021.

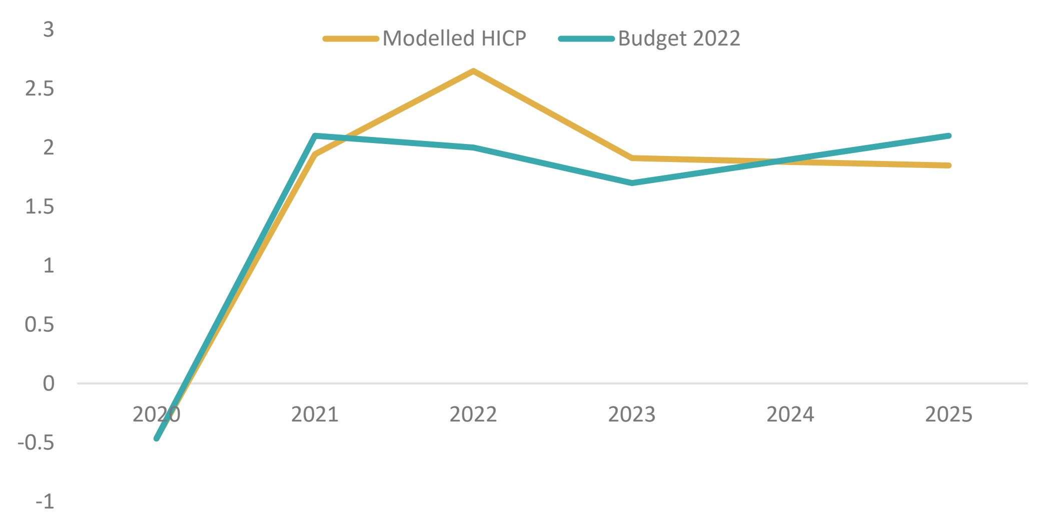
[10] Inflation expectations are taken as one-year-ahead inflation rates projected by the IMF (where spring forecasts are applied to Q1 and Q2 for year t+1, and autumn forecasts are applied to Q3 and Q4 for year t+1). Beyond 2022, the latest projections from autumn 2021 are used. The seasonally adjusted unemployment rate is mechanically extended quarterly back to 1990 using the annual labour force survey, while the import price deflator is also mechanically extended using the historical annual national income and expenditure data.

Figure B2 compares the modelled rates of HICP inflation with *Budget 2022* projections. *Budget 2022* forecasts are model-based for part of 2021 and 2022, and judgement-based thereafter. The rapid fall forecast for the unemployment rate in 2022 contributes to a rise in HICP inflation next year, whereas the *Budget 2022* forecasts entail a slightly slower rate of inflation in 2022 compared to 2021. However, the projected growth rates for HICP are otherwise very similar, suggesting a return toward 2 per cent annual inflation. This is consistent with inflation expectations based on the recent ten-year French breakeven rates.

There are limits to using conventional models of inflation in unusual circumstances such as the current ones. For example, when unemployment rose rapidly in 2020, inflation did not fall in a corresponding manner. As a result, one might not expect falls in unemployment to fuel a significant acceleration in inflation. In fact, many of the factors that are likely to cause increases in inflation at present would not be typically captured by conventional models (supply-chain issues, energy price increases, temporary labour supply issues and pent-up demand).

Figure B2: Model-based forecasts broadly align with judgement-based forecasts

% growth year-on-year



Sources: Department of Finance, and Fiscal Council workings. Get the data.
Notes: The "Modelled HICP" forecasts are based on an error-correction model using inflation expectations, seasonally adjusted unemployment rates and price inflation on imports of goods and services.

While the model-based forecasts align well with those produced by the Department, there is scope to improve how medium-term inflation forecasts are founded. Inflation forecasts could be more usefully linked to developments in the domestic economy and its spare capacity. Factors like this and the role of expectations becoming entrenched could take on greater importance in the coming years.

Output gap issues

The Department of Finance has shifted to using alternative estimates of potential output and the output gap in recent years. For *Budget 2022* projections, the Department changed its approach slightly, making its "preferred" output gap estimate one that is based on potential growth in domestic gross value added (GVA) rather than GDP (Murphy, Nacheva and Daly, 2018).[11] The move to a better-founded domestic measure of the output gap has been welcomed by the Council.

The move to estimating output gaps based on domestic GVA is welcome, but needs some refinement

As an example, in 2021 the previous GDP-based method showed a positive output gap. This was deemed highly implausible as it implied output in the economy had exceeded its potential. At the same time, the Department estimated that the unemployment rate was 16.8 per cent. The use of the Department's other domestic GVA-based approach results in a relatively more plausible negative output gap of about 0.7 per cent.

The Council welcomed the Department's move to relying on domestic GVA rather than GDP for its preferred estimates of the output gap but notes some concerns. The way domestic GVA is forecast is an issue as it seems to be poorly aligned with growth in underlying domestic demand and real GNI*.[12] In addition, the approach — though it focuses on domestic GVA — still relies on total GVA in a way that results in distortions from the multinational sector influencing the estimates of potential.

First, estimates of the output gap based on domestic GVA are used in conjunction with actual total GVA to generate potential output growth rates. This results in very high estimates of potential output growth in years where large distortions to Ireland's GDP took place (such as in 2015). If domestic GVA is used instead as the basis for potential output, it would be possible to obtain a far more plausible estimate over time (Figure 1.10). Second, the output gap — although being focused on domestic GVA — is still defined in

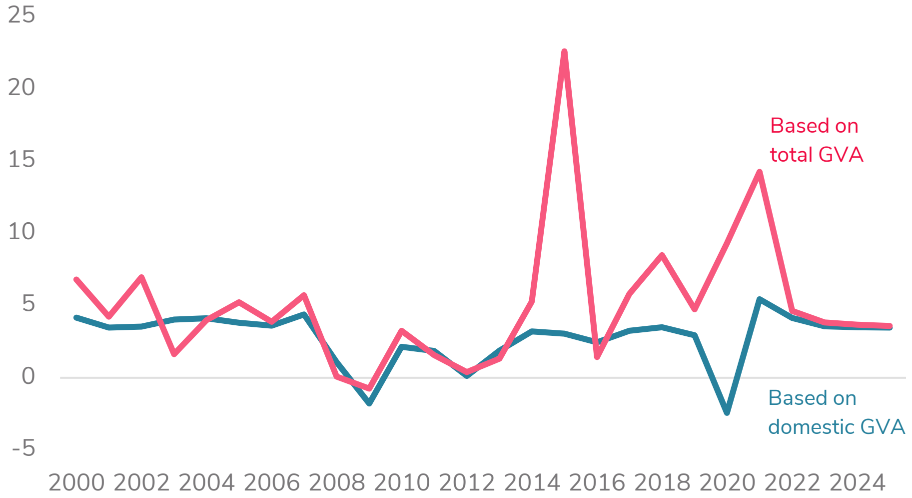
[11] "Domestic gross value added" refers to a series published quarterly by the CSO for GVA excluding sectors where over 85 per cent of turnover is accounted for by foreign-owned multinational firms. However, it is important to note that this measure excludes output that is relevant to GNI*, in particular compensation of employees from the excluded sectors. The Department had previously produced alternative estimates of potential output using Domestic GVA but its preferred measure was based on the GDP-based estimates.

[12] The forecasting approach for domestic GVA relies on a historical relationship with gross national product. However, as a result of the large fall in domestic GVA in 2020 (–9.8 per cent), but where gross national product actually grew by 2.6 per cent, this methodology results in a large permanent loss to domestic GVA. This loss is not shown in the Department's forecasts for other relevant variables for the domestic economy including GNI* and underlying domestic demand (UDD), which recover far closer to their pre-pandemic trend levels over time.

terms of total GVA. That is, whereas the numerator is calculated based on domestic GVA, total GVA is the denominator used. The Department's approach effectively assumes that foreign-owned multinational sectors (the "foreign" component of GVA) always operate at full potential. This approach will tend to underestimate the size of the output gap over time as GVA of foreign-owned multinational enterprises grows faster relative to domestic GVA. By contrast, the Council's models (Casey, 2019) are currently applied with domestic GVA as the denominator, which overcomes these risks.

Figure 1.10: The Department's estimates of potential output are based on total GVA, implying high potential growth rates in some years

% change year-on-year in potential output



Sources: Department of Finance, and Fiscal Council workings

Notes: The estimate based on domestic GVA uses the Department's inputs, but with an alternative forecast for domestic GVA (rising in line with the percentage gap to 2014–2019 trend for UDD from 2021–2025), and with faster growth in house prices (more aligned to growth in nominal GNI*). Get the data.

Budgetary Assessment

Medium-term commitments need more clarity

2. BUDGETARY ASSESSMENT

Medium-term commitments need more clarity

Budget 2022 forecasts a deficit of 5.9 per cent of GNI* in 2021. This would present a significant improvement since 2020 (almost 3 percentage points of GNI*), driven by stronger tax revenues from the economic recovery and lower Covid-related spending. The deficit could be lower than projected however, with revenue likely to be higher-than-forecast and possible underspends.

Under current spending plans, the general government balance is forecast to improve over the medium term, taking into account the cost of providing existing commitments, the National Development Plan and the Government's spending rule. Falls in Covid spending, steady increases in core spending and the continued recovery in revenues will yield a significant improvement in the balance over the coming years.

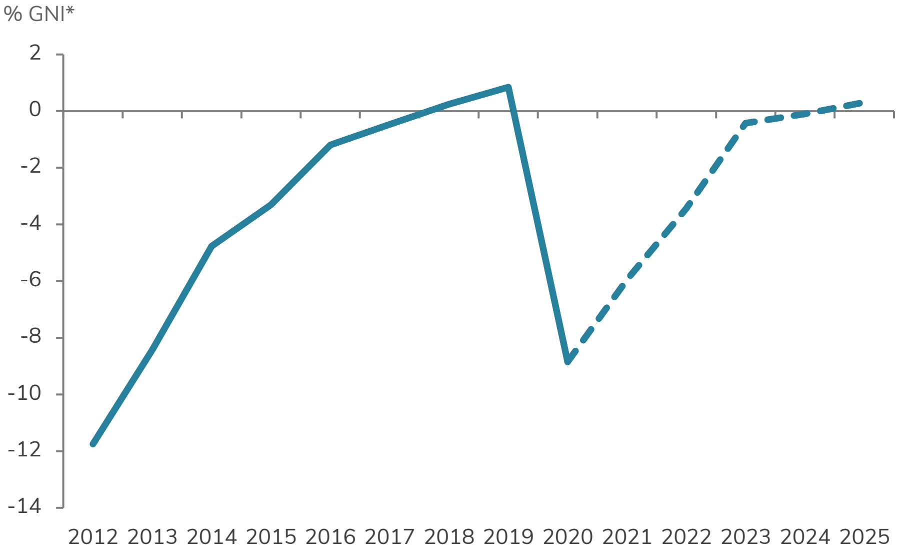
Over the medium term (2023–2025), *Budget* 2022 forecasts of core current spending growth are slightly above the level required to maintain existing service levels. While revenue could also be higher than forecast in *Budget* 2022 over the medium term, there are large uncertainties around the costs of major policy reforms such as Sláintecare and the costs of the Government's commitments to significantly reduce greenhouse gas emissions by 2030. This implies limited scope for new spending measures or improvements to service levels consistent with these projections.

With the low-interest environment and improving general government balance, the government debt ratio is projected to fall at a steady pace, but it will remain at high levels. By 2025, gross general government debt is forecast to be 89.5 per cent of GNI*.

2.1 The recent budgetary context

Prior to the Covid-19 pandemic, the budget deficit had narrowed over many years, finally reaching a small surplus in 2018 and 2019 (Figure 2.1). As a result, the public finances were somewhat better placed to absorb the pandemic's impacts in 2020 and beyond. However, "excess" corporation tax receipts – unexplained by the performance of the domestic economy – have boosted the budgetary position since 2012 (see supplementary information S6 on Corporation tax).

Figure 2.1: The Government's budget balance reached a surplus in 2018



Sources: CSO and *Budget 2022* projections. Get the data.
Note: Dashed line indicates *Budget 2022* forecasts.

Current estimates suggest that a general government deficit of €18.4 billion (8.8 per cent of GNI*) was recorded in 2020, compared to a surplus of €1.8 billion in 2019 (a deterioration of €20.2 billion). This deterioration was driven by increased spending of €15.7 billion. The increase was almost exclusively temporary or pandemic-related spending (€14.8 billion), with €1.0 billion of permanent increases. Overall revenues were relatively stable, falling by €4.5 billion, of which about €1.4 billion reflects tax supports adopted. Nonetheless, some tax heads were remarkably resilient.

VAT and income tax receipts were stronger in 2020 than headline (cash–basis) Exchequer figures would suggest. This is because some liabilities (€1,131 million for VAT and €442 million of income tax) were warehoused and are to be repaid over 2021–2024.[13] *Budget 2022* forecasts are made on the assumption of a 75 per cent recovery rate, with repayments expected out to 2024. [14]

2.2 The short-term outlook

Forecasts for 2021

Budget 2022 forecasts a general government deficit of €13.3 billion in 2021, an improvement of €5.2 billion compared to 2020. The improvement is driven by increases in the proceeds from corporation tax (€2.1 billion) and other revenues (€7.4 billion), as well as by a reduction in Covid/temporary spending (€1.0 billion).

Improvements in the general government balance in 2021 are driven by recovering revenue

Table 2.1: Fiscal forecasts from Budget 2022

€ millions unless otherwise stated

	2020	2021	2022	2023	2024	2025
General Government Revenue	83,616	93,110	96,715	102,100	106,570	110,880
Change in General Government Revenue	-4,493	9,494	3,605	5,385	4,470	4,310
General Government Expenditure	102,033	106,360	104,975	103,175	106,840	110,005
Covid/One-off Expenditure	14,762	13,804	7,510	1,505	695	410
Change in Covid/One-off Expenditure	14,762	-958	-6,294	-6,005	-810	-285
"Core" General Government Expenditure	87,271	92,556	97,465	101,670	106,145	109,595
Change in "Core" General Government Expenditure	985	5,285	4,909	4,205	4,475	3,450
General Government Balance	-18,417	-13,250	-8,260	-1,075	-270	875

Sources: CSO; Department of Finance; and Fiscal Council workings.

Notes: For 2020, €14,762 million of general government spending is considered to be pandemic related, as per CSO estimates. Covid/one-off spending in 2021 is mainly made up by €13,360 million of spending given in Table 8 of the Economic and Fiscal outlook. A sum of €444 million for CRSS payments is added to this estimate, as that would also be counted as expenditure in general government terms. Covid/one-off spending in 2022 is made up of €6.8 billion of Covid spending, €500 million from the Brexit adjustment reserve fund and €210 million from the National Recovery and Resilience Plan. One-off amounts for 2023 to 2025 are made up of Covid automatic stabilisers, National Recovery and Resilience Plan, and the Brexit Adjustment Reserve Fund in 2023 only.

The extent of these improvements is, however, partially offset by large permanent increases in spending (€5.3 billion, see Figure 2.2). With the unexpected duration of Covid-related spending in 2021, the contingencies set out in *Budget 2021* have largely been used during the year, but spending will be lower than anticipated in the April SPU. This is because the number of claimants on the main support schemes has been lower than

[13] Warehousing here refers to firms being allowed to defer payment of tax liabilities until they are in a better position to repay. This is done to assist those with cash flow and trading difficulties during the pandemic.

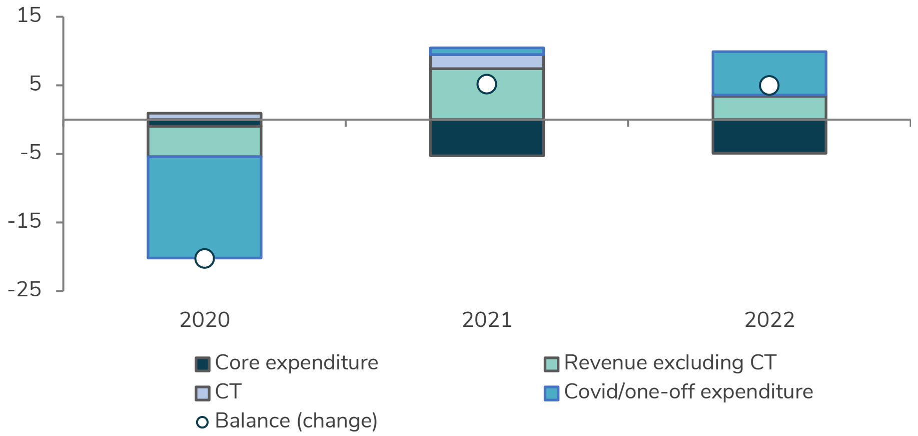
[14] In general government terms, revenue is accrued to the year where liability arose (2020 and 2021) as opposed to the year in which it was paid to the Exchequer (2021-2024).

anticipated and a number of government departments are likely to underspend relative to expectations.

Budget 2022 forecasts for this year are based on the first nine months of returns that were available at the time. As a result, *Budget 2022* forecasts three months of receipts and expenditures.[15] Revenue forecasts for 2021 were arrived at in consultation with the Revenue Commissioners. For 2022 and beyond, a typical forecasting approach was applied, using macroeconomic drivers and elasticities. Section S6 shows how the forecast levels of receipts could be arrived at.

Figure 2.2: Improvements in the budget balance are driven by revenue increases and falls in temporary spending.

€ billions annual change



Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.
Notes: Changes in expenditure are recorded as their impact on the balance (i.e. expenditure increases are recorded as negative, as they worsen the balance). Covid/one-off expenditure as outlined in Table 2.1. CT = Corporation Tax.

The recovery in revenues is broad based across the various tax headings. Annual changes are flattered by policy interventions such as warehousing and periods of economic restrictions in 2020, but revenues have been performing well relative to profile too throughout the year.

Several revenue headings have been revised up at each forecast round since *Budget 2021* (Table 2.2). Compared to what was expected at that time, total Exchequer revenue for 2021 has been revised up by €6.5 billion, with corporation tax proceeds €0.9 billion higher, partially reflecting some one-off settlement payments (€630 million), which are not expected to recur.

[15] In the meantime, the level of receipts and expenditure for October has been published.

Since the publication of *Budget 2022* forecasts, a further month of Exchequer revenue and spending data have become available. October saw another strong month of Corporation tax receipts, and receipts for the year appear likely to exceed the levels forecast in *Budget 2022*.

Table 2.2: Revenue Developments 2021

€ billion, Cumulative difference to October for year-to-date column

	Budget 2022 (€bn)	Revision from Budget 2021 (€bn)	Year to Date (€bn, y/y)
Exchequer Tax	66.1	5.7	8.3
Exchequer Tax excl. Corporation tax	52.2	4.8	6.5
Income Tax	26.0	3.3	3.7
VAT	15.4	1.5	2.5
Corporation Tax	13.9	0.9	1.9
Excise Duty	6.0	0.0	0.3
Other Taxes	4.7	0.1	0.0
PRSI Receipts	12.2	0.8	1.0
Other Revenue	5.1	0.7	0.3
Total	83.4	6.5	9.7
Total Excl. Corporation Tax	69.5	5.6	7.8

Sources: Department of Finance and Fiscal Council workings.

Notes: Other taxes include stamps, capital taxes, motor tax, customs, and other unallocated tax receipts. Other revenue includes the National Training Fund, other A-in-As, non-tax revenue, and capital resources. PRSI and National Training Funds include their corresponding excess as indicated in the memo items.

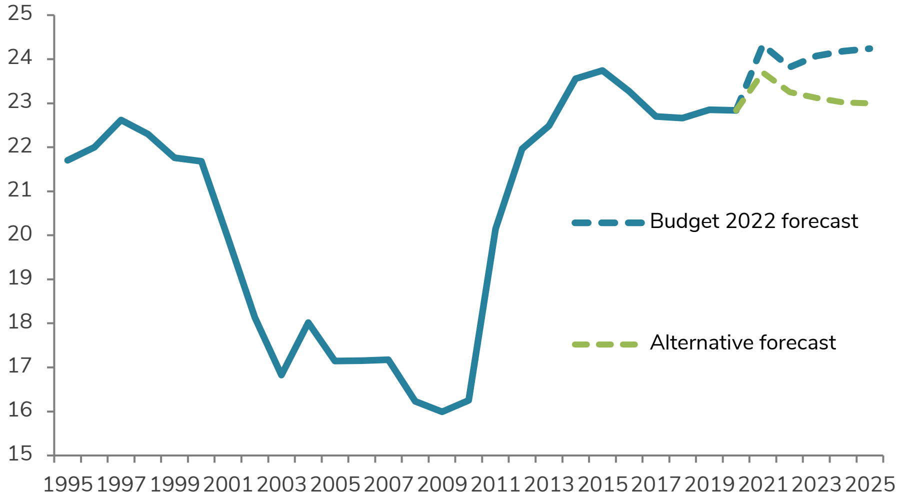
Income tax receipts have also been revised up significantly, with a strong performance in the year to date. Income tax now appears to be above its pre-pandemic trend. It is likely that income tax will exceed *Budget 2022* forecast levels for this year.

Budget 2022 forecasts of income tax and compensation of employees for 2021 imply a sharp rise in the income tax to compensation of employee's ratio (Figure 2.3). As discussed in Section 1, compensation of employees could be significantly higher in 2021 than *Budget 2022* forecasts. Figure A.3 shows an alternative forecast for compensation of employees, based on stronger hourly earnings.

Were income tax receipts for 2021 to be broadly in line with *Budget 2022* forecasts (which were made with 9 months of returns), then this alternative forecast would imply a more modest increase in this ratio in 2021 and then a reversion to a more normal level thereafter. The tax forecasts appear more consistent with recent developments than the compensation forecasts. Nevertheless, there remains significant uncertainty for the medium-term.

Figure 2.3: A more realistic forecast for compensation suggests that the ratio of income tax to the pay bill should return to close to its pre-crisis level

Income tax to compensation of employees ratio



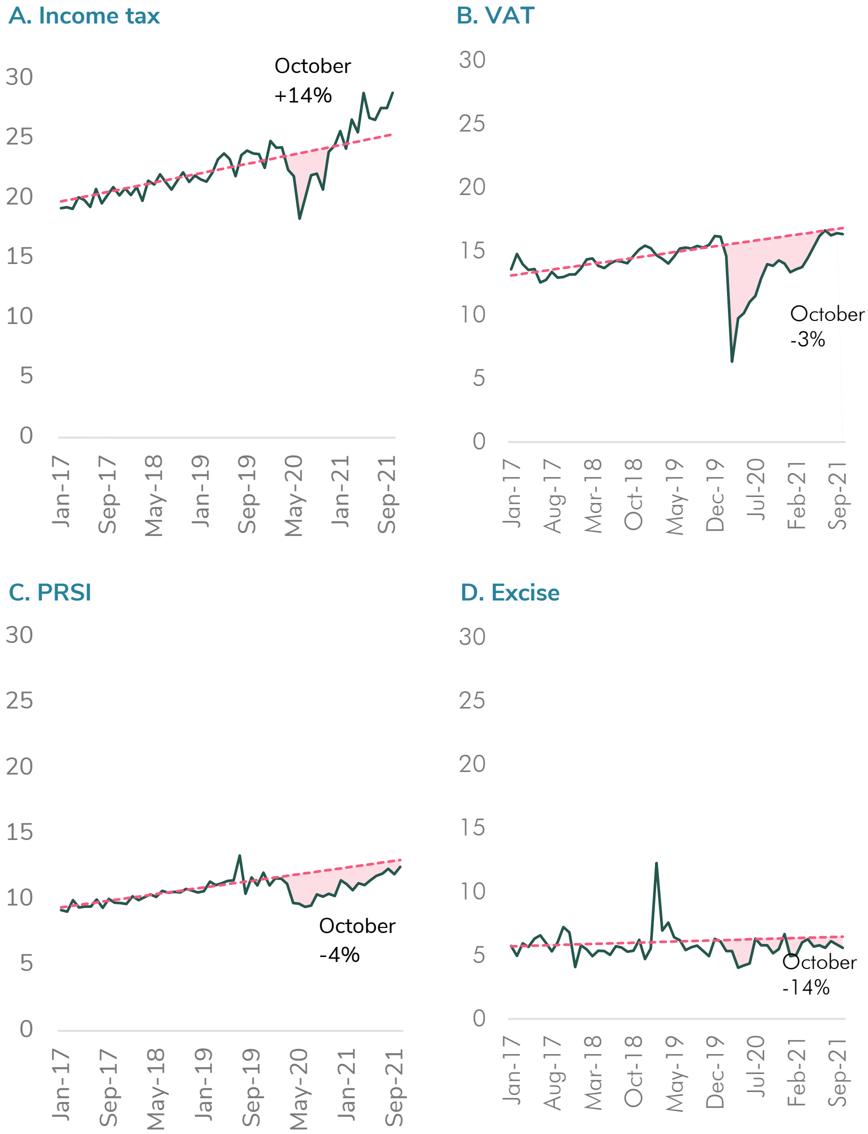
Sources: Department of Finance and Fiscal Council workings. Get the data.
Notes: Exchequer income tax forecasts from *Budget 2022* are adjusted for warehousing and repayments, so that these figures are more in line with general government treatment (75 per cent repayment is assumed). The sharp increase in 2011 is due to the introduction of the Universal Social Charge. "Alternative forecast" shows the income tax to compensation of employee's ratio if income tax forecasts from *Budget 2022* were unchanged, but the "alternative forecasts" of compensation of employees shown in Figure A.3 were used.

VAT receipts have also been revised up significantly since *Budget 2021*. A strong recovery in consumption is reflected in VAT receipts for 2021, which have almost reached their pre-pandemic trend (Figure 2.4).[16] Excise receipts are also benefitting from the recovery in consumption, as well as policy changes (mainly an increase in the carbon tax).

[16] The underlying performance of Income tax and VAT are understated in cash (Exchequer) terms in 2020 and 2021 relative to revenues on a general government basis. This is because some Income tax and VAT due has been warehoused. This results in Exchequer tax not being collected in 2020 and 2021, but rather in 2021-2024. *Budget 2022* forecasts are based on 75 per cent of income tax and VAT receipts warehoused in 2020 and 2021 being repaid. In general government terms, the amount of receipts collected would be accrued back to the year liability arose (in this case 2020 or 2021), rather than the year the money reaches the Exchequer (2021, 2022, 2023 and 2024).

Figure 2.4: Taxes have largely recovered to their pre-pandemic trend levels

Annualised seasonally adjusted levels € billion



Sources: Department of Finance; and Fiscal Council workings. [Get the data.]

Notes: Monthly tax data are seasonally adjusted and annualised (× 12). The pre-pandemic trend is calculated as a linear trend from January 2015 to December 2019.

Table 2.3: Exchequer revenues growing strongly this year

Growth rates

	2020	2021	2022	2021(YTD)	Required growth rate**
Exchequer revenue	-4.6	9.6	4.2	14.2	-9.1
Tax revenue	-3.6	15.6	6.2	19.6	4.1
Income tax	-1.0	14.6	5.8	21.5	-6.2*
VAT	-17.8	24.0	9.6	24.3	22.8
Corporation tax	8.7	17.4	1.4	24.6	4.2
Excise duties	-8.3	10.7	10.3	7.4	23.2
Other tax revenue	7.1	0.3	6.1	0.4	-0.3
PRSI	-8.3	11.5	6.4	12.1	8.9

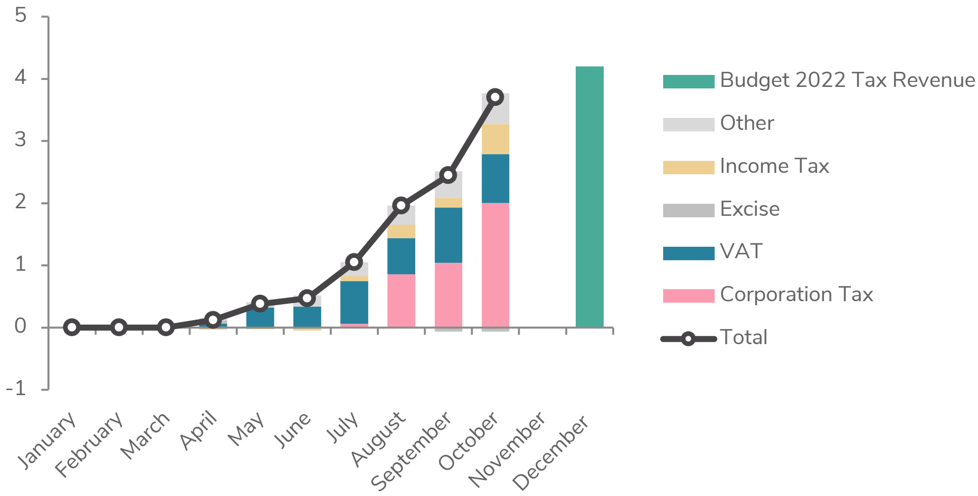
Sources: Department of Finance.
Notes: 2021 (YTD) column shows the year-on-year performance of various revenue headings for the first 10 months of the year compared to 2020. **The Required growth rate column shows the year-on-year growth rate required for the final 2 months of the year to achieve full year Budget 2022 forecasts. *The y/y comparisons are obscured by unusually high outturns of self-employed income tax receipts in the final two months of 2020.

Tax revenue looks likely to exceed budget day projections for 2021

Taken together, total tax revenues currently stand 8.1 per cent ahead of expectations formed at the time of the Government's *SES 2021* in July, the latest available monthly profiles (Figure 2.5). *Budget 2022* forecasts of taxes in 2021 are €4.2 billion higher than in *SES 2021*. The strength of the October returns means that only a slight overperformance, and less than the overperformances observed in recent months, is required for November and December to achieve the *Budget 2022* tax forecasts. As a result, it is likely that tax revenue will exceed the levels forecast in *Budget 2022*.

Figure 2.5: Taxes have exceeded expectations in 2021

€ billion (cumulative over-performance compared to SES profile)



Source: Department of Finance and Fiscal Council workings. [Get the data.]
Notes: Monthly profiles were not produced for *Budget 2022*, so *SES 2021* profiles are the latest available. *Budget 2022* forecasts of tax revenue are €4.2 billion higher than in *SES 2021*, so that is the level of "overperformance" needed in this chart to reach *Budget 2022* forecasts.

General government spending is the most comprehensive measure of spending. While this is mostly covered by Exchequer spending, about one-fifth is non-Exchequer spending. Non-Exchequer spending includes spending by local government (including Approved Housing Bodies), non-commercial semi-state bodies (like Irish Rail, Irish Water, RTÉ, Solas, Tusla, the aggregate institutes of technology, etc), and Extra-Budgetary Funds (such as the Irish Strategic Investment Fund).[17]

In general government terms, the increase in spending (excluding one-offs) foreseen for 2021 is now €3 billion smaller than what was assumed in *SES 2021*. The bulk of this revision, however, falls in areas outside of the Exchequer where detailed information is lacking.

Significant government spending occurs outside the Exchequer, where there is virtually no transparency

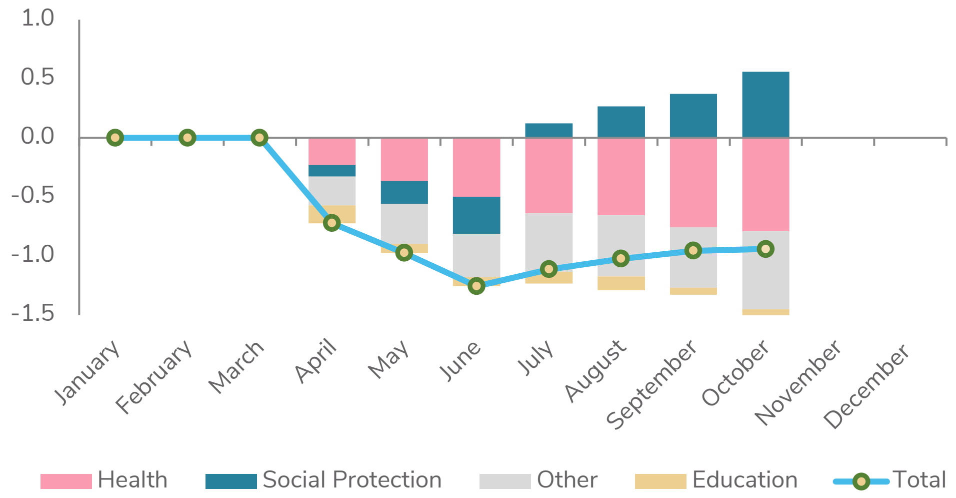
Overall expenditure is expected to be higher than 2020 levels. This is driven by the large increase in core current and capital spending, only partially offset by the reduction in Covid-related spending. Current primary spending is below expectations set in the June SES by 1.6 per cent, driven by underspends in key areas like healthcare and also in other government departments (Figure 2.6). Should spending on health continue to track below expectations for this year, it would represent one of the few instances in which expenditure on health was under profile.[18] However, it is unclear as to whether these underspends will be reversed by the end of the year through unexpected increases in the final months of 2021 as both Covid-19 continues to require active management through the winter and as pent-up demand for regular treatments is addressed. Casey and Carroll (2021) show that overruns in health have tended to be focused in the final quarter of the year.

As regards health underspends and those in other Departments more generally, these reflect both lower–than–expected Covid-related spending in contingencies built into Departmental budgets, and Departments not using the full amount of current spending allocated in 2021. Taken together, these mean an underspend of around 1.5 per cent for the year. The reasons for these underspends in core spending are not clear but may reflect some of the logistical challenges and uncertainties related to Covid-19. As a result, there is some uncertainty as to whether or not these underspends might be expected to reduce pressures for 2022.

[17] Expenditure by non-commercial semi-state bodies is often a mixture of Exchequer and non–Exchequer spending.
[18] See Casey and Carroll (2021) for a more comprehensive overview of historical expenditure trends on healthcare in Ireland.

Figure 2.6: Most departments have underspent in 2021

€ billion (cumulative performance compared to SES profile)



Source: Department of Finance; and Fiscal Council workings. Get the data.
Notes: Data refers to cumulative monthly gross voted current spending outturns relative to the monthly profiles produced as part of the SES 2021, which contain the latest available set of monthly profiles.

Capital spending is forecast to increase this year (7.3 per cent), before much larger increases in spending in later years (see Section 2.3 below and Conroy, Casey and Jordan-Doak, 2021). However, gross voted capital spending is currently well below profile for the year to date, with October's outturns showing a cumulative underspend of 22.9 per cent relative to profile (€1.5 billion). Underspends are largest in areas such as housing (€0.4 billion or 24.8 per cent). While capital spending typically accelerates in the later months of the year, it seems unlikely that underspends of this magnitude will be totally reversed. It is also unclear whether this pattern will extend into 2022 and beyond. Capital spending plans may have been disrupted due to Covid, but it may also point to the difficulties in ramping up investment at speed.[19]

2021 Spending could be lower than forecast in *Budget 2022*

Overall, it seems likely that the general government deficit for 2021 will be lower than *Budget 2022* forecasts. On the revenue side, corporation tax and income tax look likely to overperform. On the spending side, underspends in capital spending, along with health and other departments are possible.

[19] An amount of around €0.7bn of capital allocations unspent in 2020 was carried into the envelope for 2021, with *Budget 2022* indicating that a similar amount would follow from 2021 into 2022.

Forecasts for 2022

Budget 2022 forecasts a general government deficit of €8.3 billion in 2022, representing a €5 billion improvement relative to 2021. General government revenue is forecast to grow by €3.6 billion (with corporation tax increasing by only €0.2 billion). Temporary/Covid spending is forecast to fall by €6.3 billion (to a level of €7.5 billion). This is largely offset by permanent increases in spending of €4.9 billion (€4.2 billion of this is Exchequer spending). This is close to the size of the overall budgetary package for 2022 (€4.7 billion).

Table 2.4: Budgetary Package in 2022

€ billions

	2022
Demographics	0.7
Pay provisions	0.75
Existing Levels of Services (ELS)	0.2
Capital investment	1.1
New current spending resources	1.45
Tax measures	0.45
Total	4.7

Sources: Department of Finance and Fiscal Council workings.

Fall in the deficit in 2022 driven by reduced Covid spending and increased revenues

The fall in temporary/Covid spending reflects the continued recovery forecast for the economy and labour market into 2022. This would result in fewer claimants of income supports and unemployment payments. Further to this, the Government has outlined that the two main income support schemes introduced in March 2020, the PUP and the Employment Wage Subsidy Scheme (EWSS), will be tapered and closed in early 2022.[20] Estimates for the cost of these schemes in 2022 totals around €0.7 billion, with provisions for labour market activation measures also projected to cost €0.4 billion. Similarly, business supports such as the CRSS (Covid Restrictions Support Scheme) are set to end and the commercial rates waiver not renewed.[21]

Despite the planned reduction in Covid-related spending, the Government has (prudently) made considerable amounts of both allocated and unallocated contingency funding available to departments in 2022. These may be accessible should the public health situation deteriorate once more.

[20] The EWSS replaced the original Temporary Wage Subsidy Scheme (TWSS) in September 2021.

[21] As part of the response to the pandemic to support firms impacted by public health restrictions, commercial rates payments by businesses to local government were suspended. This amounted to foregone revenues of €0.7bn in 2020 and around €0.5bn in 2021.

Unallocated contingency funding of €4 billion has been made available, while departmental allocations for temporary Covid-19 spending totals around €1.9 billion. The Department of Health is receiving the bulk of this – a €1 billion allocation.

Table 2.5: Contingency funding and reserves represent the majority of temporary Covid-19 spending in 2022

€ billions

Spending policy measures	2022
Pandemic Unemployment Payments	0.1
Wage subsidy schemes	0.6
Other social protection	0.4
Health spending on Covid-19*	1.0
Covid-19 contingency reserve	2.8
Other Covid-19 reserve**	1.2
Other departmental Covid-19	0.9
Total***	7.0

Sources: Department of Finance and Fiscal Council workings.
Notes: *includes €0.2bn in contingency funding as part of *Budget* 2022. **includes other measures such as labour market activation and education reserves. The latter includes €0.2bn contained as part of the NRRP.

This should provide a reasonable margin if there were to be a serious worsening of the Covid crisis, but should otherwise be left unspent. However, since this contingency planning is essentially temporary and ends in 2023, these allocations make little difference to the outlook for the public finances further ahead, although they do impact the forecast budget balance for 2022.

The Christmas bonus has again not been budgeted for 2022. This is a long-standing weakness in budgeting and implies a shortfall relative to Budget plans. Full payment of the Christmas bonus in 2021 is projected to cost €313 million, although the number of recipients is likely to be lower in 2022. Since the Christmas bonus has been paid every year in some form since 2014, this is an obvious upside risk to expenditure forecasts for 2022.

Budget 2022 forecasts of the pay bill are made in aggregate. As a result, it is difficult to ascertain how much of the growth in the pay bill in each year is due to assumed increases in pay per head versus numbers of employees. The existing public sector pay agreement is due to expire in 2022.

General government capital spending is forecast to increase by almost €2 billion in 2022 (20.5 per cent change compared to 2021), consistent with the National Development Plan. Given the substantial increase and underspends this year, it may prove challenging to achieve the level of capital spending forecast for 2022.

Increased Exchequer revenue in 2022 is mainly due to growth of income tax (€1.5 billion) and VAT (€1.5 billion). Approximately one–third of the growth in VAT receipts can be attributed to the impact of warehousing (on an Exchequer, cash–basis). The forecast continued recovery in consumption would also aid VAT growth in 2022.

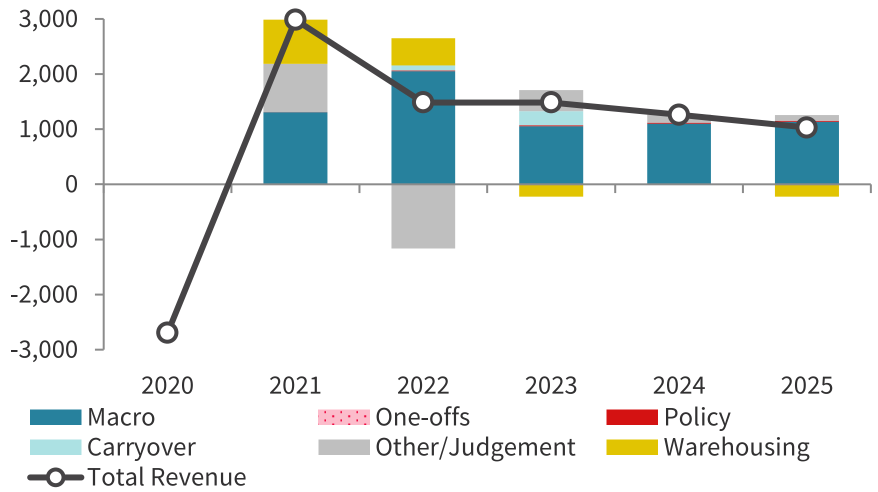
Significant negative judgement is applied by the Department to arrive at its VAT forecast for 2022 (Council estimates suggest around €1.2 billion, see Figure 2.7). This means that VAT receipts are assumed to being growing slower than the underlining drivers, even though warehousing should be adding to this (in cash terms). It is unclear why such a negative judgement has been applied. As a result, there is potential for significantly higher VAT receipts in 2022 than forecast in *Budget 2022*.

Significant negative judgement has been applied by the department to arrive at VAT forecasts for 2022

Figure 2.7: VAT forecast decomposition

Factors contributing to the y/y revenue change

€ million



Source: Department of Finance; and Fiscal Council workings. Get the data.

Excise is also forecast to grow in 2022, driven by consumption growth and policy changes (primarily the increase in the carbon tax). Some negative judgement is also applied (Council estimates suggest around €140 million, see Figure S.8).

Income tax receipts, when adjusted for the impact of warehousing, are forecast to grow by 3.8 per cent in 2022. PRSI is forecast to grow by 6.4 per cent (€0.8 billion) in 2022.

Various policy changes to income tax for 2022 were announced in *Budget 2022*. The impact of these policy changes, relative to maintaining current policies in nominal terms, is to reduce income taxes by €760 million, slightly more than the cost of indexing income tax bands and credits. As a result, income tax revenue in 2022 will be slightly lower than would have been the case if the only changes to the income tax system had been to index tax bands and credits.

As noted in previous FARs, the approach used by the Department of Finance to forecast income tax is currently problematic. This approach uses separate impacts from pay per head and employment to forecast PAYE and USC receipts. This may be appropriate when the composition of employment is relatively stable. However, during the forecast horizon pay per head is significantly affected by the changing composition of employment (see Section 1, Box A). As a result of these compositional impacts, *Budget 2022* forecasts pay per head to fall in 2022. Without applying judgement, this would imply lower PAYE income tax receipts.[22]

Given the methodology, significant judgement is applied by the Department of Finance to arrive at the forecasts in *Budget 2022* (Figure S.8). These are the same problems which were highlighted in Fiscal Council (2021a) when assessing *SPU 2021* forecasts. As was suggested then, a simpler and possibly more robust alternative method could be used, such as the elasticity of income tax receipts to compensation of employees.

As mentioned in Section 1, compensation of employees could be higher than *Budget 2022* forecasts for 2021, with a higher level in the later years also. Were this to be the case, and income tax forecasts were largely unchanged, the ratio of income tax to compensation of employees would fall slightly in 2022, getting close to pre-pandemic levels (Figure 2.3).

Corporation tax is forecast to grow slightly in 2022, but will remain at a high share of revenue. Allowing for one off settlements/payments in 2021 and the ending of the CRSS scheme, corporation tax would grow by €0.4 billion (2.6 per cent). This is considerably slower than the macroeconomic driver, gross operating surplus, which is forecast to grow by 7.8 per cent in 2022.[23]

[22] While increases in numbers employed would offset the negative impact of falling pay per head, the overall effect would be negative (see supplementary information S6).
[23] This calculation involves removing the impact of one-off settlements and the CRSS scheme in 2021.

Significant negative judgement is applied by the Department to arrive at its forecast for 2022 (Council estimates suggest around €0.5 billion, see Figure S8).[24] Uncertainty around corporation tax receipts remains high, particularly in the near-term around the profits of a small number of MNCs who contribute a large share of the revenue. As noted earlier, the overperformance of corporation tax in 2021 relative to *Budget 2022* forecasts may create upside risks for 2022, but these risks need to be seen in the context of the large uncertainty.

[24] Budget 2022 forecasts assume that the negative impact of changes in the international tax environment only begins in 2023, so 2022 forecasts are not impacted by this.

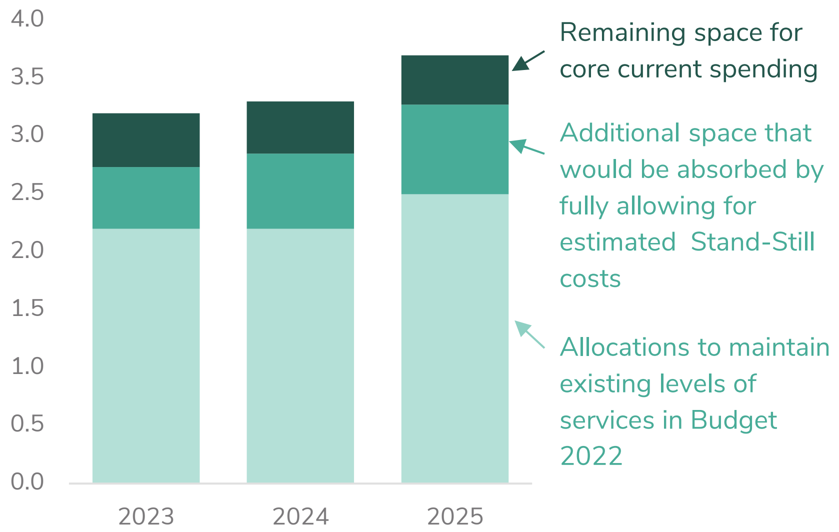
2.3 The medium-term outlook

Fiscal projections in *Budget 2022* go out to 2025, only four years ahead. The last time five-year-ahead forecasts were published was in *Budget 2020*. The Council has previously highlighted the importance of five-year-ahead forecasts to support a medium-term orientation for fiscal policy.

Budget 2022 saw the Government move towards presenting more accurate estimates of the costs of maintaining "existing levels of service" in real terms over the medium term, following the approach piloted in the June *Summer Economic Statement*. This approach, which follows in the same vein as the 'Stand-Still' analysis by the Council, is welcome and has been advocated by the Council for many years (Figure 2.8). Both techniques adjust current spending levels for future demographic and price pressures, so provide a projection based on continuing to provide existing levels of public services and welfare payments in real terms. This follows typical patterns and is consistent with Government policy that does not set out real cuts in any of these areas.

Figure 2.8: Stand-Still costs for the medium term are considerable

€ billion, year-on-year increase in current spending



Source: Department of Finance, and Fiscal Council workings. Get the data.
Notes: The Stand-Still approach estimates the costs of maintaining existing public service levels and value of welfare payments, taking into account inflation, wage increases, and demographic pressures. Core current figures relate to annual changes in the level of core current spending as per *Budget 2022*, ELS allocations represent 3% of gross voted core current spending levels as per *Budget 2022*.

The Government has outlined that for 2022, as part of the budgetary package, approximately €1.7 billion has been allocated for accommodating demographic costs, pay increases, and for maintaining existing levels of services.[25] For the later years, the government has allocated a specific amount within its medium-term expenditure forecasts, but it is unclear what costs this covers. Figure 2.8 therefore compares the Council's "Stand-Still" estimates with the annual changes in gross voted core spending over the forecast period provided in *Budget 2022* both in terms of the level of allocated spending and the total amount provided. The Government should publish a full medium-term breakdown of the various drivers of the costs of maintaining the existing level of service and the assumptions and methodologies used. This would allow a more comprehensive evaluation of the figures provided.

Spending increases in Budget 2022 would cover stand still costs, but leaves little room for other spending increases

The Council's estimates for 2023 to 2026 show that, on average, increases in core current spending of around €3.2 billion would be required to hold service provision constant in real terms – accounting for price and demographic pressures. This is considerably higher than the amount allocated for these costs in 2022 (€1.65 billion, see Table 2.4).

Given the overall spending path, this implies that room for increasing core current spending on "new" activities, beyond the existing level of service, will be narrow in the years ahead, averaging around €0.6 billion per year from 2023. The "unallocated" space the Government has provided for these years is around €1.5 billion per year. However, an additional €0.9 billion of this could be absorbed by the estimated costs of standing still. This leaves little scope for "new" current spending in the years ahead, beyond existing service levels, within the spending rule without cutting spending elsewhere or raising taxes.

Core expenditure is assumed in *Budget 2022* to grow by 5 per cent per annum over 2023–2025 in line with the Government's spending rule.[26] Core current spending is forecast to grow by 4.7 per cent on average over 2023–2025. Core capital spending is forecast to grow by 7.1 per cent on average.

[25] These stand-still costs for 2022 are low (relative to later years) as unemployment is forecast to fall quite rapidly in 2022, with more modest falls in later years.

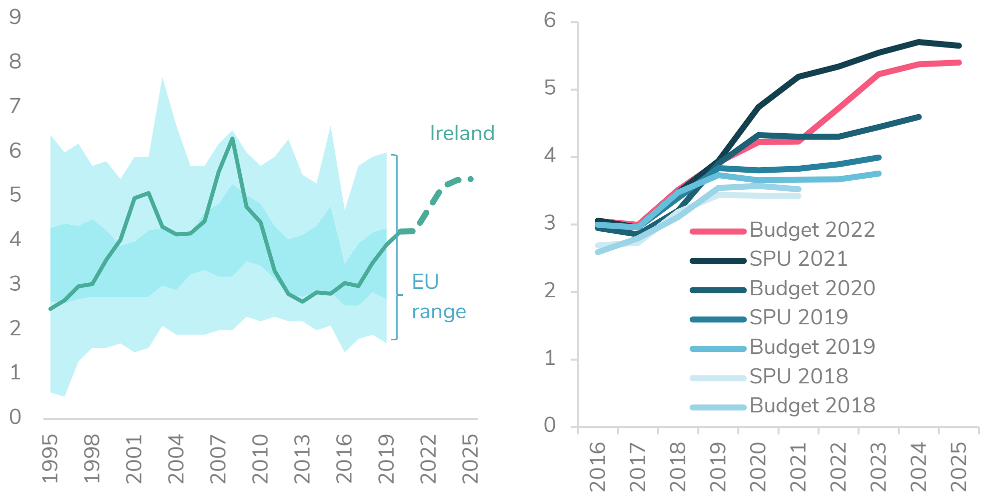
[26] *SPU 2021* forecasts assumed that core expenditure would grow by 3.5 per cent per annum in the medium term.

Figure 2.9: Capital spending

%GNI*

A. Capital spending is forecast to rise above EU norms

B. Forecast capital spending above previous plans, but lower than *SPU 2021* share



Sources: CSO and Department of Finance. Get the data.

Note: The dashed line in Panel A indicates forecasts from *Budget 2022*. The EU range shows the minimum and maximum levels of public investment as a share of national income in EU countries (GDP for all countries apart from Ireland). The darker shaded area shows the inter quartile range of EU levels of investment. Darker lines in Panel B represent more recent forecasts. *SPU 2020* and *Budget 2021* are excluded due to their short forecast horizons.

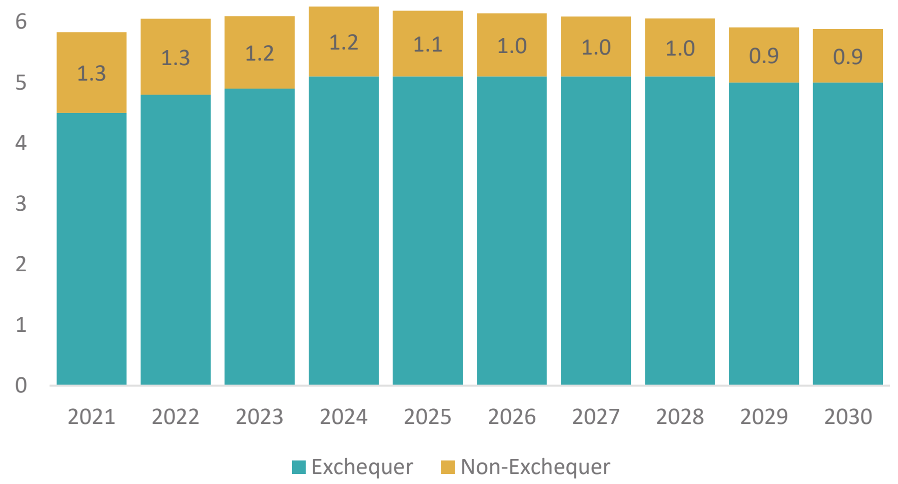
Capital spending is forecast to ramp up significantly in the coming years

While strong increases are planned, nominal general government capital spending has been revised down for 2020, 2021 and 2022, relative to *SPU 2021*.[27] This comes with the publication of the National Development Plan. The lower forecast investment for 2021 and 2022 is largely due to the 2020 outturn being revised down. The levels of investment for 2023–2025 in *Budget 2022* are similar to those forecast in *SPU 2021*. GNI* has been revised up, so the capital spending share of national income is lower than *SPU 2021*. A recently published analytical note (Conroy, Casey, and Jordan-Doak, 2021), explores in more depth many of the issues around capital spending.

[27] As noted earlier, the 2020 outturn from the Government Finance Statistics was somewhat lower than the level forecast in *SPU 2021*.

Figure 2.10: Share of Exchequer capital spending to non-Exchequer to increase

% GNI*



Source: National Development Plan 2021–2030 and Fiscal Council workings. Get the data.
Notes: GNI* is derived from the implied figures contained in the Government's National Development Plan 2021–2030.

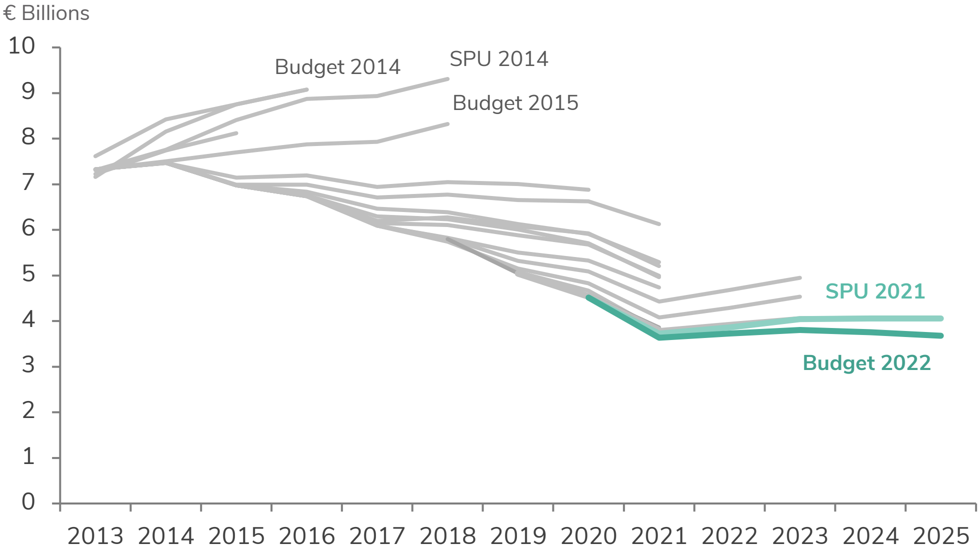
As part of the Government's National Development Plan 2021–2030, it outlined the split between Exchequer and non-Exchequer capital expenditure over the next 10 years (Figure 2.10). Exchequer capital spending rises from €9.8 billion in 2021 to €16.4 billion in 2030, staying relatively constant around 5 per cent of GNI*. However, there is less transparency around what is driving non-Exchequer capital spending, which remains constant over the forecast period at €2.9 billion per year, implying a falling share in national income.[28]

Generally, there was a lack of detailed economic information contained in the National Development Plan. While information is provided on how spending will be allocated across Departments and for some types of projects, the information remains highly aggregated and provides little detail. The NDP does show some estimates of the impact increased public investment is expected to have on the economy. Using COSMO, a structural model of the Irish economy, estimates are provided of the impact of public investment on GDP, employment and total wages. While useful, the results are highly aggregated and not very detailed. For example, no estimates are provided on the impact this investment is expected to have on the public finances, the labour market, and on specific sectors such as construction and housing. A similar lack of analysis in these areas is evident in the Housing

[28] The NDP 2021-2030 describes non-Exchequer finance as "continuing to play an important role in the delivery of infrastructure in the higher education sector".

for All strategy (Department of Housing, Local Government and Heritage, 2021).

Figure 2.11: Interest expenditure has been repeatedly revised down



Sources: Department of Finance. [Get the data.]

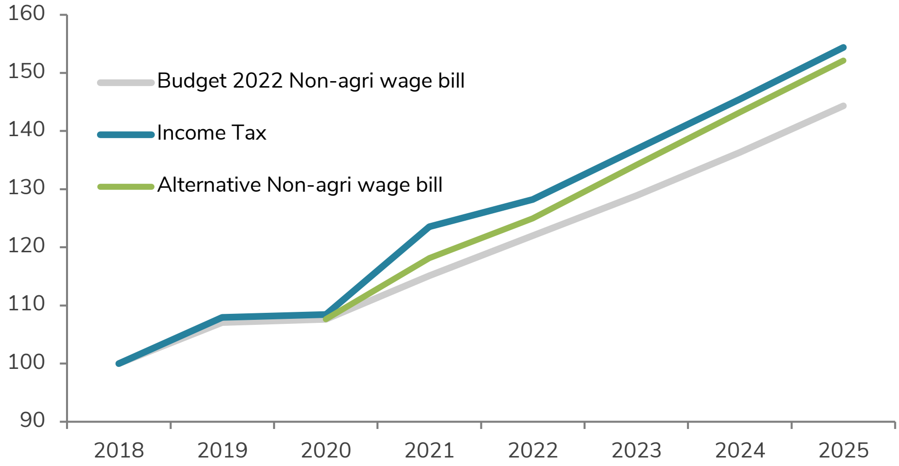
The downward revision of interest spending since *SPU 2021* is consistent with the previous pattern of repeated downward revisions to interest expenditure, reflecting both the unexpected decline in market interest rates and the cautious approach to recognising likely declines in refinancing costs. However, longer-term interest rates have risen in recent months, despite the recent change in the ECB's policy objective. This is due to higher expected inflation. This may be an indication that the interest rate cycle may be turning and that borrowing costs could begin to rise again.

As described in Section 1, *Budget 2022* forecasts taxes to rise as a percentage of compensation of employees over the medium term.[29] *Budget 2022* forecasts imply a sharp increase in the ratio for 2021 and to remain elevated thereafter. Were compensation of employees stronger than *Budget 2022* forecasts (as outlined in Figure A.3), that would imply a more modest increase in 2021, with the ratio stable and close to pre-pandemic levels over 2023-2025 (Figure 2.3).

[29] Note that the measure considered in Section 1 (taxes on income and wealth) is slightly broader than just income tax. As a result, the percentage of compensation of employees shown in Figure 1.8 is higher than that in Figure 2.3.

Figure 2.12: Income tax is forecast to grow strongly

Index, 2018 = 100



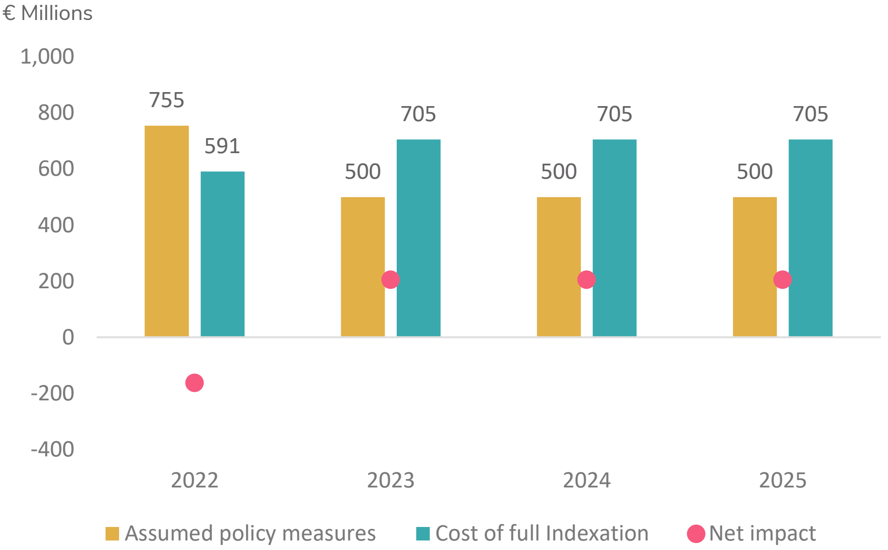
Sources: Department of Finance and Fiscal Council calculations. Get the data.

Note: Exchequer income tax forecasts from *Budget 2022* are adjusted for warehousing and repayments, so that these figures are more in line with general government treatment (75 per cent repayment is assumed). Alternative non-agri wage bill shows alternative forecasts of compensation of employees given in Figure A.3.

Budget 2022 forecasts do not explicitly assume the indexation of income tax bands and credits over the medium term promised in the Programme for Government. However, forecasts are based on €500 million of income tax reductions being introduced in each year from 2023 to 2025. If a similar approach is taken to these tax measures as in the *Budget 2022*, this amount would be broadly consistent with a partial indexation system that would have the effect of allowing the tax burden to rise modestly as incomes grow (Figure 2.13).

***Budget 2022* assumes partial indexation of income tax bands and credits over the medium term**

Figure 2.13: Assumed Income tax policy changes would modestly increase the tax burden through partial indexation.

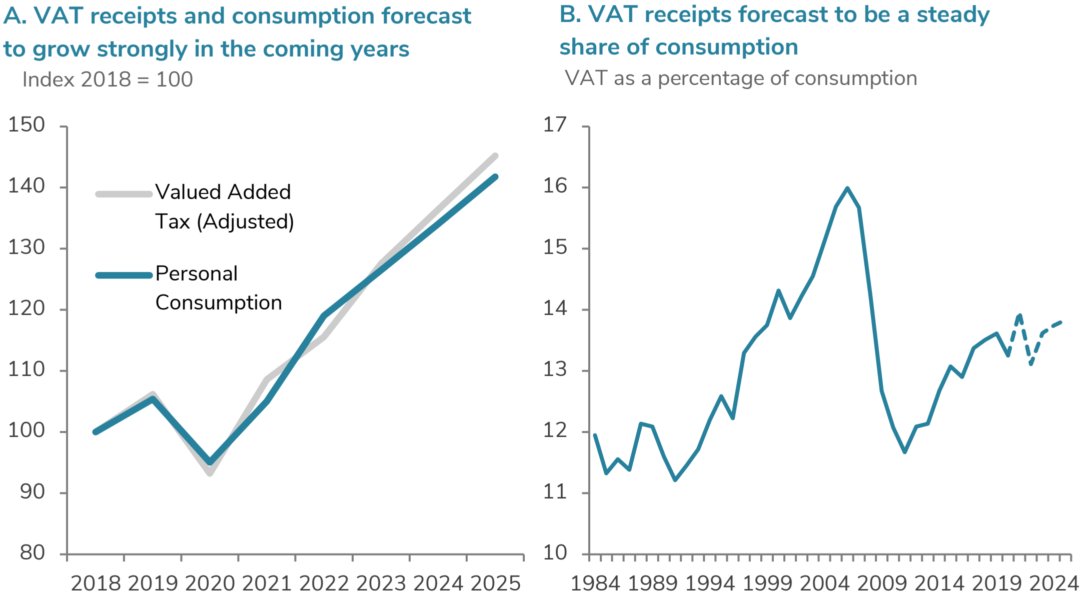


Sources: Department of Finance. [Get the data.]

Note: A net impact greater than zero indicates that assumed policy changes are less than the assumed yield from not indexing income tax bands and credits. As a result, income tax revenue would be higher than if full indexation of the income tax system were assumed.

Over the medium term, VAT receipts are forecast to grow at a similar rate to personal consumption, which is forecast to moderate after a strong rebound forecast for 2021–2022. Excise duties are also due to grow, reflecting not only consumption developments, but also policy changes, most notably the carbon tax, the rate of which is due to increase each year out to 2030.

Figure 2.14: VAT growing in line with personal consumption



Sources: CSO and Department of Finance. Get the data.
Note: In both panels, Exchequer income tax forecasts from *Budget 2022* are adjusted for warehousing and repayments, so that these figures are more in line with general government treatment (75 per cent repayment is assumed). Dashed line in Panel B shows the ratio implied by *Budget 2022* forecasts of VAT and personal consumption.

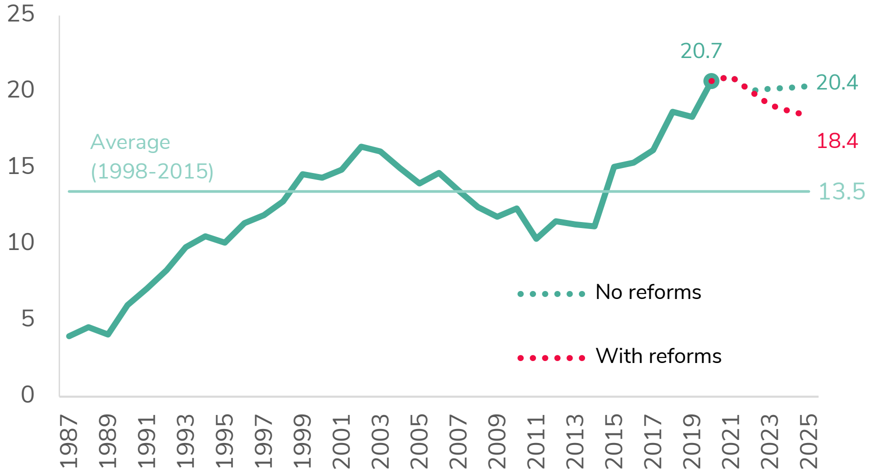
Corporation tax receipts from 2023 onward are affected by several factors. *Budget 2022* forecasts of corporation tax incorporate an assumed impact from changes to the international tax environment. The eventual impact to the level of annual corporation tax receipts is assumed to be €2 billion, as was previously the case. This estimate has been unchanged by the Department since the *Medium-Term Fiscal Strategy* was published in January 2020, despite actual and projected corporation tax receipts growing substantially in the meantime. Given that much of the increase in revenue has come from internationally oriented activities, this suggests that this cost should have increased, all else equal.

Budget 2022 incorporates a €2 billion impact on CT receipts from international tax changes

A €1 billion impact is assumed for 2023, followed by impacts of €0.5 billion in 2024 and 2025. This fall in revenues largely stems from moves to reapportion profits of global companies under Pillar 1 of the reform.

Figure 2.15: Corporation tax to fall as a share of tax revenue

Corporation tax (per cent share of Exchequer tax revenue)



Sources: CSO Department of Finance and Fiscal Council calculations. Get the data.

Note: The "With reforms" series shows how the corporation tax share is forecast to evolve in *Budget 2022* (which incorporates impacts from Base Erosion and Profit Shifting (BEPS) reforms). The "No reforms" series shows how the forecast would differ were these impacts not assumed and the forecasts were otherwise as in *Budget 2022* (hence increasing corporation tax receipts and total tax receipts relative to *Budget 2022* forecasts).

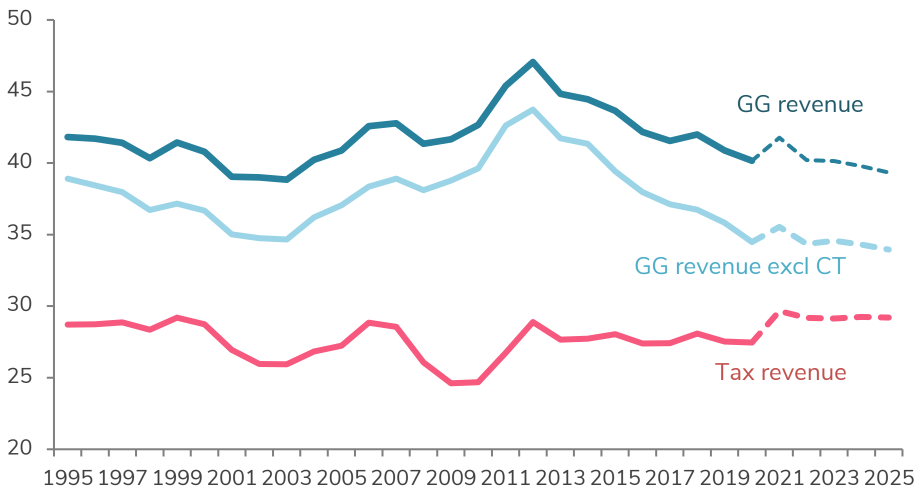
As part of *Budget 2022*, it was announced that a new corporation tax rate of 15 per cent (rather than the current 12.5 per cent rate) would apply to firms with a global annual turnover in excess of €750 million. It is expected that this change will take effect from 1 January 2023. *Budget 2022* forecasts do not incorporate any assumed positive impact to corporation tax receipts from 2023 to 2025 as a result of this new higher rate on the basis that the international agreement is not yet in place and the timing of implementation is uncertain.

The Department of Finance has not provided an estimate of the impact on revenue owing to the envisaged increase in the tax rate. If the tax base were to remain unchanged, the gain could be substantial. However, the higher rate could prompt greater efforts to avoid the tax. Furthermore, this could impact the tax base of the multinational sector on a much larger scale if firms were able to shift profits elsewhere. Given that Ireland's corporation tax rate will remain relatively low, including relative to the various rates currently applied to the income of US multinationals, it is not clear that firms would have a strong incentive to repatriate these profits.

Budget 2022 does not take into account the increased rate of CT expected in 2023

Figure 2.16: General Government Revenue forecast to fall as a share of GNI*, while tax revenue remains flat

General government revenue and Exchequer tax revenue (per cent share GNI*)



Sources: CSO and *Budget* 2022. Get the data.

Note: Dashed line indicates *Budget* 2022 forecasts.

Overall, *Budget* 2022 forecasts suggest that general government revenue will grow at a slower pace (4.7 per cent) than GNI* (5.4 per cent) over 2023–2025. As a result, the general government revenue-to-GNI* ratio falls over this period. Tax revenue, however, is forecast to grow in line with GNI* over 2023-2025 (5.4 per cent). However, non-tax general government revenue is expected to grow more slowly than GNI*.

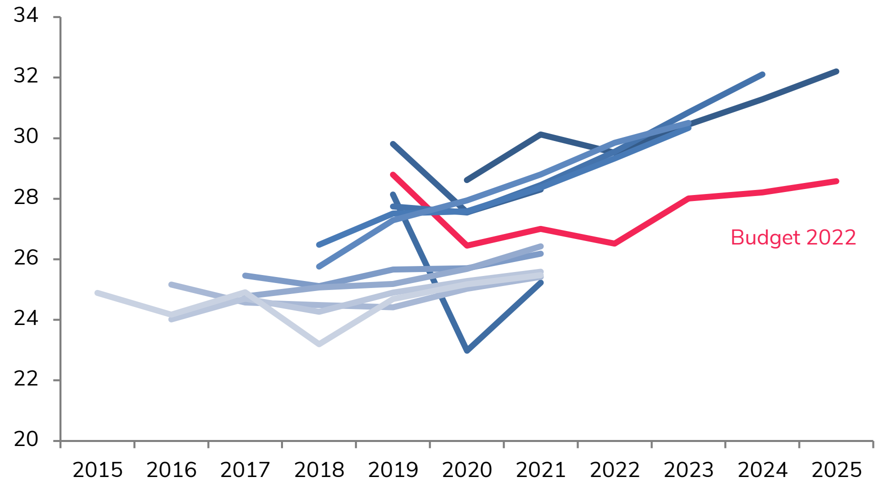
Forecasts of non-tax general government revenue look weak over the medium-term

Figure 2.17 shows recent vintages of forecasts of non-tax general government revenue. Recent forecast vintages have shown much higher growth rates and levels for this variable, particularly for the outer years of the projections.

This is an area where there is limited detail in budgetary projections. As a result, it is difficult to assess why general government revenue is falling as a share of GNI*.

Figure 2.17: Non-tax General Government Revenue forecast vintages

General government revenue minus tax revenue (€ billions)



Sources: Department of Finance. Get the data.

Note: Darker blue lines indicate more recent vintages. *Budget 2022* forecasts are shown in red.

Budget 2022 projections of revenue and spending result in an improving budget balance over 2023–2025. The forecast for 2023 sees a significant improvement in the budget balance (a deficit of €1.1 billion — a €7.2 billion improvement relative to 2022). This is driven by both increased revenue (€5.4 billion) and falling spending (€1.8 billion). By 2025, a small surplus (0.3 per cent of GNI*) is forecast.

Underlying medium-term developments in the public finances

To give a perspective on the underlying dynamics of the public finances over the medium term, Table 2.6 below compares the *Budget 2022* forecast of the level of several fiscal variables in 2025 to the last outturns before the pandemic (2019) as way of "looking through" the impact of the pandemic.

The main feature over this period (2019 to 2015) is the 80 per cent growth in public investment spending (rising 10 per cent annually, on average). The nominal increase in public investment is €6.8 billion and takes the share of public investment national income to over 5 per cent. Despite this increase in public investment, revenue and spending both grow at an annual rate of around 4 per cent so that the budget balance as a share of GNI* only slightly declines.

However, the overall picture has a number of moving parts that contribute to accommodating the increase in investment without a deterioration of the budget balance. On the spending side, current primary spending grows somewhat more slowly than the economy as a whole, expanding by 5 per cent less over the period despite population ageing. Lower interest costs as a share of GNI* also help.

General government revenue and spending are forecast to make up a lower share of GNI* in 2025, compared to 2019

Table 2.6: Comparing 2025 and 2019

2025–2019

	p.p change in GNI*	€ billion change	% Change	Annualised growth rate
GG Revenue	-1.5	22.8	25.8	3.9
Tax Revenue	1.7	23.0	38.8	5.6
Non tax revenue	-3.2	-0.2	-0.7	-0.1
IT	1.0	9.9	43.0	6.1
CT	0.3	4.3	39.3	5.7
VAT	0.3	5.6	36.7	5.4
Other tax revenue	0.0	3.3	31.7	4.7
GG spending	-1.0	23.7	27.5	4.1
Gross Fixed Capital Formation	1.5	6.8	80.0	10.3
Interest	-1.0	-1.4	-31.3	-6.1
Current primary spending	-1.5	18.4	25.1	3.8
GG Balance	-0.5	-0.9		
Level of GNI*		66.3	30.8	4.6

Sources: CSO, and *Budget 2022*.
Notes: Changes are in the format of the 2025 level minus the 2019 level. As a result, positive values indicate a variable increasing over the period or taking up a larger share of GNI* than was the case in 2019. The annualised growth rate shows what rate of growth applied for every year from 2019 would yield the 2025 level forecast in *Budget 2022*.

On the revenue side, tax revenues would rise primarily because of strong nominal growth, but some tax headings are forecast to grow even faster than GNI*. Income tax sees the biggest increase both in nominal terms (€9.9 billion) and as a share of national income (1 percentage point increase in GNI*).

Corporation tax contributes close to 20 per cent of the total revenue increase, slightly less than its current share of revenues but still a large increase from an uncertain source: the corporation tax increase is equivalent to almost two-thirds of the increase in public investment.

By 2025, general government revenue is slightly below its 2019 share of national income (Figure 2.16). This is the case both when corporation tax is included or excluded.

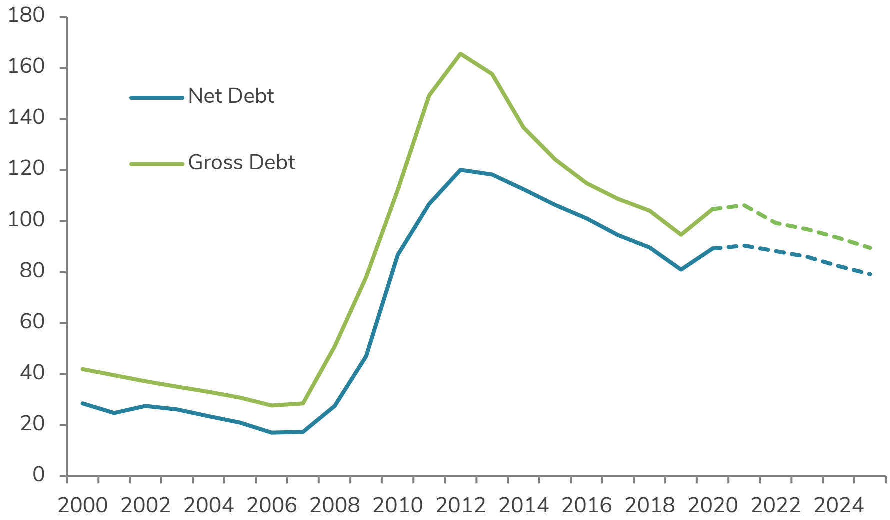
Government debt

With the low interest environment and the improving general government balance, both gross and net government debt are projected to fall at a steady pace (Figure 2.18). By 2025, gross general government debt is forecast to be 89.5 per cent of GNI*. This is a significant fall from the level projected for 2021 (106.2 per cent).[30] However, this remains a high debt level. As a result, the public finances would remain exposed to increases in borrowing costs.

Government debt is projected to fall, yet remain at elevated levels

Figure 2.18: Debt ratios set to fall but to remain at high levels

Gross and Net General Government Debt to GNI*



Sources: CSO and *Budget* 2022. Get the data.
Note: Dashed line indicates *Budget* 2022 forecasts.

[30] In net terms, the 2021 level is forecast to be 90.4 per cent, falling to 79 per cent by 2025.

2.4 Risks to the outlook

In the short term, the macroeconomic and public health environments pose major risks to fiscal projections in *Budget 2022*. Were more stringent public health restrictions required again, that would imply higher levels of spending for longer, as well as depressing revenue, although the contingencies built into the budget provide significant margin for manoeuvre. The main fiscal risks are listed in Section S4, which contains a fiscal risk matrix outlining potential likelihoods and impacts.

In the medium term, significant risks to the fiscal forecasts in *Budget 2022* arise both on the spending and revenue sides. On the spending side, there is a risk that some of the spending introduced in response to the pandemic that is currently considered temporary turns out to be more long-lasting than currently assumed. This could arise in the area of health for example, where there was a significant increase in spending in response to the pandemic and had persistent overruns in the years prior to the pandemic.

Casey and Carroll (2021) examine many of the key issues related to health spending in Ireland. They find that poor staff planning is responsible for many of the overruns in recent years. While some efforts have been made to address major shortcomings in planning, basic information is still severely lacking, including for plans around Sláintecare. They suggest that more realistic, five-year budgeting could yield significant improvements.

Expenditure increases in core current spending made as part of *Budget 2022* should accommodate the costs required to maintain current service levels and to index social payments. However, there is little room implied for further increases in spending measures or improvements to services. This could make it challenging for the Government to stick to its spending rule.

A more specific risk to spending forecasts relates to capital spending. *Budget 2022* forecasts a significant increase in capital spending. One risk suggests that ramping up capital spending by such a large degree may actually be difficult to achieve due to capacity constraints in construction for example, implying lower levels of expenditure (Conroy, Casey and Jordan-Doak, 2021). However, the same constraints could be hit sooner as ambitious objectives on housing and climate action are pursued simultaneously. This scenario would likely result in higher prices and lower real output. Additionally, effectively managing the costs of large projects in the government's new NDP could be challenging, with overruns an obvious risk. Risks to the budget from the higher costs could be managed by undertaking fewer projects within a given budget or slowing down their implementation, but this would still imply lower benefits.

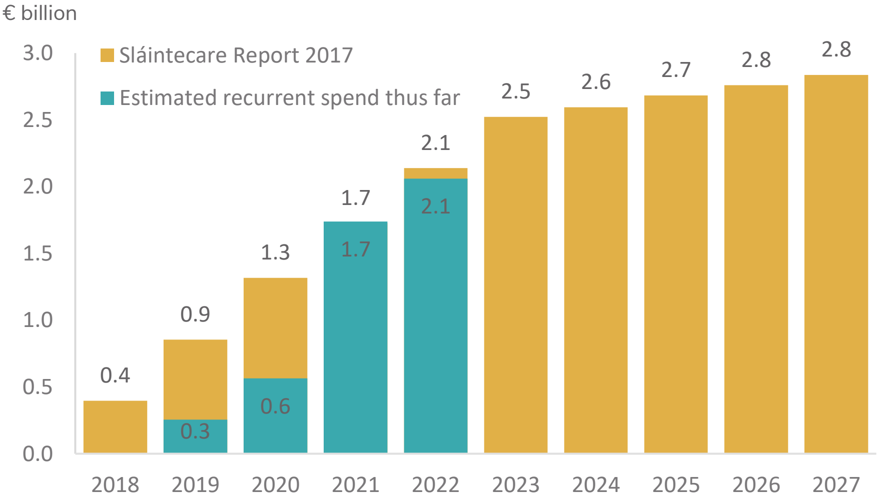
The costs and implementation of major policy commitments on health and climate change remain a key risk and an area of major uncertainty.

Regarding healthcare, the fiscal impact of Sláintecare remains unclear. As part of *Budget 2021*, over €1.1bn was made available to fund the implementation of the programme, but this detail was released only several months following the publication of the Budget. Casey and Carroll (2021) outline several areas where of information on health spending and planning is lacking.

The Department of Health has indicated that the contribution in *Budget 2022* towards Sláintecare was €0.3 billion, which represents the entire amount of new resources allocated to the Department as part of *Budget 2022*. The estimated cumulative total of funding directed towards the implementation of Sláintecare since 2019 is just over €2 billion (Figure 2.19).

Costings of implementing Sláintecare are old and hence unclear

Figure 2.19: Annual spending arising from Sláintecare is highly unclear but looks set to catch up to earlier plans



Source: Sláintecare Report 2017; Department of Health; and Fiscal Council workings. Get the data.
Notes: The "estimated spend thus far" represents the increase in recurrent annual health spending that is associated with Sláintecare as derived from budget day plans. The actual increases may vary, however, as these are plans rather than outturns, and the figures are not precise, in that costs tend to be mixed in with the costs of other more general expansions in publicly provided health services.

The most recent cost estimate available, released in 2017, indicated that the reforms to healthcare provision under the programme would entail an annual cost of €2.8 billion. It is unclear as to whether this estimate remains indicative of the overall implementation costs expected by the Government. What progress previous funding has delivered towards the implementation of the programme is also unclear.

Fiscal implications of transitioning to a low carbon economy are highly uncertain

As for transitioning to a lower-carbon economy, the fiscal and economic costs remain uncertain and represent a significant risk. Government has committed to reducing Ireland's emissions levels by 51 per cent by 2030, to be achieved through a combination of 'green' spending and revenue-raising measures such as carbon taxes.[31]

The Government's new Climate Action Plan uses around half of expected carbon tax revenues for measures over the period 2021-2030. From this amount, €5 billion is to be invested in enhancing energy efficiency with the remaining amounts to protect those on lower incomes from rising carbon prices and to assist with decarbonisation of the agricultural sector through current spending measures. The latter amounts represent new current spending initiatives outside of the NDP. Over the next decade, this amounts to a total amount of around €9.5 billion. This is factored into the Government's medium-term budgetary projections. For context, the main allocations in 2022 as part of the carbon tax expenditures of €0.4 billion are €0.2 billion for investment in residential and community energy efficiency and €0.2 billion for social protection measures.

While the capital investments associated with climate change appear to have been built into the NDP (particularly with energy investments), other spending needs have not been addressed. This includes current spending for incentives for changes in consumer behaviour and encouraging home energy efficiency. There is also little detail on the extent to which behavioural changes from the public are required to meet emissions targets, should this fall short Government expectations, further costs may be incurred. In addition, compensation may be needed for people and activities that are hit by the climate transition.

Collectively, on the spending side there is a risk that the costs of meeting climate-change targets run higher than detailed above while revenue-

[31] These emissions targets are relative to 2018 levels.

raising measures may fail to generate sufficient receipts or influence the desired behavioural changes in firms and households. If behavioural changes do occur, this would have negative implications for receipts such as excise duties, vehicle registration tax, carbon tax and VAT.

Addressing these generational challenges could be made more difficult as the Government attempts to tackle both issues simultaneously, alongside pressure from an ageing population on pensions costs. Healthcare reforms could be made more costly by a history of above-average price increases and cost overruns, while investment in climate change will require competing for construction inputs already in high demand, potentially leading to higher costs and lower real output.

Increased pension costs from an ageing population will have a significant impact on the public finances

Given that little space is implied by the Stand-Still estimates relative to how the Government expects current spending to evolve over the coming years, there is a risk that expenditure pressures make it challenging to implement the Government's recently adopted spending rule.

There are risks to corporation tax receipts in both directions. The Government has recently agreed to the OECD's proposal of a minimum global tax rate. The increased (15 per cent) rate presents upside risks to receipts assuming larger firms' pre-tax profits are unchanged and firm activity remains unchanged in the State. However, if the change to the tax rate proves disorderly, where firms suffered from reduced turnover or chose to relocate, revenues could be negatively affected.

Significant upside and downside risks apply to CT receipts

The Fiscal Council's latest estimates suggest that €3.2 to €6.4 billion of corporation tax receipts could be considered "excess" (see Supplementary information S7). Corporation tax receipts in Ireland are highly concentrated, with the top ten companies accounting for 51 per cent of net corporation tax receipts last year. A separate Fiscal Council (2021a) analysis suggested that five major foreign firms exiting Ireland could reduce Corporation tax receipts by €3 billion.

Furthermore, there are no indications as to any potential plan for reducing overreliance on corporation tax receipts for overall revenue intake. Like the share of corporation tax in overall revenue, the State's exposure to this risk has become larger: the impact of a sharp reversal is becoming potentially more severe. Increasing exposure to specific sectors adds to volatility and risk around corporation tax receipts.

Fiscal Stance

The Government needs to deliver on its new strategy

3. FISCAL STANCE

The Government needs to deliver on its new strategy

With *Budget 2022*, the Government stuck to the budgetary package of €4.7 billion that it had set out in the *Summer Economic Statement* published in July 2021. As the Council noted in its *Pre-Budget 2022 Statement*, this package looked to be at the limit of what is prudent. However, taking account of the improved growth outlook, the final tax package, and the forecast increases in broader general government spending, the overall pace of expansion is broadly in line with the underlying potential growth rate of the economy. This should help to ensure that the underlying (structural) deficit — once temporary factors are excluded — would remain broadly close to balance. In turn, this should help set the debt ratio on a steady path towards safer levels.

The Government stuck to the package set out in July

For the medium term, *Budget 2022* presents a clearer sense of the Government's plans for the coming years than in previous budgets. There are three key changes to budgetary plans set out in the *SES* and implemented in a Budget for the first time. First, the Government has provided more credible spending forecasts that allow for the cost of maintaining existing supports amid demographic and price pressures. Second, it has introduced a spending rule that seeks to limit permanent Exchequer spending increases to an average of 5 per cent annually, broadly in line with the economy's trend growth rate. Third, it has set out public investment plans to 2030 in a new National Development Plan, published in October. In addition, the Government has said that it aims to lower the debt ratio and not borrow to finance current spending over the medium-term.

Budget 2022 presents a clearer sense of the Government's plans with the 5% Spending Rule and more realistic spending forecasts

These changes have the potential to set the public finances on a prudent path. With revenues expected to recover strongly, the plans should allow the Government to respond to investment needs in the areas of housing and climate change, bring public investment to record levels, and maintain existing levels of services, without providing excessive stimulus to an already fast-growth outlook. In addition, they allow for a steady pace of debt reduction averaging close to 3 percentage points for the net debt-to-GNI* ratio annually over the medium term. This would bring the gross debt ratio to 89.5 per cent of GNI* by 2025 and the net debt ratio to 79.2 per cent.

These changes have the potential to set the public finances on a prudent path

However, Ireland has a poor track record of sticking to budgetary plans and there are still risks and unknown costs associated with large spending commitments. It remains unclear what the cost to the Government will be in halving Ireland's greenhouse-gas emissions by 2030. It is possible that budgeted amounts will fall short of what is required, particularly for current spending needs. In addition, commitments to major Sláintecare reforms in health are not budgeted for beyond next year. The space available for funding new current spending initiatives on a sustainable basis each year without raising taxes or scaling back other spending is very limited.

There is also a need to address the over-reliance on corporation tax receipts built up in recent years. The concentration of corporation tax receipts coupled with their ongoing volatility and vulnerability to international tax developments is a source of serious concern. To help to limit or reduce this over-reliance, the Government should allocate any further excess corporation tax receipts, including increases due to the rise in the minimum corporation tax rate to 15 per cent, to the Rainy Day Fund.

The Government needs to deliver on its plans and reinforce its new 5% Spending Rule

If the Government's strategy is to be realised, the Government will need to deliver on its plans. The fact that medium-term Departmental spending ceilings have yet to be published undermines the new rule (Section 4.1). To support the plans, the Government should also set its new spending rule on a stronger footing. This means giving it legislative backing, while also reinforcing the rule so that it (1) is backed by departmental spending ceilings; (2) is better aligned with sensible estimates of real potential output growth; (3) captures non-Exchequer spending and the impact of tax changes, which it currently does not; and (4) has a link to debt-to-GNI* targets. This would better align it with the EU spending rule, the Expenditure Benchmark, while correcting for distortions in GDP (see Section 1), measurement problems associated with potential output and possible sustained changes in inflation.

If the Government's medium-term spending plans exceed *Budget 2022* plans, tax increases or spending savings elsewhere may be needed to keep the public finances on a safer path. This would ensure that the Government's planned steady reduction in the debt ratio, averaging close to 3 percentage points of GNI* per annum, would be maintained. It would ensure that the Government's new 5% Spending Rule and Existing Level of Services initiatives continue to guide sound management of the economy and public finances.

If net spending exceeds *Budget 2022* plans, tax increases or spending savings elsewhere may be needed to keep the public finances on a safer path

The Council's assessment of the fiscal stance is informed by (1) a broad economic assessment that considers appropriate management of the cycle as well as the sustainability of the public finances; and (2) an assessment of compliance with domestic and EU fiscal rules.

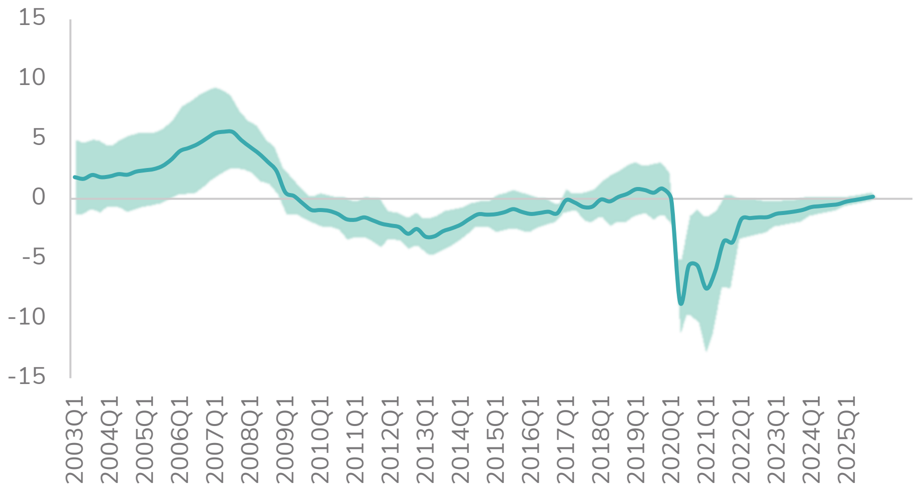
3.1 The fiscal stance in 2021

The pandemic led to a substantial contraction in the domestic economy, with domestic GVA falling by 8.7 per cent in 2020. Activity has rebounded since then, however, as restrictions have eased, and vaccinations progressed. This is corroborated by high-frequency data (Section 1).

Activity has rebounded

Figure 3.1: Ireland's economy fell well below its potential in 2020

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



Sources: Fiscal Council workings (based on *Budget* 2022 forecasts). Get the data.

Notes: The figure shows a range of output gap estimates (the shading) and the mid-range of these estimates (the line). The estimates are produced using a variety of methods based on the Council's supply-side models (Casey, 2019) and the Department's forecasts. Given distortions to standard measures like GDP and GNP and the relative importance of domestic activity to the public finances, the measures focus on domestic economic activity, including quarterly Domestic GVA.

While there are risks around the path for growth, the *Budget* 2022 estimates imply that the economy has been operating well below its capacity since the pandemic started. However, it is projected to recover most of its normal levels by mid-next year. At that time, the gap between actual and potential economic activity is estimated to be about –1½ per cent as compared to about –8½ per cent in Q2 2020. The projections imply a more gradual recovery thereafter, with the gap closing in 2025.

The uneven sectoral nature of the shock means there is uncertainty around long-term supply-side impacts that might hamper growth. Some sectors, such as tourism and hospitality, remain relatively depressed, and it is unclear to what extent activity will recover in these areas. The fact that domestic demand has recovered to its pre-crisis trend indicates the strength of the recovery elsewhere (Section 1). Targeted supports were appropriate in supporting the economy through the downturn.

Some sectors remain relatively depressed

The Council assesses that the Government was right to pursue a countercyclical fiscal policy in 2020 and 2021 — providing exceptional budgetary support amid the downturn. The scale of the government supports has been unprecedented in modern times. The fiscal supports introduced are estimated to have boosted economic activity, in real GNI* terms, by about 5 percentage points, halving the estimated contraction in real GNI* last year from what it might have been in the absence of these supports (Fiscal Council, 2020a).

Exceptional and targeted supports were appropriate

The Council therefore assesses that the Government's response to the crisis, in terms of the sizeable temporary supports funded by large deficits, was prudent and necessary to support the economy. The temporary supports provided in 2020 and 2021 were costly but they were reasonably well targeted. They helped to avoid lengthening and deepening the economic crisis that unfolded. The approach was also supported by monetary policy at the Euro Area level that kept interest rates at low levels.

While the Council assessed that the temporary supports were welcome, the Government also introduced large unfunded permanent increases in spending in *Budget 2021* — the size of these increases was not prudent. The increases reflected plans for large increases in public sector staff numbers and they were set out without long-term funding to offset them.

However, the scale of permanent increases in spending for 2021 now look set to be smaller than had been envisaged, while the spending increase in 2020 was also revised down. The downward revision in 2020 was mainly due to lower investment spending. The planned increase for 2021 is now also €3 billion less than had been set out previously. This is mainly driven by lower increases in current general government spending, now estimated to rise by €2.3 billion less than planned when excluding interest costs and one-offs such as Covid-related amounts. Public investment is projected to expand by €0.6 billion less than previously planned.

The downward revisions to spending increases set out for 2021 are entirely in areas outside of the Exchequer where there is virtually no transparency. These areas account for about one-fifth of overall general government spending. They include spending by local government (including approved housing bodies), non-commercial semi-state bodies (like Irish Rail, Irish Water, RTÉ, Solas, Tusla, the aggregate institutes of technology, etc), and

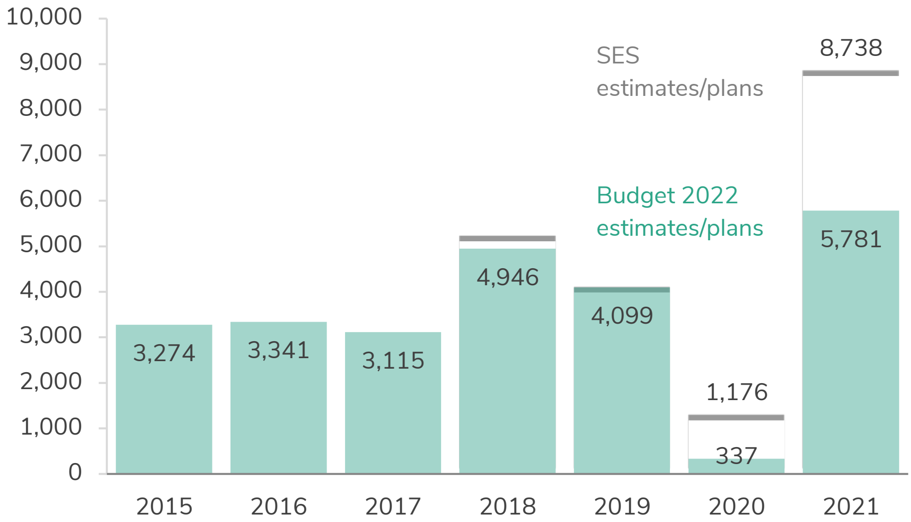
Extra-Budgetary Funds (such as the Irish Strategic Investment Fund). The Council has repeatedly called for more transparency to be shone on these areas in budgetary publications, but this has still not been addressed adequately. The Department of Finance has committed to providing more information on these areas in the forthcoming Stability Programme Update in April 2022 and this needs to be delivered on.

Downward revisions to spending lessen the risks to fiscal sustainability

The downward revisions to spending lessen the risks to fiscal sustainability. The scale of unfunded permanent spending increases set out in *Budget 2021* are large at €5.8 billion (Figure 3.2). These also came amid sizeable temporary spending measures for Covid. However, the impact on fiscal sustainability is moderated by the downward revisions to permanent spending increases for both 2020 and 2021. Moreover, part of the expansion in 2021 is likely to reflect a catch-up in spending that was supressed in 2020 due to logistical challenges associated with the pandemic. Taken together, the average €3.1 billion expansion over the two years, as compared to €5 billion previously set out, is now better aligned with sustainable increases in the economy and government revenues.

Figure 3.2: Permanent net spending increases smaller than first signalled

€ millions, net policy spending increases



Sources: CSO; Department of Finance (SES and Budget 2022); and Fiscal Council workings.
Notes: Net policy spending is a measure of spending that attempts to assess the Government's overall fiscal policy stance. It represents overall general government spending, excluding temporary factors like one-offs, and spending on unemployment benefits that are not likely to be long-lasting. It also recognises the role of tax changes; that is, a rise in net policy spending is offset by tax-raising measures but is added to by tax cuts. Get the data.

3.2 The fiscal stance in 2022

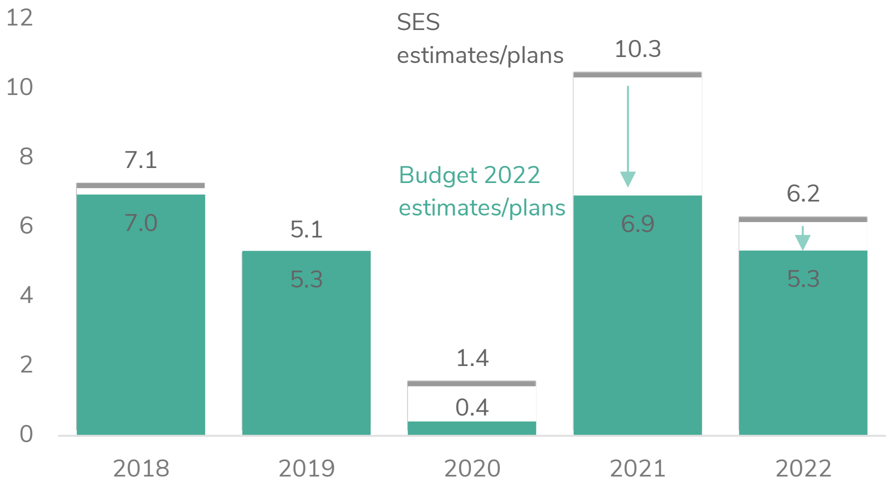
For 2022, the Government stuck to its planned €4.7 billion budgetary package as had previously been set out in the *Summer Economic Statement*. The package included €1.6 billion to maintain the existing level of public services, an increase of €1.1 billion in government investment, and an additional €1.45 billion in new current spending measures. The Government also raised tax allowances to take into account inflation and undertook a few other tax changes.

The overall expansion of net policy spending at 5.3 per cent is in line with the Government's 5% Spending Rule and estimates of the potential growth rate of the economy. In addition, a temporary spending amount of €4 billion of Covid contingency reserves was set out for 2022, which is prudent.

The overall expansion in net policy spending is in line with the new 5% Spending Rule and estimates of potential growth

Figure 3.3: Plans more moderate than previously thought

% change in net policy spending



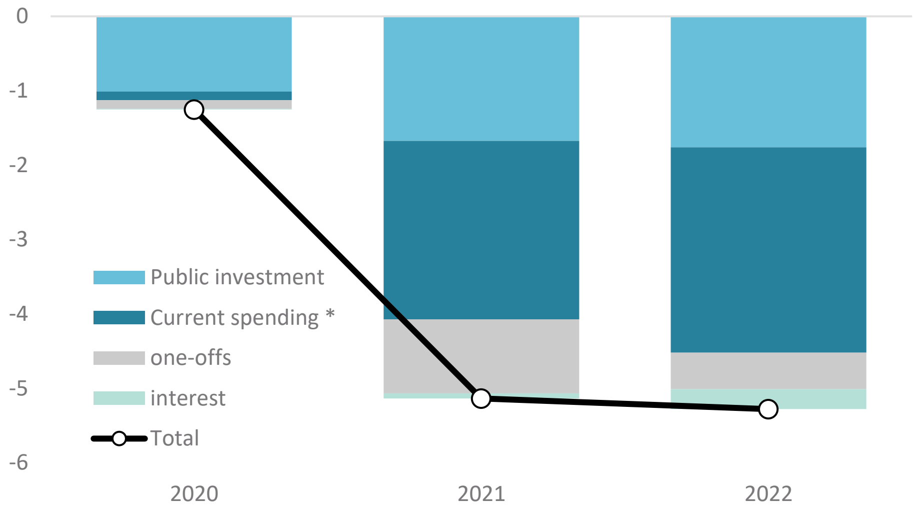
Sources: CSO; Department of Finance (SES and Budget 2022); and Fiscal Council workings.
Notes: Net policy spending is a measure of spending that attempts to assess the Government's overall fiscal policy stance. It represents overall general government spending excluding temporary factors like one-offs and spending on unemployment benefits that are not likely to be long-lasting. It also recognises the role of tax changes: that is, a rise in net policy spending is offset by tax-raising measures but is added to by tax cuts. Get the data.

The budgetary expansion for 2022 is more moderate than was thought to be the case at the time of the *Summer Economic Statement*. In summer, the Government set out plans that indicated a permanent budgetary expansion at what appeared to be a rate of 6.2 per cent (Figure 3.3). This is when measured on the basis of net policy spending — a measure of underlying spending that attempts to assess the Government's overall fiscal policy stance by (a) excluding temporary items and (b) recognising the impact of tax cuts/increases. The Council had assessed this rate of expansion as being at the limit of what is prudent. However, the package set out on Budget Day amounts to an actual increase of 5.3 per cent, which is more in line with sustainable growth rates for the economy and government revenues. Moreover, updated estimates of government expenditure for 2020 and 2021 highlight that the rate of permanent spending increases in recent years have turned out to be less than was initially assessed (Section 3.1).

Spending for 2020 and 2021 was revised down and a more moderate budgetary expansion was introduced for 2022

Figure 3.4: Lower-than-expected spending

€ billions revisions to general government spending suggested by Summer Economic Statement



Sources: CSO; Department of Finance (SES and Budget 2022); and Fiscal Council workings.
Notes: This analysis shows the difference between the Council's estimates of spending projected using the incomplete data provided in the *Summer Economic Statement* with the more comprehensive estimates set out in *Budget 2022*. * Current spending here refers to total general government expenditure less gross fixed capital formation, interest and one-off items. Get the data.

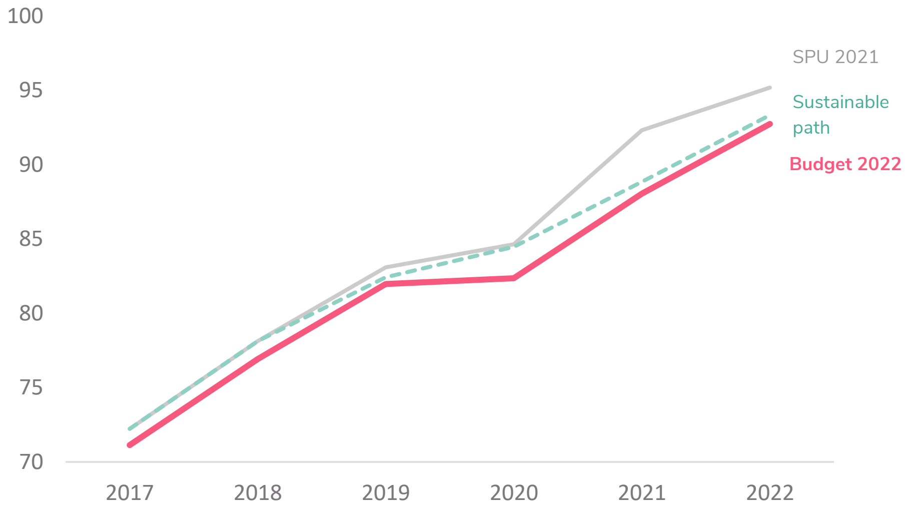
The lower-than-planned net policy spending in 2022 reflects two key factors. First, the spending base is lower due to underspends, mainly in 2021, both in current and capital spending (Figure 3.4). Second, the income tax policy changes for 2022 broadly matched the cost of indexing income tax bands and credits, but did not reduce revenues by much more, which the *Summer Economic Statement 2021* could have been interpreted as indicating. Third, current spending is projected to rise by slightly less in 2022 when assessed on a broader general government basis. That is, Exchequer increases are unchanged from SES indications, but the broader general government figures show a slightly slower pace of increase.

When the revisions to past years are considered together with the slightly less expansive measures for 2022, the overall trajectory for the public finances measures is more sustainable (Figure 3.5). The Council therefore assesses the budgetary plans to be conducive to prudent economic and budgetary management.

For 2022, targeted supports may need to continue to support a transition away from areas that might never recover previous levels of demand. However, the benefits and costs of any such measures need to be carefully assessed in the light of the recovery.

Figure 3.5: Net spending path better aligned with sustainable increases

€ billion, policy spending



Sources: CSO; Department of Finance forecasts; and Fiscal Council workings.
Notes: Policy spending is general government expenditure less interest costs, one-offs, and the estimated costs associated with cyclical unemployment. The "sustainable" increases assume that spending grows in line with potential output and actual price inflation. Get the data.

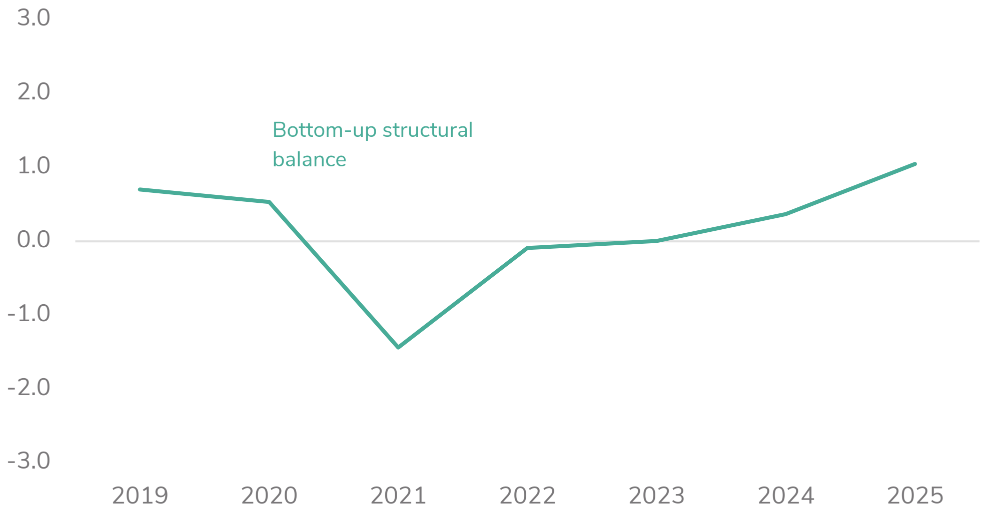
The less expansive measures for 2022 leaves the estimated structural balance position — the underlying budget balance when corrected for temporary factors — better off. Ireland entered the pandemic with a structural balance that was reasonably close to balance. With a moderate expansion in 2022 now planned, the structural position should remain broadly balanced (Figure 3.6).

The Government's plans set the public finances on a more sustainable path, but high debt ratios mean there remains a high degree of uncertainty

In turn, this should help set the public finances on a more sustainable path for beyond 2022. The net debt ratio should stabilise this year and start to fall steadily after 2022. However, with debt ratios already high, there remains a high degree of uncertainty around the path for debt.

Figure 3.6: The underlying budgetary position is close to balance

% of GNI*, structural balance



Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.

Note: Figure shows the Council's bottom-up estimate of the structural balance. Potential output is assumed to grow at 3 per cent over 2021 to 2025. Inflation forecasts are based on the Department of Finance's *Budget 2022* forecasts. See Box I of the May 2021 *Fiscal Assessment Report* for further details.

3.3 The Government's medium-term fiscal stance

The Government's overarching budgetary strategy, as stated in *Budget 2022*, is to slow the pace at which debt is accumulated so that the debt ratio is put on a downward path over the medium term. This is a more ambitious and welcome approach than the objective set out three months earlier with the *Summer Economic Statement*, when it was noted that the objective was "to stabilise, and reduce slightly, the debt-income ratio in the coming years". It is also more consistent with the original commitments set out in the *Programme for Government*. Given the high level of government debt, this move towards reducing it is welcome and should help to ensure the sustainability of the public finances and maintain scope to run countercyclical policy in future downturns. Longer term challenges, including aging pressures, remain, which will put pressure on deficits and debt ratios.

Budget 2022 sets out plans to reduce debt ratios to safer levels helped by the new "5% Spending Rule" and more credible spending forecasts

The more ambitious approach to reducing the debt ratio is a consequence of the Government keeping its medium-term spending plans broadly unchanged in line with its new 5% Spending Rule. As a result, the faster pace of economic growth and the growth in revenues forecast in *Budget 2022* is planned to be used to reduce the debt ratio at a quicker pace than was set out in previous plans. While the Council assessed in September's *Pre-Budget Statement* that the Government's plans to run significant deficits during a period of strong growth was risky, sticking to the spending rule achieves a more prudent fiscal stance.

The Government has made significant steps towards developing a credible fiscal plan as first committed to in the Programme for Government one year ago. Compared to April's *SPU*, it has set out more realistic medium-term spending forecasts that allow for the costs of maintaining public supports and services in real terms; it commits to the new 5% Spending Rule; and it shows some evidence that the fiscal rules are likely to be complied with. As Table 3.2 shows, these steps have led to a more favourable assessment by the Council as regards the quality of the Government's medium-term plans. Previously, its plans were assessed as having made marginal or no progress overall, but now the overall assessment is of some progress and certain key areas have clearly been improved on.

However, it is unclear what costs of Sláintecare and climate change are and whether budget plans factor them in

However, there is an urgent need for the Government to outline the costs of meeting its health and climate objectives. It is still not clear how the Government's budgetary plans address major policy commitments such as the costs of Sláintecare reforms in health and measures required to achieve climate change objectives. While the new National Development Plan appears to cover significant capital spending needs, there may be significant additional costs to the State, particularly in encouraging the switch to electric vehicles and improving home energy efficiency. More detail is required on future plans and their expected impact and cost.

Table 3.2: Significant steps towards credible fiscal plans have been made

Objective	Budget 2022	Council calling for this since	Progress
Present five-year-ahead forecasts	Four-years-ahead	Nov-17	Mostly there
Base projections on realistic spending plans	Much more realistic than previous rounds, and Budget 2022 accommodates Stand-Still costs	Jun-16	Mostly there
Commit to medium-term fiscal objectives	With the spending rule, more formal numerical targets introduced, but need development	Nov-17	Mostly there
Consider measures to strengthen fiscal framework	Spending Rule and Existing Level of Services are excellent initiatives but can be improved further	Nov-17	Some
Provide transparent costings of major policy changes	Still not clear if Major Programme for Government policies including Sláintecare are factored in	Dec-20	Some
Show how rules will be complied with	Document sets out structural balances that appear compliant, but some areas are overlooked	Dec-20	Some
Indicate how taxes would be adjusted if needed	No information on this, but Tax and Welfare Commission established	Dec-20	Limited
Make non-Exchequer forecasts more transparent	Marginal improvement in transparency shown	Nov-19	Marginal/none
Clarify how the Rainy Day Fund will be used in future	No mention of it	Jun-16	Marginal/none
Overall progress			**Some**

Notes: Diagonal shading shows how the Council's past May 2021 Fiscal Council (2021a) assessment was revised up.

The spending rule could be developed along the lines set out in the Council's Pre-Budget Statement (Box B). Three key areas to improve on for the spending rule are to:

Improve coverage

Include non-Exchequer spending

Recognise tax cuts

Improve calibration

Set the 5% limit wth reference to potential output

Clarify relationship to debt rule

Give statutory footing

Set in legislation and link to Department spending ceilings

The Government could make substantial progress with its medium-term planning with these reforms.

First, by giving the rule a strong statutory footing and setting it in legislation, the Government could ensure that the 5% Spending Rule becomes a cornerstone of fiscal policy. The rule could be added to the *Fiscal Responsibility Act 2012*, with a comply and explain requirement, aligning it with the approach for other fiscal rules. In the recent past, Irish governments have developed debt rules that have unfortunately been consigned to history shortly after being introduced. In those cases, legislative underpinnings were missing and the rules were soon forgotten. The legislative requirement would both mean that the rule has to be specified more clearly and also that it would be harder to ignore, although ultimately the Government could legislate to get rid of it.

The medium-term plans could be reinforced by developing the new 5% Spending Rule

Second, widening the spending rule to recognise tax changes and non-Exchequer spending, currently not included, would help to ensure a sustainable path for the public finances. Assessing it on a general government basis would be more appropriate. It would also prevent other budgetary measures outside the scope of the spending rule undermining it as an effective anchor.

Third, considering the 5 per cent limit with respect to potential output and debt targets as the Council has previously recommended would also improve its foundations and avoid locking in unsustainable policies. These changes should rely on modified GNI (GNI*) as a denominator and the Department's preferred estimates of the cycle adjusting for issues with the denominator (Section 1).

Fourth, giving clear timeframes, such as annual targets would allow for a more meaningful debt target. As it stands, the debt objective is only vaguely defined.

Fifth, the rule should be backed by projections for consistent departmental ceilings. Such ceilings were not included with *Budget 2022* in what was a bad start to how the rule is operationalised. This is at odds with past practice, over 2013 to 2019, when these ceilings would have been published with the Budget itself rather than in late-December as happened last year.

The combination of the new 5% Spending Rule and the allowance for maintaining "Existing Levels of Services" helps to make budgeting more credible. This responds to the Council's recommendations that "Stand-Still" costs — the costs of maintaining public services and supports in real terms, recognising demographic and price pressures — are accommodated.

However, there may be too little allocated specifically for maintaining Existing Levels of Services in the medium term and information is lacking (Section 2). This means that more of the unallocated amounts for current spending increases set out in line with the 5% Spending Rule may be absorbed by the costs of standing still. The Government needs to get the balance right between what it budgets for maintaining existing spending in real terms and what is available for new current spending measures.

There are several other areas where the Government can improve its medium-term planning. First, a clear sense of how taxes would be adjusted if needed would help to safeguard future plans. The Commission on Taxation and Welfare does not report until July 2022, but its recommendations will be important in this regard and outcomes will depend on whether or not their recommendations are followed through on. Second, the Government should improve transparency on non-Exchequer areas.[32] Third, the Government should deliver on the commitment to full 5-year-ahead medium-term forecasts and revert to this horizon in future publications.

Implications of the medium-term fiscal stance

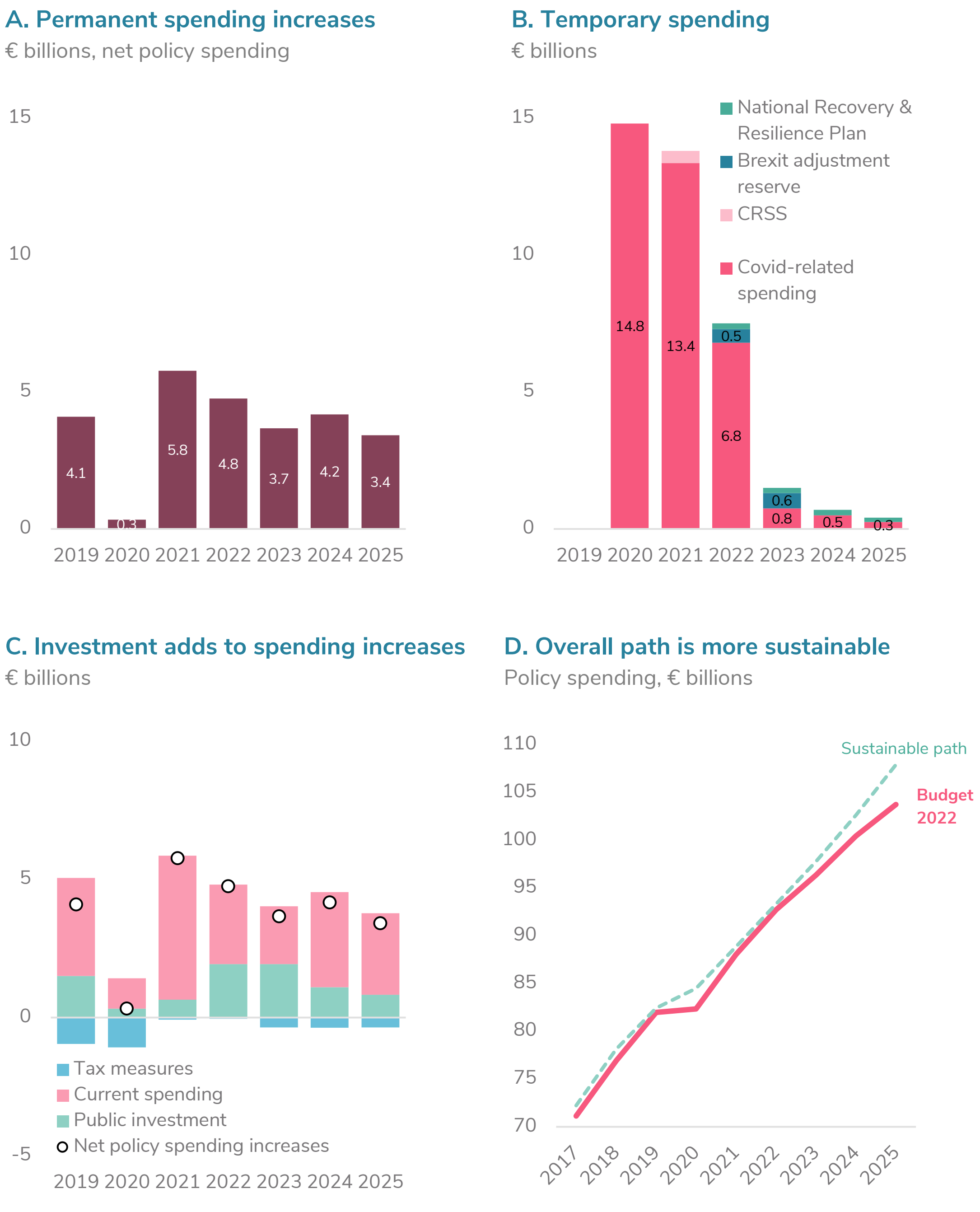
The Government plans to increase net policy spending by nearly €3.8 billion annually on average from 2023 to 2025 (Figure 3.7A). This is well aligned with sustainable growth rates in the economy and revenues. Temporary spending associated with the pandemic is also set to fall sharply in the coming two years — down from €13.4 billion in 2021 to €0.8 billion in 2023 (Figure 3.7B). This will help the deficit almost fully close by 2023 and will help to reduce the debt ratio at a steady pace (Figure 3.7D).

Plans for net spending over the medium term are well aligned with sustainable growth rates

[32] The Expenditure Report for *Budget 2022* showed more detail on capital spending among non-government bodies. However, this was for just two years (2021 and 2022) and tables on local and other government areas outside of the Exchequer were dropped. For example, Table A8 of *Budget 2021*'s Economic and Fiscal Outlook showed estimates of local government income and expenditure for 2021 but this table was absent from *Budget 2022* documentation. However, the Department has indicated to the Council that it is making progress on these areas including on developing a "gross walk" which is planned to be published with *SPU 2022*.

In terms of the impact on the economy, running a budget close to balance in the years ahead means that the Government will broadly be taking in as much revenue from the private sector as it pays out in wages, interest, welfare payments and other expenses. This is appropriate, given that the economy will be growing strongly.

Figure 3.7: Moderate expansions and fewer temporary measures

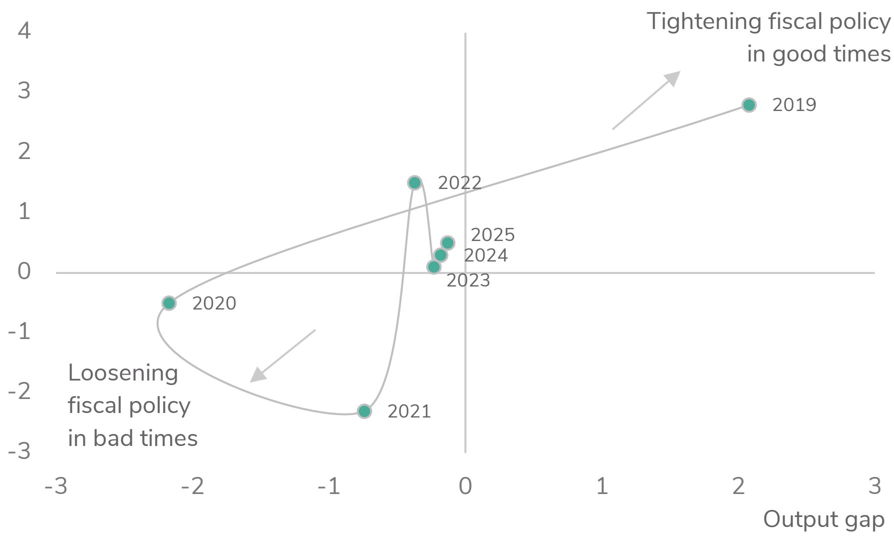


Sources: CSO; Department of Finance (*Budget 2022*); and Fiscal Council workings.
Notes: The tax measures in panel C include the carbon tax increases, the €500 million tax cuts and the estimated yield from non-indexation yield. The "sustainable path" in panel D shows what policy spending would look like if it grew from 2019 in line with 3 per cent potential output plus the rate of HICP inflation (1.6 per cent on average). Get the data.

Another useful way to assess the change in the Government's fiscal stance is by looking at its "fiscal impulse". That is, the change in the structural primary balance given cyclical conditions in the economy as measured by the output gap. Figure 3.8 uses the Department's preferred measure of the output gap and the Council's bottom-up structural primary balance. The move towards loosening policy sharply in 2020 and 2021 is visible in the bottom left of the panel. By contrast, the indicator suggests that the direction of policy in 2022 is to reduce the expansionary measures adopted in recent years, while the measure implies the fiscal impulse is minimal in the years ahead.

Figure 3.8: Moderate reversals in loose fiscal policy

Fiscal impulse



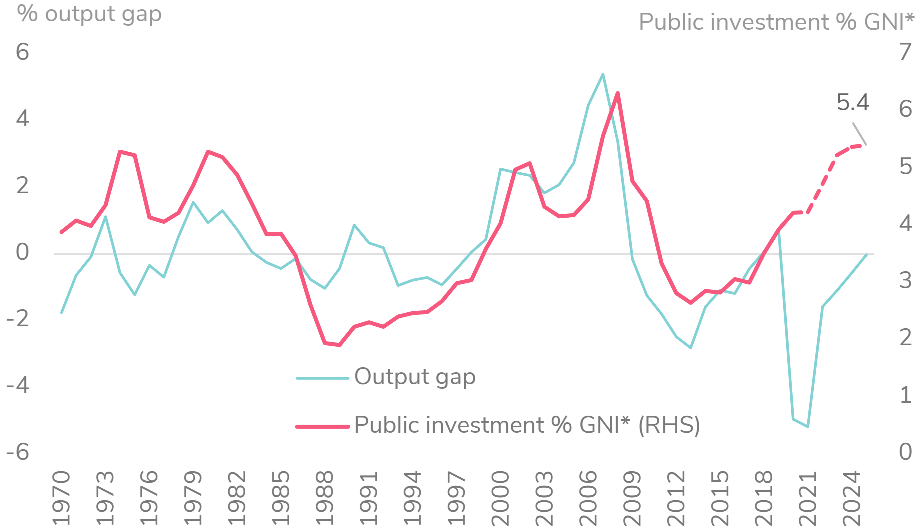
Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.
Notes: The "fiscal impulse" is defined as the change in the structural primary balance (percentage points), with the Council's bottom-up estimates used and the Department's preferred estimates of the output gap.

Public investment spending is set to ramp up sharply and needs to be managed carefully

Public investment is set to make up an increasing amount of spending in the coming years and risks need to be managed carefully. The Government plans to expand public investment to about 5½ per cent of national income. This is unusually high both by historical and international standards. Conroy, Casey and Jordan-Doak (2021) estimate that this additional investment could boost the level of economic activity by one per cent over the long term. However, prices across the economy would also be expected to rise by about 0.6 per cent and the government debt ratio would be higher by about 5.7 percentage points of GNI* compared to a scenario in which public investment rates remained at 4.1 per cent of GNI* as in 2021.

Ireland's public investment has fluctuated over the past two decades with booms and busts in the economy (Figure 3.9). There are risks, especially as the economy recovers, that a tight labour market and low productivity in construction could potentially lead to lower value for money. It is therefore important that the Government safeguards the value of its investments while fostering greater productivity in the sector.

Figure 3.9: Public investment set to rise to unusually high levels



Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.
Notes: Public investment is general government gross fixed capital formation. The output gap estimates are the Council's own produced using Department of Finance demand-side forecasts for 2021–2025.

There may be further scope to improve how capital projects are assessed

The Department of Public Expenditure and Reform could usefully develop its capacity as a coordinator and gatekeeper of public investment in this regard. Conroy, Casey and Jordan-Doak (2021) highlight three avenues through which this could be achieved, drawing partly on the IMF's (2017) Public Investment Management Assessment:

1) **Building up the Department's in-house expertise**: The Department could continue to develop its use of analytical techniques such as cost-benefit analyses and reference class forecasting as well as producing more analysis on costs of maintaining existing assets. It could alleviate potential optimism bias by using more conservative scenarios for higher cost inflation in the construction sector over the coming years.

2) **Improving transparency**: The Department could develop a register of existing assets and further develop its tracker of capital projects.

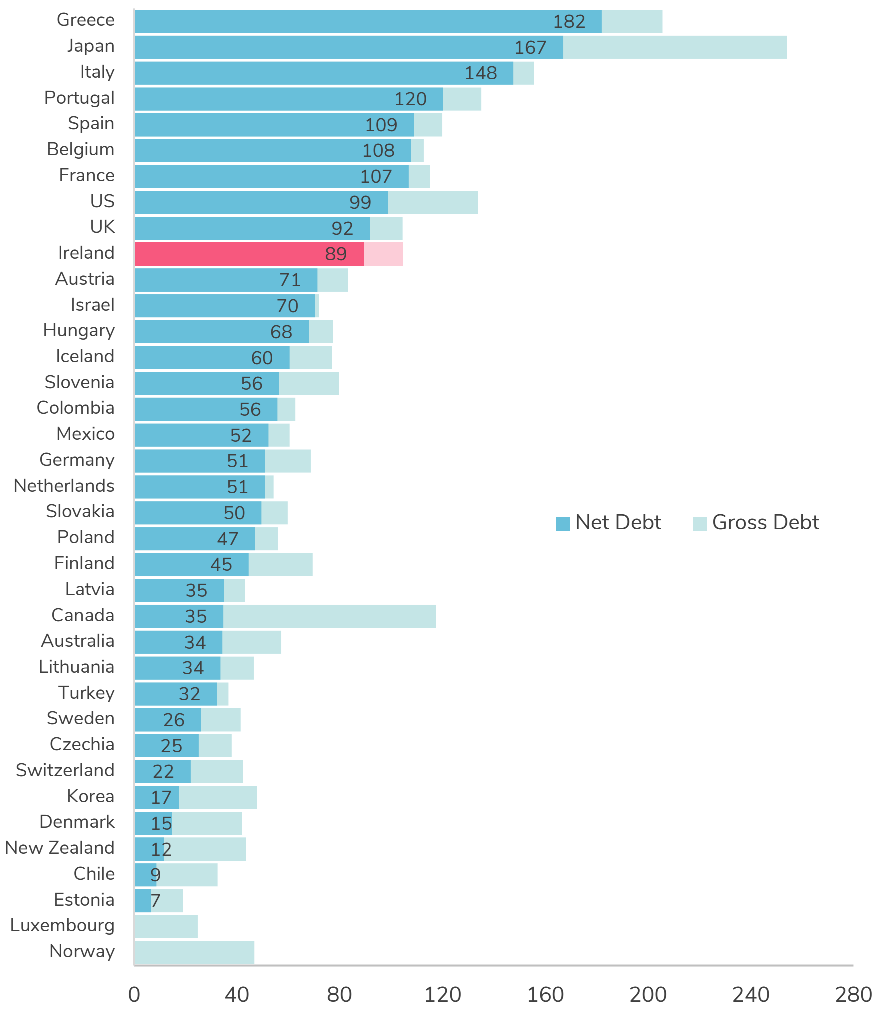
3) **Learning from past experiences:** The Department could strengthen assessments of major past projects; encourage the Comptroller and Auditor General to audit major capital projects; and produce summaries of government-wide lessons based on reviews of the 10 largest projects every two years.

Ireland's net debt ratio was already high entering the pandemic. At the end of 2020, with other countries seeing their levels of output fall and debt rise, Ireland was tenth highest out of 37 OECD countries for which data are available. Ireland's net debt ratio at the end of 2020 was 89 per cent of GNI*. This also marks Ireland out as an outlier as having one of the highest net debt ratios for a small economy in the OECD (Figure 3.10).

Ireland's debt ratio remains high, especially for a small open economy

Figure 3.10: Ireland has a high debt ratio

% GDP (% GNI* for Ireland), general government basis, end-2020



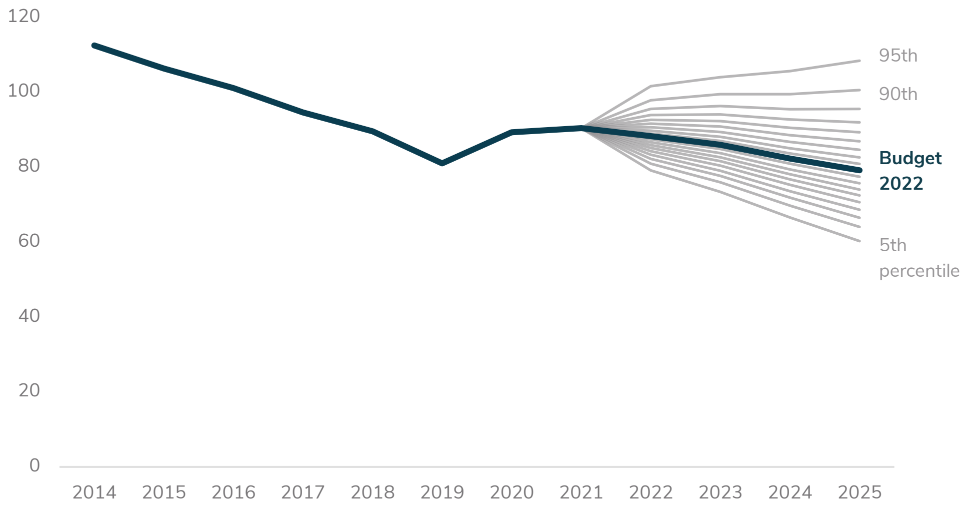
Sources: Eurostat; CSO; IMF (October 2021 Fiscal Monitor); and Fiscal Council workings. Get the data.
Notes: All OECD countries are shown aside from Costa Rica. Net debt is gross debt of general government excluding assets held by the state in the form of currency and deposits; debt securities; and loans. The 60 per cent ceiling for government debt set out in the Stability and Growth Pact (SGP) is set in gross rather than net terms. Net debt does not include the State's bank investments.

While the pace of budgetary expansion set out in *Budget 2022* is prudent, with Ireland carrying such a high level of debt, risks remain. The Council estimates using its Maq model — a structural econometric macro-fiscal model of the Irish economy — that there is a one-in-four risk that current policies could lead to a debt path whereby the debt ratio fails to fall, or even rises, from current high levels (Figure 3.11). While the Government has set out a more prudent path for the medium term, this analysis highlights the uncertainties and risks around the path for the debt ratio when the starting point is a high debt level. In other words, the planned path for the public finances is safer than had been signalled in the summer, but it is not yet safe.

The planned path for the public finances is safer but not yet safe

Figure 3.11: Current policies suggest one-in-four risk of unsustainable debt path

Net debt ratio, % GNI*



Sources: Fiscal Council workings. [Get the data.](#)
Notes: Each line shows a path for debt dynamics at various probability levels or "percentiles". The *Budget 2022* projections are treated as the central or most likely scenario. The estimates are based on the Council's Maq model (Casey and Purdue, 2021).

The one-in-four risk assessment is a source of concern, though not necessarily alarming, as several factors mitigate the risks. The debt sustainability risk assessment is based on current medium-term policies and it implies that there is a non-negligible probability that fiscal adjustment might be required to ensure debt sustainability. However, the risks of an outright recession being imminent seem relatively low for the coming years. Risks are also tempered by the fact that policies can adjust. For instance, a large portion of the rise in public spending in the coming years will be due to exceptional levels of investment to help address shortfalls in climate change and housing areas. There may be a strong case for this investment to be unusually high for a period. If high levels of public investment spending are sustained for a period and then returned to more normal levels in later years, the budget balance would be expected to improve along with the debt path. There are also some upside risks to revenue (Section 2).

A welcome feature in *Budget 2022* that helps to frame sustainability assessments is that it places more emphasis on using GNI* as the denominator for assessing fiscal sustainability. This is something the Council continues to assess as appropriate (Box C).

Box C: Department of Finance now making greater use of GNI* when assessing budgetary sustainability and real economic activity

The Department of Finance has moved to using modified Gross National Income (GNI*) in its budgetary documents as a key measure for assessing both fiscal sustainability and real economic activity. This aligns with the Fiscal Council's view that GNI* is a more appropriate measure for assessing the sustainability of the public finances and for gauging economic activity relative to other countries' estimates of GDP.

This box explains why the Council assesses GNI* to be an appropriate measure. In particular, it shows that the ability of GNI* to explain and predict taxes and real economic activity is far superior to GDP.

How does GNI* differ from GNI?

When moving from GNI to GNI*, the CSO makes the following adjustments:

1) Depreciation on intellectual property and on leased aircraft: Some assets held in Ireland by foreign-owned companies add significantly to GNI due to the addition of high amounts for depreciation. However, these amounts have little relation to production here, and if they are used in production, the profits all flow overseas to foreign owners. This is true of patents needed for manufacturing pharmaceuticals and of planes leased by foreign-owned companies. Yet the impact of these planes and patents on domestic output and employment is limited. The cost of depreciation on these assets is also borne by the owner overseas. For these reasons, the CSO excludes this depreciation.

2) Redomiciled PLCs: Redomiciled PLCs are companies with permanent offices in Ireland, but usually a small staff and little or no real activity. Management, leadership and other productive activity are mainly carried out overseas. While a lot of their profits from subsidiaries elsewhere are sent on to shareholders as dividends, some profits remain as net income inflating GNI. Recognising that they have little interaction with the Irish economy, the CSO subtracts out this net income from GNI*.

Why GNI* is a useful measure

1) Informed by expert assessments

After Ireland's GDP growth spiked in 2015, an expert group was set up to provide recommendations to the Central Statistics Office on how to address distortions in the national accounts. The idea was to convene experts and wide-ranging stakeholders to provide insights as to how best meet user needs for greater insight into Irish economic activity. Specifically, the group sought to account for measurement challenges associated with the highly-globalised nature of the Irish economy and the role of large foreign-owned multinational enterprises.

It its recommendations, the Economic Statistics Review Group (ESRG) proposed GNI* as a reliable level indicator of the size of the Irish economy. This was designed to be suitable for fiscal planning and for assessing the sustainability of public and private debt.

A substantial amount of evidence went into the ESRG assessment drawing on inputs from FitzGerald (2016); Honohan (2016); the Central Bank of Ireland (2016); Revenue (2016); and the Head of National Accounts at the OECD, Van de Van (2016). The report was finalized in 2016. Subsequent analysis by Lane (2017) and FitzGerald (2020) corroborates the move to GNI* as an appropriate measure of Ireland's economy. Lane looks at the need for countries such as Ireland where globally active firms play an important role to have an appropriate accounting framework. Two principles are sought: (1) a stable measure of overall economic performance robust to alternative accounting approaches; (2) a sensible measure robust to alternative mechanisms by which returns to foreign investment are paid out. As with the ESRG, he concludes that GNI* represents a suitable measure of domestic resources. FitzGerald (2020) similarly assesses that GDP, the traditional measure of national output and income, is no longer a good measure of the economic welfare of those living in Ireland and shows how detailed measures consistent with GNI* provide a more informative breakdown of economic growth over recent years.

2) More useful for assessing public finances and sustainability

As well as being statistically better able to explain historical year-to-year movements in taxes, GNI* is far superior for predicting future taxes.

Using error correction models, we assess a variety of government revenue measures and their relationship with both GDP and GNI*. The short-run equations for the models are of the form:

$$\Delta log(tax_t) = \alpha + \beta \, \Delta log(activity_t) + EC_{t-1}$$

with tax activity being represented by a variety of revenue measures; activity represented by either nominal GDP or nominal GNI*; and the Error Correction (EC) term representing the lagged residual from a long-run equation of the form:

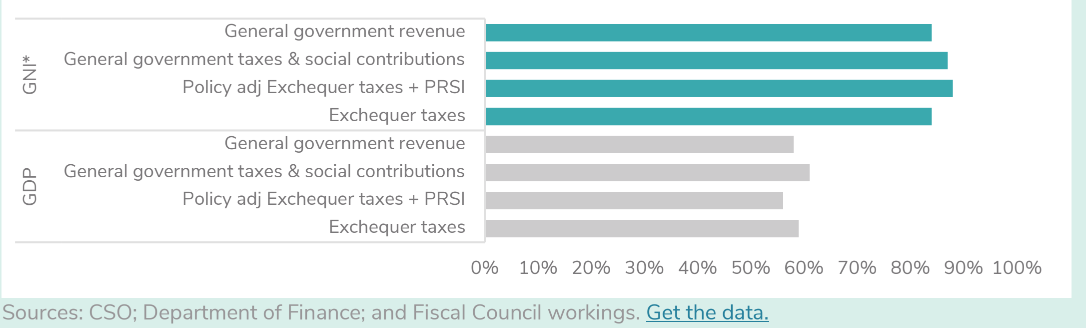
$$log(tax_t) = \alpha + \beta \, log(activity_t)$$

On average, models that use GNI* are able to explain about 86 per cent of annual variation in government revenues as compared to just 59 per cent with GDP (Figure C1). This points to the better ability of GNI* to explain how the public finances evolve with economic activity.

Using GNI* also leads to a better forecasting performance. On average, using GNI* almost halves the forecast errors compared to GDP. The errors using GDP would average 7.9 percentage points for annual growth rates as compared to 4.3 percentage points if using GNI* (Figure C2).

Figure C1: GNI* is better at explaining taxes

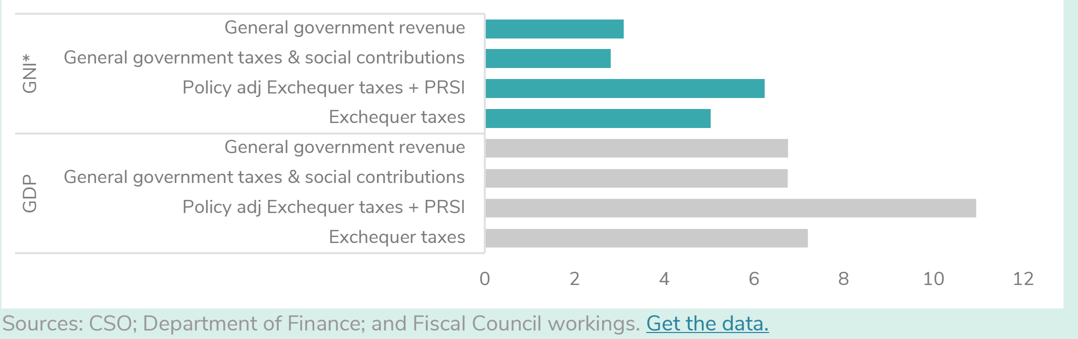
Explanatory power for error correction models estimating revenues



Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.
Notes: The chart compares the explanatory power (adjusted R-squared) of error correction models that rely on nominal GNI* as compared to nominal GDP. The estimation window is 1995–2019 using annual data.

Figure C2: GNI* is better at forecasting revenues

Annual percentage point forecast errors



Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.
Notes: The chart compares the forecast errors (the root mean squared error of annual percentage changes) of forecasts produced by error correction models that rely on nominal GNI* as compared to nominal GDP. The estimation window is 1995–2005 and the out-of-sample forecast window is 2006–2019 using annual data.

3) More aligned with the real economy

Another sense check on whether GNI* provides useful insights into the domestic economy is how it relates to growth in employment — a common measure of the performance of the "real economy".

Table C1: GNI* is also better at explaining and predicting employment

Independent variable	Dependent variable	Explanatory power	Out-of-sample forecast errors (p.p.)
Real GDP	Employment	43%	3.34
Real GNI*	Employment	86%	1.59

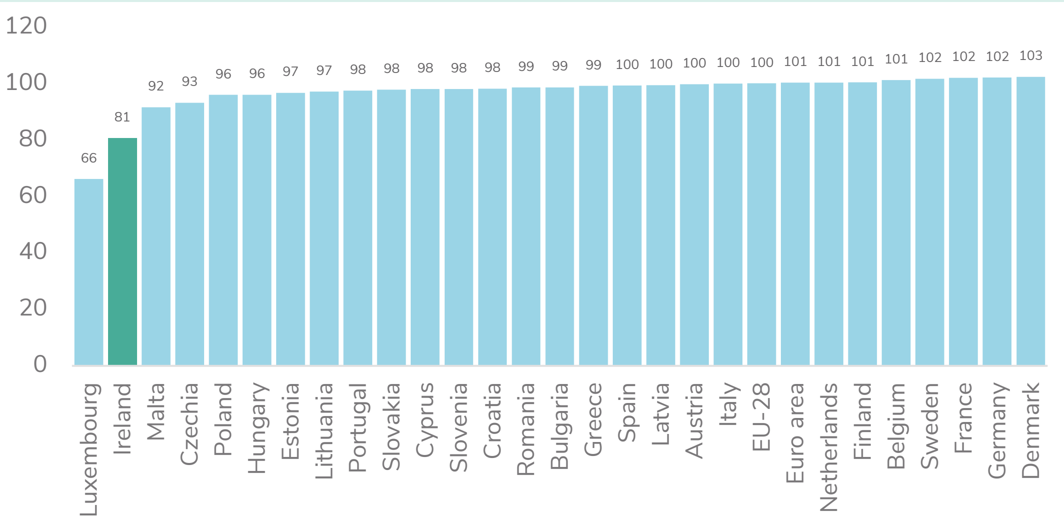
Sources: CSO; Department of Finance; and Fiscal Council workings.
Notes: The explanatory power (adjusted R-squared) is shown for error correction models that rely on real GNI* as compared to real GDP when modelling employment. The forecast errors refer to the root mean squared error of annual percentage changes with a smaller estimation window of 1995–2005 and an out-of-sample forecast window of 2006–2019.

4) GNI tends to align well with GDP elsewhere

For most countries, GNI aligns very closely with GDP. Over the 10 years 2010 to 2019, for instance, nominal GNI averaged within 2 per cent of GDP for 15 EU countries. It was within 4 per cent for all but 4 countries, while Czechia was 6.6 per cent below on average, and Malta 8.2 per cent below. However, Ireland was a clear exception with GNI, on average, 19.2 per cent below GDP. Only Luxembourg, at 33.6 per cent below, showed a greater gap to GDP (Figure C3).

Figure C3: GNI tends to align well with GDP internationally

GNI as a % of GDP



Sources: AMECO. Get the data.
Notes: Figure shows the average for nominal gross national income (not modified gross national income) as a share of nominal gross domestic product over 2010 to 2019.

For these four reasons, the Council tends to use GNI* as a more meaningful measure of the Irish economy — one that reduces the statistical distortions linked to globalized activities that have less of a bearing on fiscal and real-economy developments.

3.4 Medium-term challenges

Ireland faces several medium-term challenges. The Government needs to spell out how priorities and challenges will be met.

Ireland still faces challenges on ageing, climate, and the overreliance on corporation tax receipts. The Government needs to spell out how these challenges will be addressed

Sláintecare reforms could put additional pressure on health spending but basic detail is lacking. Commitments to major Sláintecare reforms in health are not budgeted for beyond next year. Moreover, essential information on costs and progress associated with Sláintecare thus far is severely lacking (Casey and Carroll, 2021). It appears that a cumulative amount of €2.1 billion of recurrent spending has been allocated to the reforms as of end-2022. Total costs were estimated at €2.8 billion per annum in 2017, but these estimates appear to be highly outdated and do not seem to include subsequent price and wage pressures. A mechanical estimate, using wage and price pressures in the interim, would suggest that costs could prove to be upwards of €3½ billion by 2027 to implement the reforms. To gauge progress and potential future costs, updated costings, which factor in these pay and price pressures, should be carried out to better inform policy and planning.

Table 3.1: Gaps in knowledge on major spending commitments

Climate action plan	No costings of economic/fiscal impacts are available outside of NDP amounts (Transport + Environment ~€40 billion; Housing ~€40 billion). Spending on green measures remains unclear. The Council estimated potential costs of €7 billion per annum based on a scaling up of previous NDP plans and this is similar to IMF (2021) estimates.
Sláintecare reforms	Sláintecare costs were estimated to add €2.8 billion to annual public spending by 2027 back in 2017 (Oireachtas, 2017). Estimates have not been updated since then. Wage and price pressures have since risen. The outlay as of 2022 appears to be €2.1 billion. No allocation is budgeted beyond then. Mechanical estimates would suggest costs upwards of €3½ billion by 2027.

Transitioning to a low-carbon economy will also have substantial costs. The Government has detailed the additional actions that will be required across both the public and private sectors to achieve the 2030 ceiling for levels of greenhouse-gas emissions as legally required by the Climate Act.[33] The target is a 51 per cent reduction in Ireland's overall greenhouse-gas

[33] These legally binding objectives are set out in the Climate Action and Low Carbon Development (Amendment) Act 2021. The carbon budgets and sectoral ceilings will be adopted by Government in the coming months after being considered by the Oireachtas.

emissions from 2021 to 2030, and net-zero emissions by no later than 2050.

However, there is little clarity on the potential costs to the state of achieving the transition. Some €125 billion of total costs to meet the new objectives to 2030 are outlined in the Climate Action Plan 2021 (Department of Environment, Climate and Communications, 2021). Annually, this equates to an additional €14 billion per annum, on average. But it is unclear how much is to be spent by the private and public sectors. The Climate Action Plan 2021 notes that 40 per cent (about €50 billion or €5½ billion annually) of the total investment costs required are unlikely to have positive returns so that the State may have to make some financial intervention to incentivise these.

The recently published NDP had a cumulative total public investment of €165 billion over 2021 to 2030. It's possible—assuming the spread across departments is similar after 2026—that about €40 billion is for transport and environment, with another €40 billion on housing. But there is no clear indication how much relates to green measures within these areas. It is possible that if these investments end up being more focused on green initiatives, then sticking to currently budgeted spending levels would still be achievable while also meeting any additional pressures that arise from climate objectives.

The only clear information in the Climate Action Plan 2021 on amounts committed is that about €8.5 billion will be public spending:

- There will be at least €8 billion of public spending on residential retrofit to 2030 by the Government. Part funding is the €5 billion of the €9.5 billion in carbon tax receipts planned to be raised by 2030, which are to be used to increase capital spending on energy efficiency (supporting residential retrofit).
- €0.5 billion of the National Recovery and Resilience Plan (NRRP) amounts are to be allocated towards decarbonising measures such as retrofitting, ecosystem resilience and regeneration, climate mitigation and adaptation, and green data systems.

Sources of revenue, including excise, vehicle registration tax, motor tax and carbon tax, are likely to be affected as behaviour changes in response to climate change mitigation policies. The process of adapting the economy to lower carbon emissions may have positive effects on employment and investment. However, it may also carry costs for both growth and the public finances as firms transition to new technologies.

As with other long-term fiscal challenges, delaying adjustment in respect of climate change targets would ultimately prove more costly.

The Government's overreliance on volatile and concentrated corporation tax receipts has grown in recent years. Receipts have become more concentrated: just 10 corporate groups accounted for 56 per cent of all corporation tax receipts last year. Efforts by various international organisations and stakeholders to facilitate a global minimum corporation tax rate and sharing of profits from global digital activities could see Ireland collect lower levels of corporation tax. The Budget assumes that a gradual €2 billion reduction in corporation tax receipts will result from major changes to the global tax environment (reducing by €1 billion in 2023 and €500 million per year in 2024 and 2025).

The Rainy Day Fund has been absent in recent budget publications but could play an important role in reducing the Government's current over-reliance on corporation tax receipts. The Fund was proposed in 2016 and the first planned savings to be allocated to the fund were to take place in 2019 and 2020.[34] However, these planned savings were first scaled back and eventually abandoned. An amount of €1.5 billion was transferred to the Fund from another arm of the State (the Irish Strategic Investment Fund) but was withdrawn for *Budget 2021* as part of the response to the pandemic.

The excess corporation tax receipts that have been collected in recent years can be thought of as an unusual and persistent windfall, somewhat like the proceeds from oil discovered in the North Sea by Norway. The Norway Oil Fund was set up in the 1990s to shield the economy from ups and downs in oil revenue, to act as a financial reserve, and as a long-term savings plan so that both current and future generations get to benefit from the proceeds of its oil wealth.[35] While oil revenue has been very important for Norway, the thinking was that one day it would run out. The aim of the fund is to ensure

[34] See Box B of the November 2019 Fiscal Assessment Report for a discussion of the Rainy Day Fund's usage in Ireland.

[35] More detail on the Norway Oil Fund is available at: https://www.nbim.no/en/the-fund/about-the-fund/

that funds received from oil are used responsibly, with a long-term vision for safeguarding the future of the Norwegian economy.[3]

In some ways, Ireland's corporation tax receipts have become a persistent windfall akin to Norway's oil. Much like oil, corporation tax revenues have proven volatile, exceptionally difficult to forecast, and prone to idiosyncratic factors outside of Ireland's control disconnected from the rest of the domestic economy. Continuing to fund a large part of Ireland's recurrent spending using a resource like this would be highly unwise.

The Council assesses that the Government should allocate any further excess corporation tax receipts — beyond what is forecast — and potentially any increase in revenue due to the rise in the minimum corporation tax rate to 15 per cent to the Rainy Day Fund. This would help to limit, and potentially reduce, the over-reliance on corporation tax receipts that has currently built up.

The Council previously recommended that a "Prudence Account", related to the Rainy Day Fund, be operated. [36] The Council's proposal for a Prudence Account is one way in which unexpected surges in corporation tax receipts could be saved so as to help to prevent long-lasting spending increases being tied to possibly temporary revenue sources.

Otherwise, the Rainy Day Fund itself should be reinforced in a number of ways: (1) removing the €8 billion cap; (2) making allocations flexible to the economic cycle; and (3) clarifying how drawdowns would work under the fiscal rules. These changes would help to establish the Rainy Day Fund as a meaningful tool to support the economy in future downturns.

The Irish population is rapidly ageing. This will put pressure on pensions and health spending. The Council estimated that the growing number of pension recipients would add some €370 million annually to pension costs on average over 2021 to 2025. This was even before the legislated-for

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[36] The Prudence Account is outlined in Box B of the *June 2019 Fiscal Assessment Report*. Essentially, the idea is to notionally set aside the excess between actual and forecast corporation tax receipts as in-year allocations to a "Prudence Account". This would remove the excess receipts from the budgetary calculus; reduce the scope for spending these funds as they come in; and, at year end, these notional amounts could then be turned over to the Rainy Day Fund or set aside some other way. The baseline corporation tax forecast for the following year would then be based on the initial forecasts so that the outperformance would not be locked into the base.

increase in Ireland's pension age to 67 this January was deferred. In its Long-term Sustainability Report (Fiscal Council, 2020), the Council estimated that the deferral would raise annual expenditure by some €575 million in 2021, with costs rising over time. Increases in average payments to allow for price increases in the economy would push this upwards. Under current policies, combined spending on pensions and healthcare is projected to increase from 16 per cent of GNI* in 2019 to almost 25 per cent in 2050, with costs rising more rapidly after 2030.

Ageing will also lead to a shrinking labour force, while Ireland's productivity growth rates are likely to moderate further in future. This is expected, given the tendency for high-productivity regions internationally to exhibit slower rates of productivity growth.

The Report of the Commission on Pensions, published in October, drew on the Council's *Long-term Sustainability Report*. The Commission's report was clear that measures to improve the fiscal sustainability of the state pension were required. It noted that costs associated with the state pension (contributory) would increase by 65 per cent by 2030 and that State pension spending would consume the entire Social Insurance Fund by 2040 if policy did not adjust. Addressing the fiscal sustainability challenges faced, the Commission set out a preferred package of reforms comprising changes to social contributions, pension age increases and additional Exchequer contributions. Box D reviews these reforms.

Box D: Pensions Commission recommends substantial reforms to ensure sustainability of the pension system

The Commission on Pensions was established in November 2020 under a Programme for Government commitment to “examine sustainability and eligibility issues … and outline options for the Government to address issues including qualifying age, contribution rates, total contributions and eligibility requirements”. Its work was completed this October with the publication of a substantial report highlighting the sustainability challenges facing the pensions system.

This box sets out the main recommendations proposed by the Commission and assesses their potential impact.

Main recommendations

The Commission’s main recommendation was that a package of measures be undertaken to ensure sustainability of the pension system. Increases in social contributions, the pension age and additional Exchequer contributions were the key features.

Reform and share of pensions costs shortfall met by it	Nature of specific reforms
Social contributions increases (40%)	Increase self-employed PRSI rates from 4% to 10% by 2030. Increase higher Class A Employer rate by 2.4 percentage points by 2040 and by 0.1 percentage points by 2050. Increase employer and employee rates both by 1.35 percentage points by 2040 and 0.1 percentage point by 2050.
Pension age increases (38%)	Increase the pension age by three months each year from 2028 to reach 67 in 2031. Then increase by 3 months every 2 years from 2033 to reach 68 in 2039.
Exchequer contribution increases (13%)	Allocate the equivalent of 10% of State Pension Contributory spending to pension spending annually.
Moving fully to a “Total Contributions” approach (9%)	Currently, people availing of the state pension can choose between the most favourable option based on a “Yearly Average Approach” or a “Total Contributions” approach. This reform would see the former option abolished and a full move to the total contributions approach, whereby 40 years of contributions (including credits) are required for a full pension.

The reforms are expected to address the shortfall primarily through the social contribution and pension age increases (Figure D1).

Reforms suggest a need for tax increases

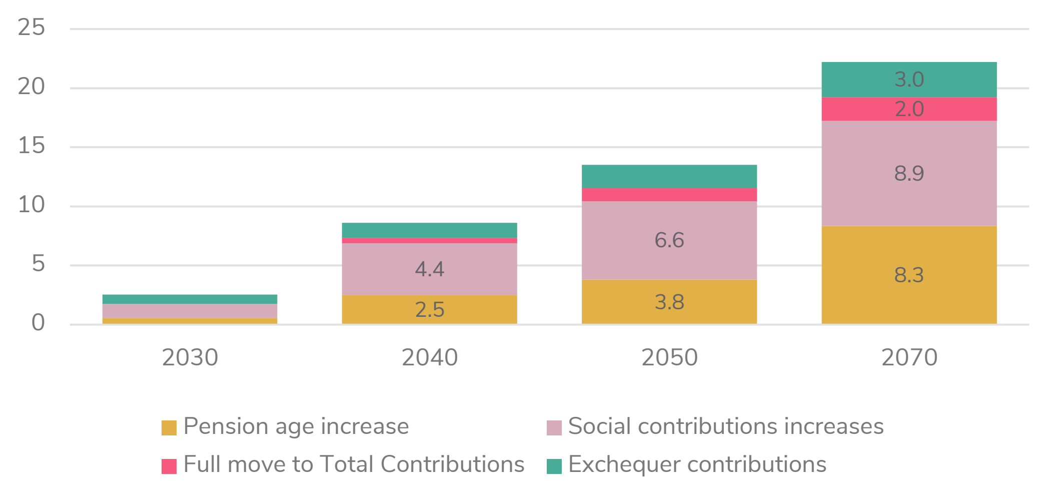
The choice to use taxes to fund much of the costs is reasonable, though it raises questions about the willingness of governments, both current and future, to raise PRSI contributions on this scale. The proposed increase in Exchequer contributions to 2030 (€790 million) would, if funded by taxes, roughly correspond to a further 1 percentage point rise in the standard 20 per cent income tax rate (€744 million full-year impact in 2022 — see Section S10). Relying on a rise in taxes over the longer term is not that credible without clear commitments to follow through on such an approach. To be credible, the Government should plan and legislate for these measures, acting sooner rather than leaving for another government term.

Increasing the pension age as the Commission proposes would mean that the gap between the pension age and the expected age of death, given life expectancy at age 65, will remain broadly fixed at about 20 years (Figure D2). The more gradual phasing is likely to make the changes easier to implement, avoiding large step changes.

However, the proposals recommend postponing increases in the pension age, which locks in a longer average retirement period. It also means higher costs than would be incurred by beginning to apply the same changes earlier, and it means that the full costs of an ageing population will need to paid for between now and 2028.. It is not clear what the rationale for recommending a delay in the pension age increases was. However, the Commission's report notes that "public concern [in relation to the originally planned pension age increase to 67] endures and was borne out in subsequent surveys and in many submissions to the Commission".

Figure D1: How the reform package addresses pension cost shortfalls

€ billions, cumulative funding raised by source

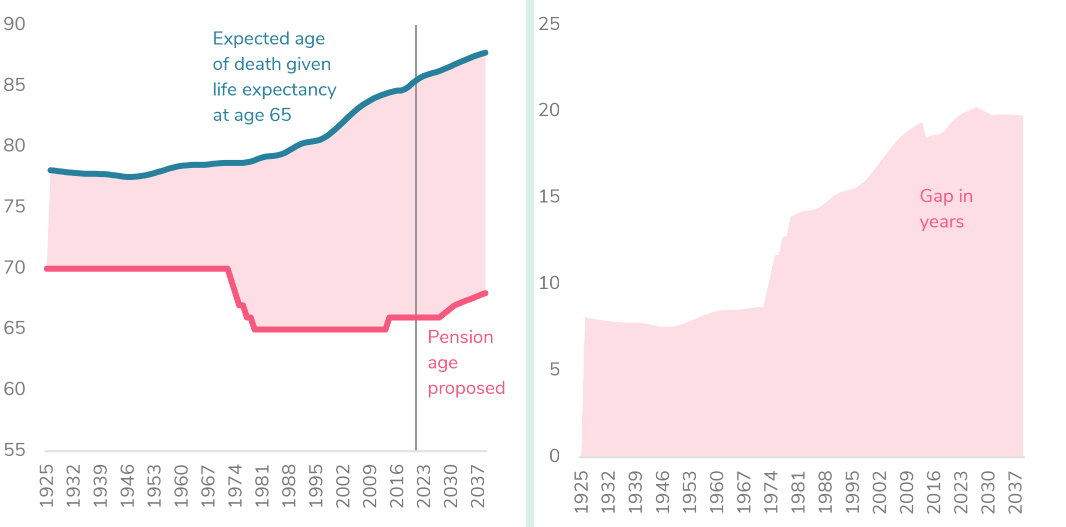


Source: Commission on Pensions (2021). Get the data.

Phasing the increase in the pension age as the Commission proposes will mean that the gap between the pension age and the expected age of death given life expectancy at age 65 will remain broadly fixed at about 20 years (Figure D2).

Figure D2: Expected years of retirement to stay broadly fixed at 20 years

Age (left panel); and gap in years between life expectancy at age 65 and pension age (right panel)



Sources: CSO Life Tables; Pensions Commission Report; and Fiscal Council workings.
Notes: Life expectancy at age 65 is interpolated from CSO Life Tables; projections are from the Council's Long-term Sustainability Report (2020); the pension age rises in line with the Pensions Commission's recommendations. Get the data.

Fiscal Rules

Exceptional circumstances continue

4. FISCAL RULES

Exceptional circumstances continue

The "exceptional circumstances" and general escape clauses of the domestic and EU fiscal rules have been activated since the beginning of the Covid-19 pandemic.[37] These flexibilities in both the domestic and EU fiscal rules allow for deviations from the normal requirements. The activation of these clauses has allowed for an appropriate fiscal response to the pandemic in 2020 and 2021. Table 4.1 shows a summary of the Council's previous assessments of compliance with the Domestic Budgetary Rule, as well as the Council's assessment for 2021.[38]

Table 4.1: The Council's assessment of compliance with the Domestic Budgetary Rule

	2017	2018	2019	2020	2021
Spending Rule	Breach	Significant Deviation	Compliant	Exceptional Circumstances	Exceptional Circumstances
Structural Balance Rule	Compliant	Compliant	Compliant		
Overall Assessment	Compliant	Compliant	Compliant		

Sources: Fiscal Council workings.
Note: The structural balance rule requires that the structural balance be above the medium-term budgetary objective (MTO) (set at minus 0.5 per cent of GDP for 2016–2019) or moving towards the MTO at an adequate pace. The spending rule requires that net government expenditure be below the average medium-term potential growth rate of the economy (the Expenditure Benchmark). Significant Deviation means that the limit for the corresponding rule was exceeded by more than 0.5 per cent of GNI* for the spending rule, or 0.5 per cent of GDP for the structural balance rule. A "breach" means that the limit for the corresponding rule was exceeded by less than 0.5 per cent of GDP or 0.5 per cent of GNI*.

The general government deficit in 2021 is forecast to be 3.1 per cent of GDP (Figure 4.1).[39] This is marginally above the 3 per cent of GDP limit in the Stability and Growth Pact (SGP). As a result, the Government will be non-compliant with the domestic budgetary rule in 2021. However, the Council deems that this is a result of the ongoing exceptional circumstances. Despite the large borrowing related to the Covid-19 pandemic, the debt-to-GDP ratio is forecast to fall by 3.2 percentage points, to 55.2 per cent of GDP. This is below the 60 per cent of GDP reference value in the SGP.

The fiscal rules are forecast to be complied with over the medium-term

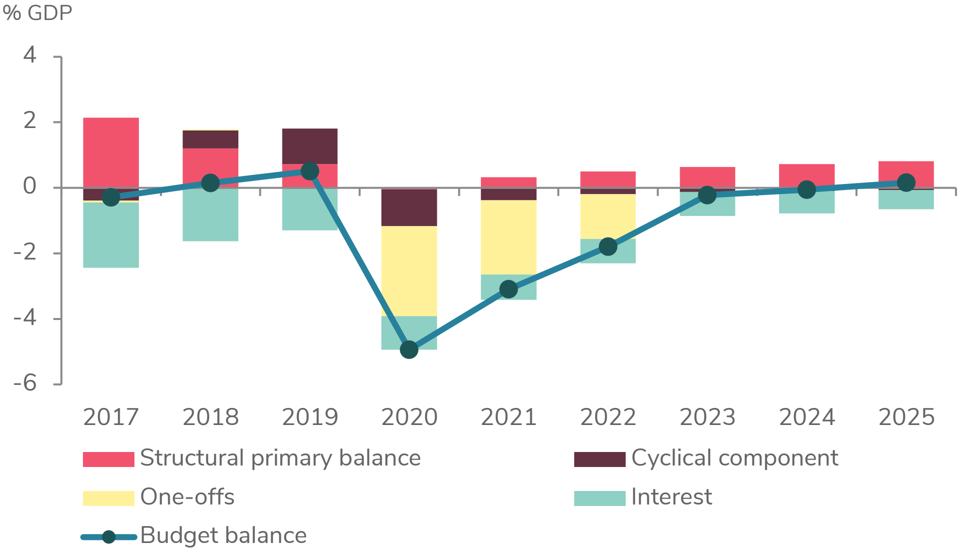
[37] See Box K of the May 2020 Fiscal Assessment Report for further details on the exceptional circumstances clause and the general escape clause (Fiscal Council, 2020).

[38] This is based on the Council's Principles-based approach to the Domestic Budgetary Rule. For further information see table S9.3 in the supporting information section.

[39] While the Council recommends using GNI* as a more appropriate benchmark for assessing Ireland's fiscal position, legal compliance with the fiscal rules continues to be assessed against GDP.

The Council has not yet determined whether exceptional circumstances will continue into 2022. However, both the headline and structural balance are forecast to improve in 2022. The headline general government deficit is forecast to fall to 1.8 per cent of GDP, below the 3 per cent limit in the SGP. The structural deficit is forecast to be 0.2 per cent of GDP, which is at the Medium-term Budgetary Objective (MTO) of a structural deficit in 2022 of no more than 0.5 per cent of GDP. Should these forecasts transpire, the fiscal rules would be complied with in 2022.

Figure 4.1: Both headline and structural balances are forecast to improve



Sources: CSO, Department of Finance, and Fiscal Council workings. Get the data.
Note: The structural element of the budget balance is estimated using the top-down approach, This is the approach used in assessing legal compliance with the fiscal rules. The cyclical budgetary component is calculated as 0.52 times the Department's GVA-based output gap measure.

The medium-term orientation of the fiscal rules is currently uncertain. The European Commission recently relaunched a review of the EU's economic governance, including the EU's fiscal rules. [40] It is the Commission's intention to provide guidance on any potential reforms well in time for 2023. The Network of EU IFIs (of which the Fiscal Council is a member) has published a contribution paper to the governance review, which outlines the views of the leadership of the Network (EUIFI, 2021).

However, based on *Budget 2022* forecasts, the current fiscal rules would be complied with over the medium term. The Government's introduction of a new spending rule helps in achieving this compliance over the medium-

[40] The review was relaunched on 19th October 2021. Further information on the review can be found at: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/economic-governance-review_en.

term. Box E outlines the implications of a spending rule on the structural balance.

For further details on the Council's assessment of compliance with the fiscal rules see section S9: Supporting information.

Box E: Implications of a spending rule on the structural balance

In the Summer Economic Statement, the Government introduced a spending rule for core gross voted expenditure. The Council which had on several occasions called for the introduction of a spending rule, broadly welcomed the Government move. However, the Council highlighted a number of shortcomings with the current rule (See Box B, Fiscal Council 2021b). This box examines the implications of a spending rule on the structural balance by providing a simple illustration of the mechanics at play.

Appropriately specified spending rules are closely linked to the notion of maintaining an unchanged underlying, or "structural" balance.[41] Absent any revenue policy changes, it is often assumed that sustainable government revenues grow one-for-one with the sustainable growth rate of the economy. Tying a spending rule to the sustainable growth rate of the economy ensures that the underlying budgetary position does not deteriorate.[42] Following such a spending rule may result in headline deficits in a downturn, or indeed large surplus in a boom due to cyclical fluctuations of the economy, but the underlying budgetary position would be unchanged. However, if the underlying budgetary position is in deficit at the time the spending rule is implemented, the new spending rule will perpetuate a structural deficit. In addition, if the debt ratio is already at an elevated level at the time the spending rule is implemented, and the spending rule does not factor this in, it can perpetuate elevated debt levels if spending is grown at the limit each year.

By way of illustration, we assume that the sustainable growth rate of the economy is 5 per cent and at time t_0 the government starts with a structural balance (i.e., no deficit or surplus). At time t_1 the government chooses to increase spending at a faster rate than sustainable growth. This opens up a structural deficit of 1.5 per cent of national income. At this point, the government introduces a spending rule that ties the increase in structural spending to the sustainable growth rate of the economy. That is, structural spending cannot grow by more than 5 per cent. Finally, each year, the government choses to spend at the limit of its new spending rule. The paths for both structural revenue and expenditure under this scenario are shown in Figure E.1A. The green line in Figure E.1A shows the resulting path of the structural deficit which as a result of growing spending at the limit of the spending rule, is unchanged relative to when the rule was first implemented.

However, if instead of increasing spending at the limit, the government chooses to spend below the limit by 0.5 percentage points (i.e. growing permanent spending by 4.5 per cent), the structural balance improves significantly, with the deficit almost closed in the 5th year (Figure E.1b).

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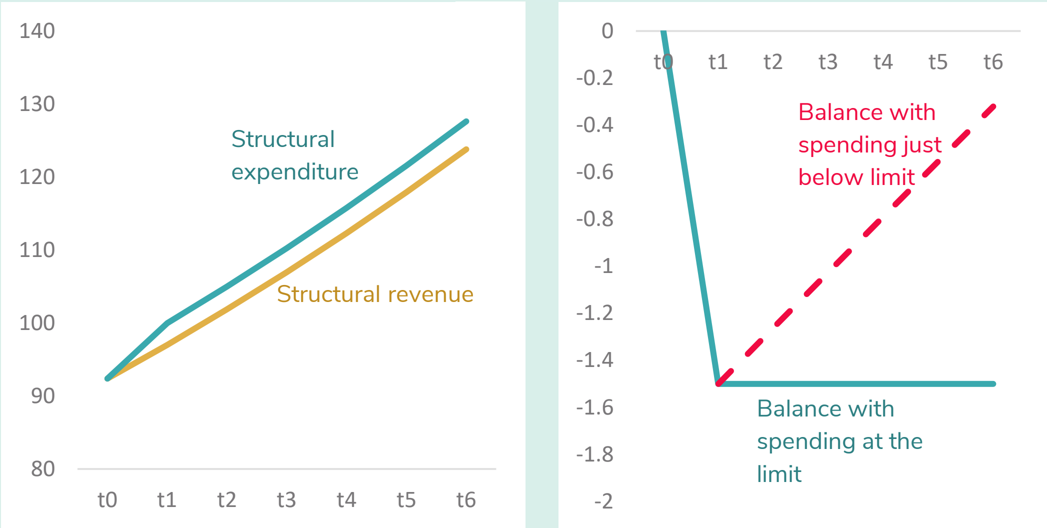
[41] The structural balanced is defined as the government's budget balance, excluding one-off and temporary measures, and adjusted for the cyclical position of the economy.

[42] Typically, spending rules are set net of additional tax measures. That is, if a government wishes to increase spending at a faster rate than the limit would allow (i.e. expand the size of government in the economy), it can raise offsetting tax measures to ensure that on a net basis the spending limit is complied with. This ensures that the rule is agnostic on the size of government in the economy.

Figure E.1: Growing spending just below the limit significantly improves the structural balance

A. Structural revenue and expenditure
€ billions

B. Structural balance
% of national income



Sources: Fiscal Council workings. Get the data.
Note: The dashed red line indicates the path for the structural balance if structural expenditure grows at 4.5 per cent each year instead of the limit of 5 per cent.

The simple illustration above shows how, while a spending rule is welcome it can: 1) make permanent an underlying deficit if spending is at the limit each year; and 2) if spending plans are designed to grow marginally below the limit it can ensure that any slight overruns still remain sustainable and also drastically improve the sustainability of the public finances. Given the uncertainty around the sustainable growth rate of the economy, Ireland's high debt level and the possibility of overruns, it would be prudent to plan to grow spending by less than the limit.

Over the medium–term (2023–2025), on a general government basis, net expenditure is currently forecast to grow below the nominal 5 per cent limit (see Table S9.1), resulting in an improvement of the structural balance.

4.1 Medium-term Expenditure Framework

Under the medium-term expenditure framework, the Government is required to set expenditure ceilings for the following three financial years. Ceilings are required to be set for overall expenditure and for each department. This framework was introduced in order to provide a better mechanism for controlling spending over the medium-term and to ensure that the Expenditure Benchmark is complied with.

Medium-term ceilings were not published in the Budget, as was typically done in the past.

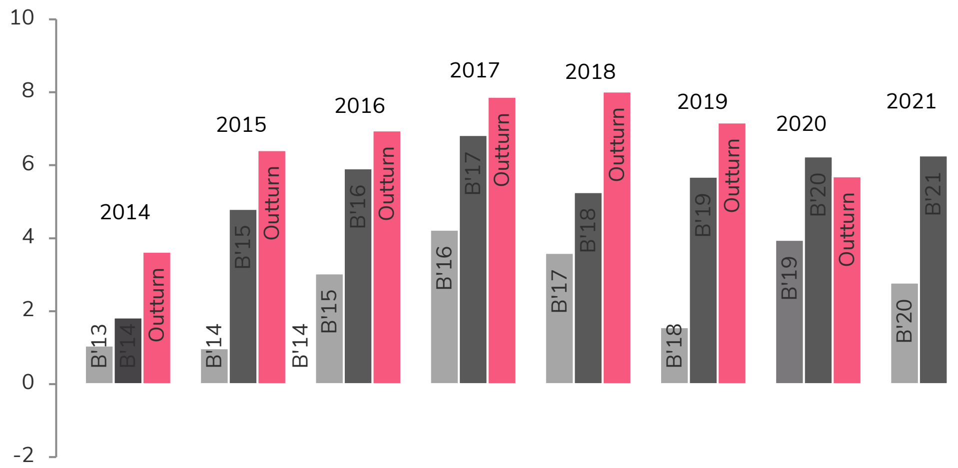
The Government failed to publish three-year ahead expenditure ceilings in the Expenditure Report on Budget Day, even though these ceilings have previously been published in the Expenditure Report alongside all budgets from 2014–2020.[43] The failure to publish these ceilings as part of the budget process represents a backwards step. It decreases transparency and undermines the new spending rule as the expenditure ceilings are not fixed as part of the budgetary process but instead as part of a technical exercise. This further gives the impression that the ceilings are seen as indicative and non-binding.

In the years leading up to the pandemic, frequent revisions to the expenditure ceilings also suggest that these ceilings are seen as indicative and non-binding (Figure 4.2). Prior to the pandemic, there had been a period of procyclical increases in the ceilings, with the outturn in 2019 €6.9 billion higher than originally planned.

[43] Expenditure Report 2021 did not include three-year-ahead expenditure ceilings. The Department originally cited uncertainty around Covid-19 and Brexit as the reason for not providing these. After the Council highlighted the legal requirement to publish these and lay them before the Dáil, the Department indicated that these ceilings would be fixed as part of the Revised Estimates process in December 2020 and were published then. The Department have indicated that the three-year-ahead ceilings that are to be set this year, will be published in December 2021 as part of the Revised Estimates process.

Figure 4.2: Change in gross voted current expenditure ceiling relative to initial ceiling

% deviation from original ceiling



Sources: CSO; Department of Finance; and Fiscal Council workings. Get the data.
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). Red bars relate to the change in outturn expenditure versus the earliest forecast for expenditure for the year specified above. Note that figures for Budget 2021, and the outturn for 2020 are Covid-19-adjusted (they incorporate only "core" expenditure).

Supporting Information

Supporting information

The following sections provide supporting information and analysis related to various parts of the Council's mandate and its assessments.

This section includes key analytical areas that the Council routinely assesses. The insights provided by these sections are an essential part of how the Council thinks through how the economy and public finances are evolving.

S1. Endorsement process

Endorsement timeline

The key dates underpinning the Council's endorsement of the Department of Finance's macroeconomic projections for *Budget 2022* are set out in Table S1a.

Table S1a: Timeline for Endorsement of Budget 2022 Projections

2 September	The CSO released its Quarterly National Accounts estimates for Q2 2021.
6 September	The Council's Secretariat and Department staff met with the CSO to clarify technical details of latest Quarterly National Accounts estimates.
14 September	The Department sent its technical assumptions underpinning its forthcoming forecasts.
17 September	The Department sent the Council preliminary forecasts in line with Memorandum of Understanding requirements.
20 September	The Department presented its preliminary forecasts to the Council's Secretariat.
22 September	The Department sent a number of additional items in relation to its forecasts requested by the Council, including hours worked for labour market projections, quarterly profiles, and pension adjustment data.
24 September	The Department of Finance presented its latest forecasts to the Council and Secretariat and answered questions. It agreed to follow up on some queries from the Council. After the meeting the Council had a preliminary discussion on its endorsement decision.
29 September	The Department sent updated forecasts drawing on new Labour Force Survey data among other things.
30 September	After reviewing the updated forecasts, the Council finalised a decision on the endorsement. The Chairperson of the Council wrote a letter to the Secretary General of the Department of Finance endorsing the set of macroeconomic forecasts underlying *Budget 2022*.
12 October	The Department's forecasts were published in *Budget 2022*.

Council's Benchmark projections

Below is a summary of the Council's Benchmark projections, which were an input to its endorsement exercise. The Council finalised these projections on Monday 20th September before opening the Department of Finance's preliminary forecasts.

Table S1b: The Council's Benchmark projections

% change in volumes unless otherwise stated

	2019	2020	2021	2022	2023	2024	2025	2026
Demand								
GNI*	2.6	-3.5	4.3	6.7	2.4	2.1	3.0	2.8
...of which (p.p. contributions)								
Underlying domestic demand[b] (p.p.)	2.8	-4.1	4.2	6.4	3.4	2.9	2.8	2.5
Adjusted net exports[b] (p.p.)	-1.5	2.4	-0.8	0.3	-1.0	-0.8	0.2	0.3
Other, incl. stocks (p.p.)	1.3	-1.8	0.9	0.0	0.0	0.0	0.0	0.0
Underlying domestic demand[a]	3.4	-4.9	5.0	7.6	4.0	3.4	3.2	2.8
Consumption	3.3	-10.4	7.5	10.1	4.4	3.5	3.5	3.5
Government	7.1	10.9	2.3	-1.8	2.0	2.0	2.1	2.0
Underlying investment[a]	-0.3	-3.6	0.8	11.5	5.1	4.4	3.7	1.7
Adjusted net exports	30.6	-18.4	23.9	14.2	11.3	9.0	5.8	5.6
...of which (p.p. contributions)								
Adjusted exports	10.2	-4.8	8.5	6.3	3.5	2.9	2.7	2.8
Adjusted imports	20.4	-13.6	15.4	7.9	7.8	6.1	3.0	2.8
Supply								
Potential output	2.9	-3.5	4.8	2.4	3.5	2.6	2.6	2.4
Output gap (% potential output)	0.7	-5.0	-4.9	-1.5	-1.0	-0.2	0.4	0.6
Labour Market								
Labour force	2.0	-0.3	0.6	1.5	1.7	1.6	1.8	1.7
Employment	2.9	-10.7	2.2	8.9	2.7	2.4	2.4	2.0
Unemployment rate (% labour force)	5.1	15.0	13.6	7.2	6.3	5.6	5.1	4.8
Prices								
HICP	0.9	-0.4	2.0	1.7	1.2	1.7	1.8	2.1
Personal consumption deflator	2.0	0.7	3.2	1.9	1.7	2.0	2.0	2.3
GNI* deflator	6.2	0.0	3.2	3.3	2.4	2.0	2.3	2.5
Other								
Nominal GNI*	9.0	-3.4	7.7	10.2	4.8	4.1	5.4	5.3
Nominal GNI* (€ billion)	215.6	208.2	224.1	247.0	258.9	269.6	284.1	299.1
Modified current account (% GNI*)	9.4	11.5	10.3	10.1	9.1	7.8	7.5	7.3
Savings ratio	10.3	25.4	19.0	12.1	10.0	9.3	9.5	9.5

a Underlying (final) domestic demand, underlying investment, and underlying imports exclude "other transport equipment" (mainly aircraft) and intangibles.

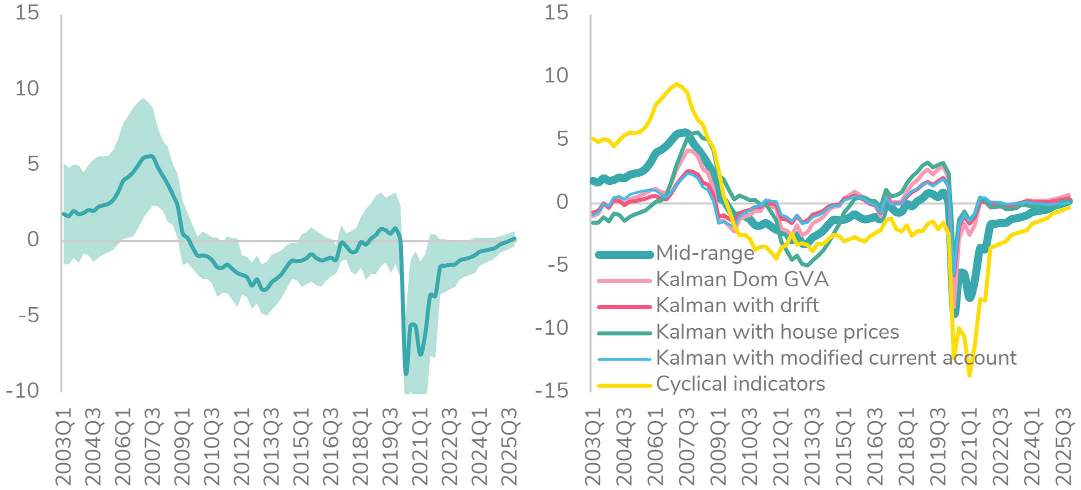
b Underlying contributions to real GNI* growth rates in percentage points — here adjusted net exports is forecast based on adjusted exports and adjusted imports, whose levels in 2019 (in 2018 constant prices) are estimated as €93.2 billion and €74.8 billion, respectively.

S2. The cycle and imbalances

This section looks at estimates of the Irish cycle and potential imbalances in the Irish economy. Estimates of the cycle are based on the Council's models, which primarily focus on Domestic Gross Value Added — a measure of domestic economic activity that strips out sectors dominated by foreign-owned multinationals (see Casey, 2019). Potential output is the maximum level of economic output sustainable where output is not unduly influenced by external, domestic or financial economic imbalances. The output gap is the gap between actual output and its potential.

Council's output gap models

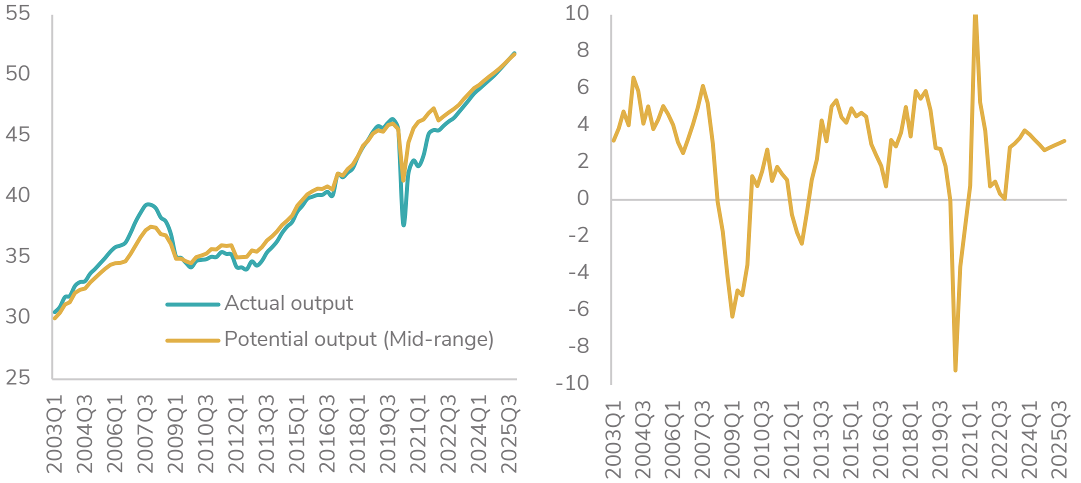
Output gap (actual output as % of potential output)



Sources: Fiscal Council workings.
Notes: Fiscal Council models of the output gap are applied to the Department's demand-side forecasts.

Council's estimates of potential output

Levels (€ billion) in left panel and potential output growth rates in right panel



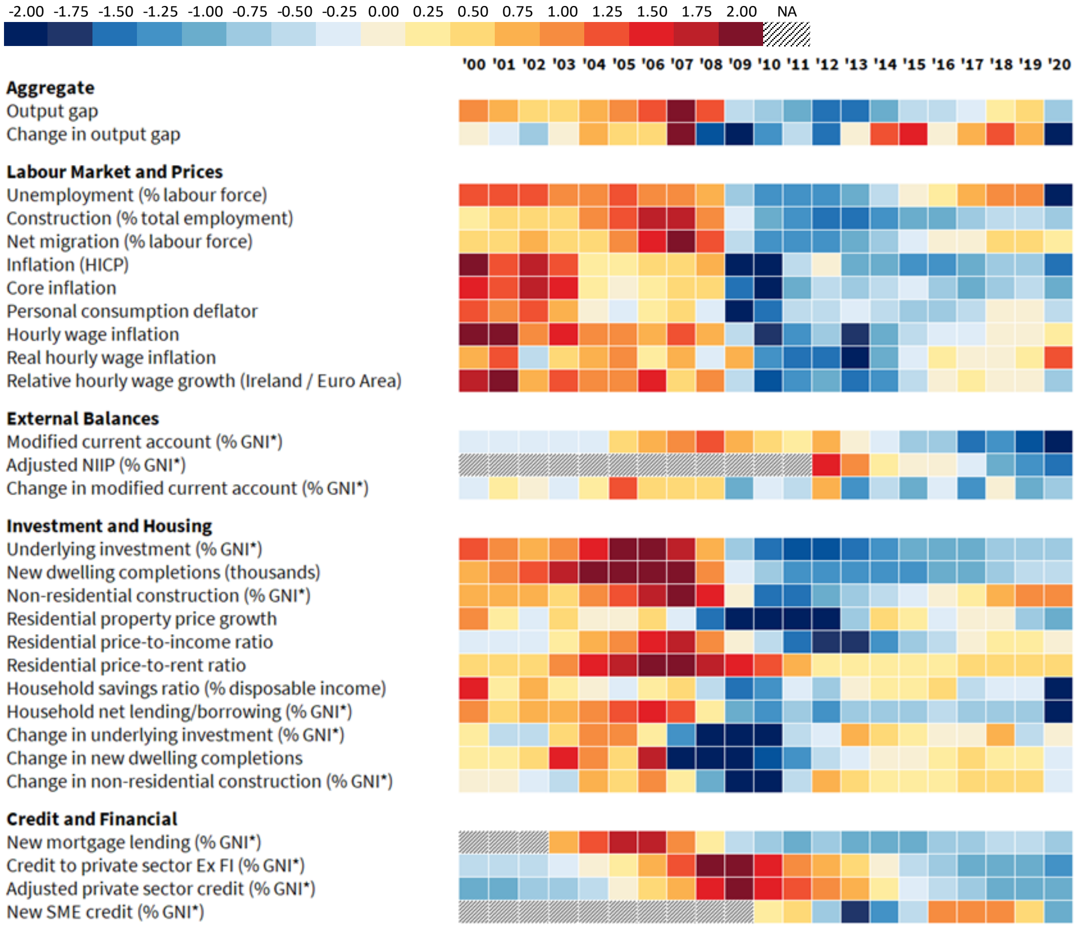
Sources: Fiscal Council workings.
Notes: Fiscal Council models of the output gap are applied to the Department's demand-side forecasts.

As well as producing estimates of the cycle, the Council monitors potential economic imbalances that might be overlooked by single indicators like output gaps. It focuses on four areas in particular: (1) the labour market and prices; (2) Ireland's external balances with the rest of the world; (3) investment and housing; and (4) financial conditions.

The following heat map assesses potential imbalances across four areas based on their departure from historical norms. Colder (bluer) indicators suggest spare capacity, while hotter (redder) suggest potential overheating or other imbalances.

Heat map of economic imbalances

Tiles show the extent of departure from historical norms (in standard deviations)



Sources: The main sources for the data underpinning the table are the CSO; Central Bank of Ireland; Department of Finance; and Fiscal Council workings. For more information on the data used and basis for deriving the heat map, see Timoney and Casey (2018).

S3. Macro-fiscal risks

This section outlines the major risks envisaged for the Government's official economic and budgetary forecasts. The risks shown are primarily those noted in *Budget 2022*, but with additional risks identified by the Council.

Macro Risks Matrix

Likelihoods and impacts are as assessed by the Council

Likelihood	Impact	
Medium	High	**Less scarring effects**: the Council has previously noted that official estimates of scarring over the medium term were too high, and *Budget 2022* has scaled these back. While risks are broadly balanced, potentially permanent productivity gains over the medium term due to the pandemic could result in further upside to official forecasts.
Medium	High	**Larger consumer spending rebound**: the likelihood of a high-impact spending rebound over the short-term is significant.
Medium	High	**Lower FDI** due to international tax reform: a slowdown or partial reversal of foreign direct investment in Ireland over the medium term could occur due to international corporation tax reform; given the importance of FDI for the Irish economy, this could have significantly negative implications for high-skill job creation in Ireland.
Medium	High	**Brexit** 'after-effects': it is possible that renewed frictions between the EU and the UK will harm growth prospects, and/or the assumed impact of Brexit on the Irish economy will prove more severe than assumed.
Medium	Medium	**Higher investment**: the potential for a greater response in terms of housing supply, or due to successful delivery of the National Development Plan, could provide a boost to economic activity in excess of official estimates; see Conroy, Casey, and Jordan-Doak (2021).
Medium	Medium	**Stronger output from MNCs**: the main benefits to the Irish economy of MNCs include wages paid to employees, corporation taxes paid to the Exchequer, and spillover employment to domestic firms; however, the relevance of stronger output from MNCs to the Irish economy — which resulted in GDP growth in 2020 alongside a contraction in underlying domestic demand — should not be overstated.
Low	High	**Financial sector** amplification: spillovers to the financial sector due to an increase in non-performing business loans could cause a negative feedback loop between the financial sector and the real economy; however, the likelihood of this could be remote given Ireland's very high modified current account surplus going into (and seemingly maintained despite) the pandemic.
Low	High	**Stagflation**: if aggregate demand remains greater than aggregate supply for a sustained period, it is possible that higher inflation will prove more prolonged, with potential implications for slower economic growth. However, in light of how rapid the economic recovery has been — for example, the nearly complete return to pre-pandemic trend levels of consumer spending as indicated by HICP-deflated monthly spending on debit/credit cards plus ATM withdrawals — the use of "stagnation" is so far not applicable to the recent performance of the Irish economy.
Low	High	**De-globalisation**: the pandemic could result in more permanent shifts away from trade and globalisation, exacerbating previous trade tensions and trends, with adverse implications for a small, open economy such as Ireland.
Low	High	**Premature policy withdrawal**: it appears to be a low likelihood that policy supports will be withdrawn prematurely, however if this were to occur, the impact on households and firms would be very significant.
Not quantified	High	**Vaccine-resistant variants**: the impact of further restrictions due to the pandemic would be very high.

Sources: Department of Finance (*Budget 2022*); and Fiscal Council assessments.

Fiscal Risks Matrix

Likelihoods and impacts are as assessed by the Council

Likelihood	Impact	
Not Quantified	High	**Pandemic related costs**. The reintroduction of public health restrictions would significant economic and fiscal implications. More generally, if some temporary schemes were to be extended rather than ended/tapered, that would lead to higher expenditure. *Budget 2022* does not specify a likelihood.
High	High	**Health overruns**. Beyond the immediate pressures of the pandemic, spending pressures in the health area remain a significant risk. Sláintecare reforms could also add significant costs. This risk is added by the Council.
High	Medium	**Corporation tax: policy change**. Adverse impacts of a changing international environment could be substantial. However, *Budget 2022* forecasts already incorporate a significant impact (€2 billion). Budget 2022 forecasts do not incorporate any additional revenue from introducing a higher rate of CT (15 per cent) on firms with a global turnover in excess of €750 million. As a result, a medium impact may be more appropriate over the forecast horizon considered. There is high uncertainty about the outcomes in this area.
Low	Medium	**Corporation tax: concentration risk:** As has been previously documented**,** corporation tax revenue is concentrated amongst a small number of payers. Firm specific factors (or factors that impact on a number of these firms) could have a significant impact on corporation tax receipts.
High	Medium	**Other spending pressures/overruns**. Some obvious spending pressures have not been budgeted for. The Christmas Bonus has not been budgeted for beyond this year (2021 cost was €313 million). More generally, spending growth outlined in *Budget 2022* is only just above that required to maintain existing service levels. This risk is added by the Council.
High	Medium	**Climate change and renewable energy targets**. *Budget 2022* says "climate policy and the corresponding actions needed to reduce emissions by 50 per cent by 2030 and transition to net-zero by 2050 will have macroeconomic and fiscal implications". The Council assesses this risk to be medium impact.
High	Medium	**Population ageing**. There is a risk that the costs of ageing could be larger than allowed for under *Budget 2022* forecasts. Stand-Still costs in the coming years are significant, partially due to population ageing.
Medium	Medium	**Cost overruns in capital projects.** Large capital projects in Ireland have a history of significant cost overruns. Given the large increase in capital spending forecast in *Budget 2022*, there is a risk that capital projects exceed their projected cost. This risk is added by the Council.
Medium	Medium	**Contingent liabilities**. Significant loans and guarantees to support sectors during the pandemic. Losses could arise if firms are unable to repay. The Council assesses this risk to be medium likelihood.
Medium	Medium	**Litigation or one-off measures**. Any unexpected litigation against the state could lead to additional expenditure. Redress schemes, while inherently one-off in nature could have significant costs (Mica homes redress and mother and baby homes survivors scheme).
Medium	Low	**EU Budget contributions**. Stronger than assumed national income growth (relative to other EU countries) could lead to larger EU budget contributions.
Low	Low	**Borrowing costs**. Borrowing conditions have been favourable in recent times. Were conditions to reverse, that would have implications for Irish borrowing costs, particularly given the high debt levels. However, given the low gross financing needs in the coming years, the Council assesses this risk to be low impact.
Low	Low	**Dividend payments**. Lower-than-expected dividend returns from the States shareholdings in financial institutions and semi state bodies. The Council assesses this to be low impact.

Sources: Department of Finance (*Budget 2022*); and Fiscal Council assessments.

S4. Detail on fiscal outturns and forecasts

This section sets out key budget figures on spending, taxes and the budget balance based on recent outturns and latest forecasts.

Fiscal forecasts from Budget 2022

€ millions unless stated

	2020	2021	2022	2023	2024	2025
General Government Revenue	**83,616**	**93,110**	**96,715**	**102,100**	**106,570**	**110,880**
Income Tax	22,710	26,015	27,515	29,220	31,040	32,795
VAT	12,425	15,410	16,895	18,380	19,640	20,670
Corporation Tax	11,835	13,890	14,080	14,170	14,675	15,170
PRSI	10,625	11,845	12,607	13,317	14,092	14,886
Excise	5,450	6,035	6,655	7,080	7,520	7,925
Stamp Duties	2,090	1,725	1,805	1,860	1,985	2,110
Other GG Revenue	18,481	18,190	17,158	18,073	17,618	17,324
General Government Expenditure	**102,033**	**106,360**	**104,975**	**103,175**	**106,840**	**110,005**
Social payments	38,097	37,225	33,360	32,605	33,380	33,920
Compensation of employees	24,510	25,645	26,670	27,815	29,005	30,305
Intermediate consumption	14,908	16,895	14,870	14,590	15,270	15,995
Capital expenditure	8,785	9,430	11,365	13,300	14,395	15,225
Interest expenditure	3,829	3,295	3,395	3,575	3,505	3,175
Subsidies	6,085	5,730	2,790	2,405	2,300	2,115
Other	5,819	8,140	12,525	8,885	8,985	9,270
Primary expenditure	**98,204**	**103,065**	**101,580**	**99,600**	**103,335**	**106,830**
Current Primary expenditure	**89,419**	**93,635**	**90,215**	**86,300**	**88,940**	**91,605**
General Government Balance	**-18,417**	**-13,250**	**-8,260**	**-1,075**	**-270**	**875**

Sources: CSO; Department of Finance; and Fiscal Council workings.
Note: Other GG revenue is calculated as a residual. It comprises some of the smaller Exchequer tax headings (motor tax, customs and capital taxes) as well as non-Exchequer GG revenue.

S5. Tax forecasts decomposed

This section examines official forecasts for the main tax heads. The projected yearly changes in tax receipts are decomposed to better understand how the forecasts are arrived at.[44] The annual changes are attributed to a number of components:

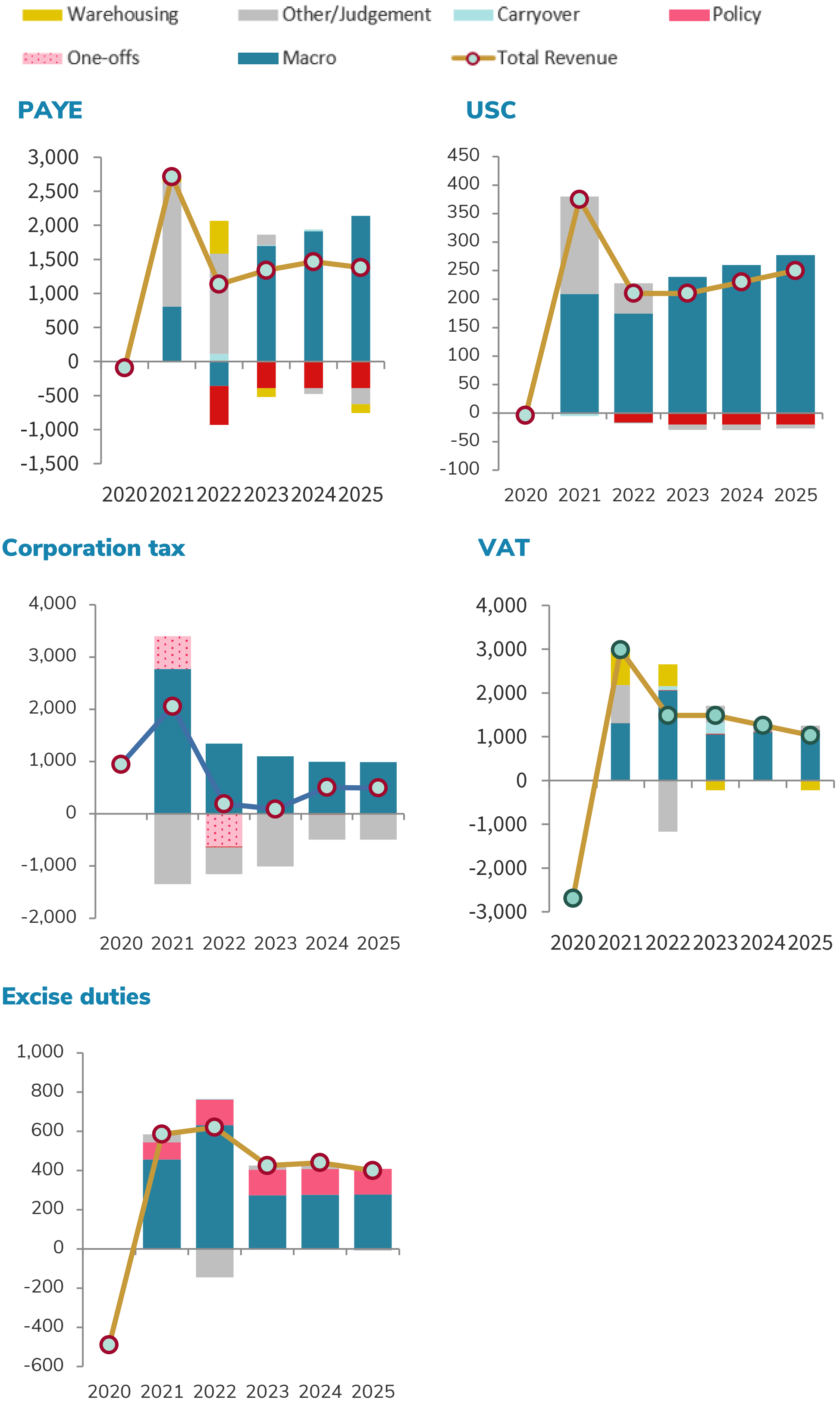
1) "**macro**" is the part of the forecast driven by growth in the relevant macro driver (such as wage growth, recognising the sensitivity of income tax growth to this driver)
2) "**one-offs**" — non-recurring items that effect expected receipts
3) "**policy**" changes, such as tax cuts or tax increases
4) "**warehousing**" the impact of lower taxes in 2020 and 2021 due to warehousing with higher receipts in later years.
5) "**carryover**" effects — policy impacts carried over from previous years
6) "**other**" — other potential elements affecting the forecasts, including judgment applied by the Department of Finance. It is calculated as the difference between the Fiscal Council's internal forecasting exercise and the Department of Finance's own forecasts.

[44] 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}. For a detailed description of the Fiscal Council's forecast replication model, see Hannon (2014).

Tax forecasts decomposed

€ million, year-on-year change



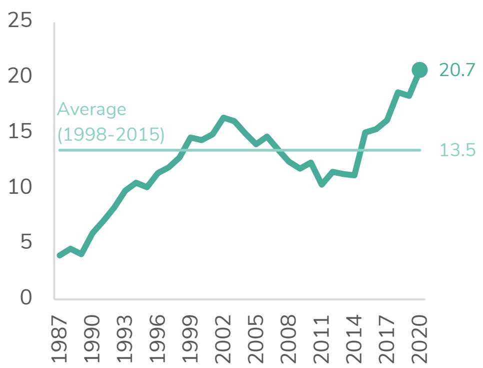
Sources: Department of Finance; and Fiscal Council workings.

S6. Corporation tax analysis

This section looks at Ireland's corporation taxes and how these have grown in importance to overall tax receipts in recent years.

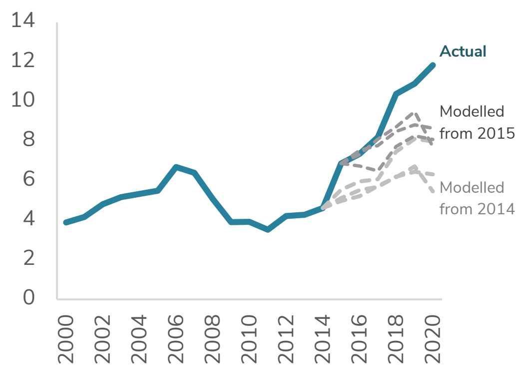
Corporation tax at record shares

% total Exchequer taxes



Receipts exceed model estimates

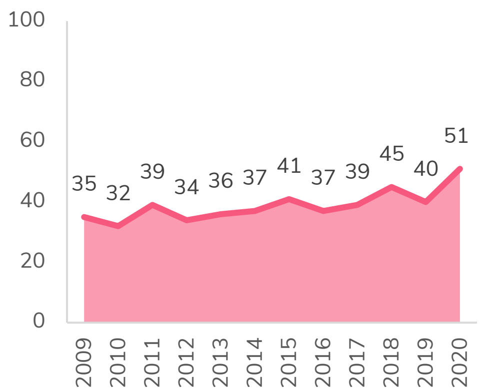
€ billions



Source: Revenue data; and Fiscal Council workings.
Notes: Model estimates based on ordinary least squares and error correction models of corporation tax receipts using Domestic GVA and Modified Gross National Income to predict receipts from 2014 and 2015.

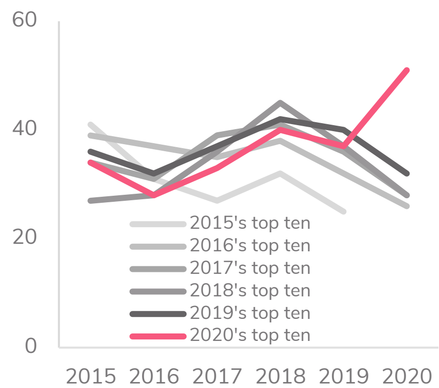
Receipts are concentrated

% net receipts accounted for by top ten companies



Though top ten changes over time

% net receipts accounted for by top ten companies



Source: Revenue data; and Fiscal Council workings.

Corporation tax receipts

€ billions unless otherwise stated

Total corporation tax in 2020	11.8
% of Exchequer taxes	20.7
Estimates of excess: lowest estimate	3.2
central estimate	4.8
highest estimate	6.4
% net receipts from Top 10 companies	51
% net receipts from Top 100 companies	79
% net receipts from Foreign-owned MNEs	82

Source: Fiscal Council workings.
Notes: "Excess" is the difference between actual and modelled corporation tax receipts.

S7. Stand-still scenario for spending

This section provides an update of the Council's "Stand-Still" scenario for government spending. The Stand-Still analysis estimates the cost of maintaining today's level of public services and benefits in real terms over the medium term based on anticipated demographic and price pressures.

Stand-still costs slightly higher than forecast increases

Annual change in € billion (gross voted current spending)

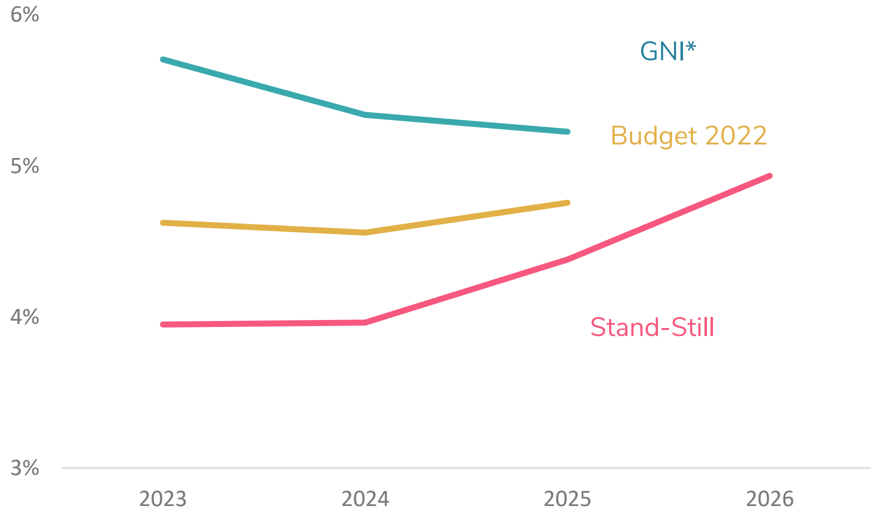
	2023	2024	2025	2026
Stand-Still scenario	2.7	2.9	3.3	3.9
- demographic pressures	0.5	0.5	0.7	0.8
- price pressures	2.2	2.3	2.6	3.0
Total Increases in *Budget 2022*	3.2	3.3	3.7	
Gap to Stand-Still	0.5	0.4	0.4	

Sources: CSO; Department of Finance; and Fiscal Council workings.

To stand still, the Council estimates that increases of the order of €3.2 billion per year would be required over the medium term (2023–2026). By comparison, *Budget 2022* spending forecasts show spending increasing by around €3.4 billion per year to 2025.

Stand-Still estimates of spending increases are closer to output growth

% change year-on-year



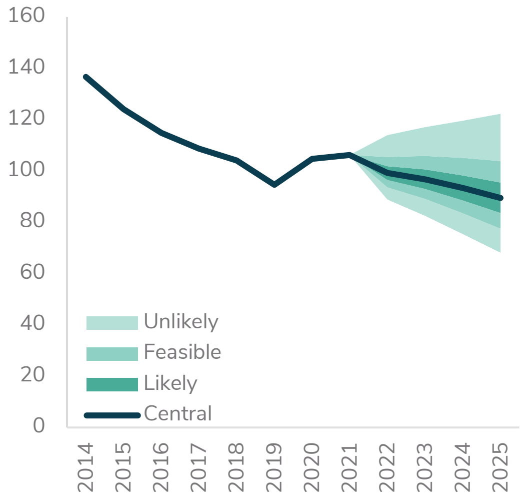
Source: Department of Finance; and Fiscal Council workings.

S8. Debt sustainability assessment

This section uses the Maq (Casey and Purdue, 2021), a macro-fiscal model, to assess paths for the government debt ratio. It draws on past relationships between variables and detailed debt security data to gauge probabilities associated with different outcomes, while also exploring potential shocks around the Department of Finance's "central" forecasts.

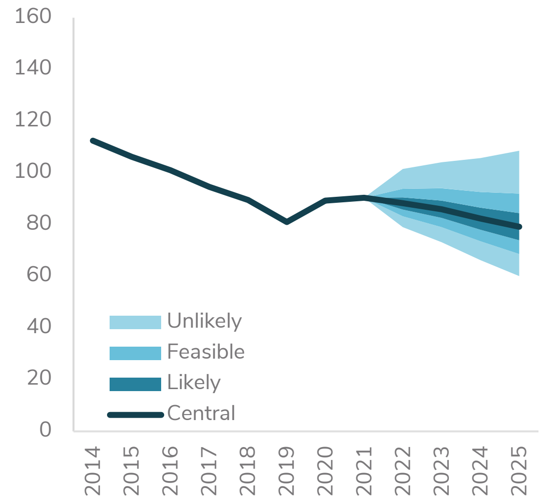
Gross debt fan chart

% GNI*



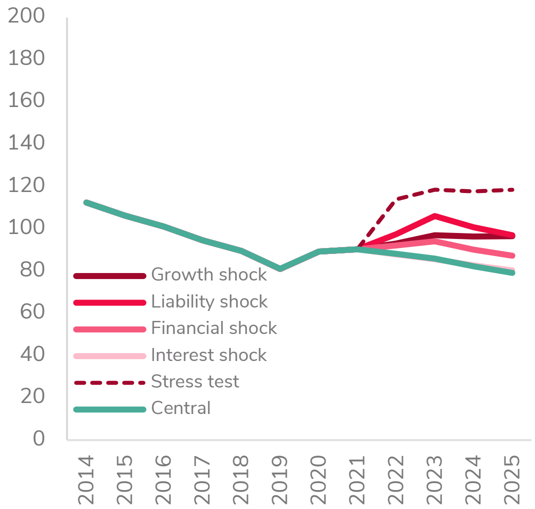
Net debt fan chart

% GNI*



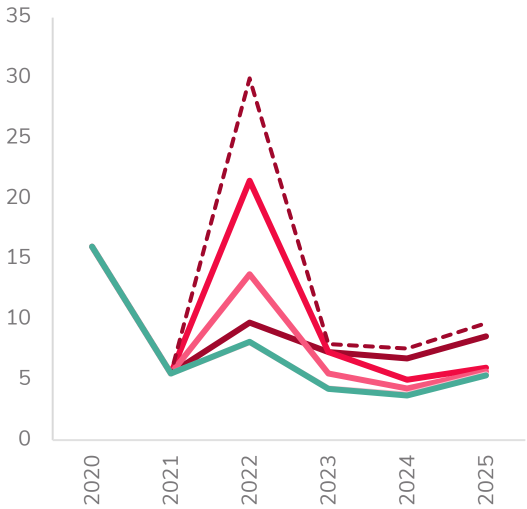
Shock scenarios

Net debt % GNI*



Gross financing needs

% GNI*



Sources: Department of Finance forecasts; CSO outturns; NTMA data on debt securities; and Fiscal Council workings.
Notes: In the stochastic fan chart projections, "Likely" covers the 30% confidence interval, "Feasible" the rest of the 60% interval; and "Unlikely" the rest of the 90% interval. The "Growth shock" assumes real GNI* growth rates 3.6pp (one standard deviation, 1996-2019 excl. financial crisis) weaker than the Central scenario for 2 years (leaving output about 7% below the central scenario). The "Liability" and "Financial" shocks, respectively, assume 15% and 10% GNI* contingent liabilities materialise, based on an historical assessment of fiscal risks internationally. The "Interest shock" assumes marginal interest rates rise by 2pp for the full period. The "Stress test" combines all previous shocks.

S9. Detailed fiscal rules assessment

This section provides a more detailed assessment of the Fiscal rules. Table S9.1 shows a summary assessment of compliance with the fiscal rules, using forecasts included in *Budget* 2022, along with the Council's assessment of one-off and discretionary revenue measures (see Table S9.2 for the Council's estimates of one-offs).

This assessment is based on the Council's principles-based approach to assessing the domestic Budgetary rule (see Table S9.3 for a summary of this approach).

For 2020 and 2021, the Council has assessed that "exceptional circumstances" exist, due to the ongoing Covid-19 pandemic.[45] The exceptional circumstances clause is a provision in the Fiscal Responsibility Act, 2012, which allows for a temporary deviation from the normal requirements under Ireland's Domestic Budgetary Rule.

Separately, the European Commission have activated the general escape clause which allows for deviations from the requirements under the EU fiscal rules. The general escape clause will remain in place into 2022.

[45] The Council has not yet made a determination as to whether exceptional circumstances will continue into 2022.

Table S9.1 Summary Fiscal rules assessment[1, 2, 3, 4]

% of GDP unless otherwise stated. For deviations, negative values = non-compliance

	2020	2021	2022	2023	2024	2025
Corrective Arm						
General government balance (% GNI*)[5]	-8.8	-5.9	-3.4	-0.4	-0.1	0.3
General government balance	-4.9	-3.1	-1.8	-0.2	-0.1	0.2
General government balance Limit	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**
General government debt (% GNI*)[5]	104.7	106.2	99.2	96.7	93.3	89.5
General government debt	58.4	55.2	51.9	50.5	48.6	46.6
1/20th Debt Rule Limit	**60.0**	**60.0**	**60.0**	**60.0**	**60.0**	**60.0**
Debt Rule met?	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
Structural balance	-1.1	-0.4	-0.2	-0.1	0.0	0.2
MTO met?	N	Y	Y	Y	Y	Y
Minimum change in structural balance required	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Change in structural balance	-0.5	0.6	0.2	0.13	0.14	0.2
1yr deviation (€ bn)	-2.2	0.2	1.2	2.0	2.8	4.0
1yr deviation (p.p.)	-0.6	0.1	0.3	0.4	0.5	0.7
2yr deviation (€ bn)	-1.3	-1.0	0.7	1.6	2.4	3.4
2yr deviation (p.p.)	-0.4	-0.3	0.2	0.3	0.5	0.6
Expenditure Benchmark						
(a) Reference rate of potential growth (% y/y)	6.1	5.9	5.9	6.2	5.9	5.5
(b) Convergence margin	0.0	0.0	0.0	0.0	0.0	0.0
(a-b) Limit for real net expenditure growth (% y/y)	6.1	5.9	5.9	6.2	5.9	5.5
GDP deflator used	-1.2	-0.6	2.2	1.7	1.7	1.7
Limit for nominal net expenditure growth (% y/y)	**4.8**	**5.3**	**8.2**	**8.0**	**7.7**	**7.3**
Net expenditure growth (% y/y)	10.0	6.7	2.9	-2.4	4.9	4.0
Net expenditure growth (corrected for one-offs) (% y/y)	-2.3	7.1	7.7	4.4	4.9	4.0
1yr deviation (corrected for one-offs) (€ bn)	5.6	-1.4	0.4	3.3	2.7	3.3
1yr deviation (corrected for one-offs) (% GNI*)	2.7	-0.6	0.2	1.3	1.0	1.2
2yr deviation (corrected for one-offs) (€ bn)	5.0	2.1	-0.5	1.9	3.0	3.0
2yr deviation (corrected for one-offs) (% GNI*)	2.3	1.0	-0.2	0.7	1.1	1.1
Limit for nominal net expenditure growth (€bn)	**3.8**	**4.2**	**6.9**	**7.3**	**7.4**	**7.3**
Net expenditure increase (€bn)	7.9	5.9	2.8	-2.3	4.7	4.0
Net expenditure increase (corrected for one-offs) (€bn)	-1.8	5.6	6.5	4.0	4.7	4.0
Current Macroeconomic Aggregates						
Real GDP growth (% y/y)	5.9	15.6	5.0	4.1	3.7	3.6
Potential GDP growth (% y/y)	9.3	14.3	4.6	3.8	3.7	3.6
Output gap	-2.2	-0.7	-0.4	-0.2	-0.2	-0.1
GDP deflator used (% y/y)	-1.2	-0.6	2.2	1.7	1.7	1.7

Sources: CSO; Department of Finance; and Fiscal Council workings.

Notes: [1] All figures are presented on a general government basis. Assessments examine the *Budget 2022* 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 (see Table S9.2 for these) and on Discretionary Revenue Measures. Potential output and output gap estimates are taken from Budget 2022. For more information on the Council's principles-based approach see Table S9.3 of this report and Box A of the Fiscal Council's Ex-post Assessment of Compliance with the Domestic Budgetary Rule 2018 (Fiscal Council, 2019a). The MTO is not currently set for 2023-2025 but is assumed constant at -0.5 per cent of GDP.

[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 GDP. Once the debt-to-GDP ratio falls below 60 per cent, the requirement is to maintain a ratio below 60 per cent.

[3] Figures in red indicate a significant deviation from the limit. Figures in amber indicate some deviation from the limit.

[4] Exceptional circumstances exist for 2020–2021. Therefore, deviations from the requirements for these years are allowed.

[5] The general government balance and general government debt are shown here as a per cent of GNI* for reference purposes only. Legal compliance with the corrective arm of the SGP is assessed based on GDP ratios.

The fiscal rules will not be met in 2021, as the general government deficit is forecast to be 3.1 per cent of GDP, above the 3 per cent reference value in the SGP. However, this is solely as a result of the ongoing exceptional circumstances related to the Covid-19 pandemic. The debt-to-GDP ratio is forecast to fall to 55.2 per cent, below the 60 per cent reference value in the SGP.

Table S9.2: One-offs

€ millions

	2019	2020	2021	2022	2023	2024	2025
Revenue	0	-515	310	0	0	0	0
Expenditure	0	9,700	10,026	6,300	0	0	0
Net one-offs	0	10,215	9,716	6,300	0	0	0

Sources: CSO; Department of Finance; and Fiscal Council workings.
Note: The Council at this time do not consider the reduction in the rate of VAT for the hospitality sector a one-off, but instead treat it as a discretionary revenue raising measure.

In 2022, based on current forecasts, the domestic budgetary rule will be complied with. The deficit-to-GDP ratio is forecast to fall to 1.8 per cent of GDP, below the 3 per cent of GDP reference value in the SGP. The structural deficit of 0.2 per cent of GDP is forecast to be below the Medium-term Budgetary Objective (MTO) of a structural deficit of no more than 0.5 per cent of GDP. Net expenditure (excluding one-offs) is forecast to grow by 7.2 per cent, below the Expenditure Benchmark limit of 8.2 per cent.[46]

Over the medium-term, the structural balance is forecast to remain at the MTO. Net expenditure (excluding one-offs) is forecast to grow by on average 4.4 per cent over 2023-2025, below the Expenditure Benchmark limit. The debt-to-GDP ratio is forecast to fall to 46.6 per cent by 2025, well below the 60 per cent of GDP reference value in the SGP.

[46] The high reference rates under the expenditure benchmark are a mechanical function of the high potential output growth rates from the Department's GVA-based estimates of the output gap. The Council does not consider these growth rates as a plausible indication of sustainable underlying growth rates. See Section 1 for further details on this issue.

Table S9.3: Outline of the Council's principles-based approach to the Budgetary Rule

Criteria	Fiscal Council Approach	European Commission Approach
Potential Output and the Output Gap	The Department's GVA-based estimates of potential output and the output gap.	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 GVA-based potential output growth (i.e. not frozen).	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 GVA deflator (i.e. not frozen).	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.	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 Commission's latest CAM-based estimates of the NAWRU.
Margin of Tolerance	No margin of tolerance.	0.25% of GDP from the MTO.
Significant Deviation from the Expenditure Benchmark	0.5% and 0.25% of GNI* for 1-year and 2-year assessment respectively.	0.5% and 0.25% of GDP for 1-year and 2-year assessment respectively.
Budgetary Semi-Elasticity	0.52	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 (Fiscal Council, 2019a) and Box M of the November 2019 Fiscal Assessment Report (Fiscal Council, 2019e). As of Budget 2022, the Department's preferred measure of the output gap is based on their GVA based models. As a result, the Council's Principles-based Approach is now based on this preferred measure of the output gap.

S10. Policy costings (based on official sources)

This section gives an illustration of the expected impacts that typical tax and spending adjustments are estimated to have on the public finances.

Examples of tax & spending changes

€ million, estimated full year impact

Income tax	
Yield from 1 percentage point (pp) rise in 20% income tax rate	744
Yield from 1 pp rise in 40% income tax rate	403
PRSI	
Increase in 4% employee PRSI rate to 4.5%	377
Increase in 10.05% employer PRSI rate to 10.55%	374
VAT	
One pp change on 9% rate	99
One pp change on 13.5% rate	292
One pp change on 23% rate	481
Carbon tax	
Increase by €15 a tonne	319
Local property tax	
Additional charge of €100 on every property	183
Capital acquisitions tax	
Increase from 33% to 43%	168
Capital gains tax	
Increase in 33% rate by 1pp	42
Social insurance spending	
€1 increase in jobseekers allowance (for max rate)	8
€1 increase in jobseekers allowance (for ages 18-24)	1
€1 increase in jobseekers benefit	3
€1 increase in carer's allowance (under 66)	3
€1 increase in carer's allowance (66+)	0.5
€1 increase in disability allowance	9
€1 increase in maternity and adoptive benefit	1
€1 increase in state pension (contributory)	26
€1 increase in state pension (non-contributory)	5
€1 increase in illness benefit	3
Public investment spending	
Keeping at 2020 levels in € (avg annual savings over 2022-25)	3,915
Indexing the tax system	
A 1% wage increase is assumed to raise €178 million from not indexing income tax	178
A 1% wage increase is assumed to raise €24 million from not indexing USC	24

Sources: Most estimates are from Revenue's "Post-Budget 2022 Revenue Ready Reckoner, Nov 2020". PRSI rate changes are from the Tax Strategy Group report in July 2019. Social insurance increases are from the PBO's Pre-Budget 2022 Ready Reckoner.
Note: Estimates seldom include behavioural impacts.

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 (CA*): 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 domestic demand (MDD): A measure of domestic economic activity that comprises consumer spending, government current spending, and investment spending (excluding investment in aircraft related specifically to leasing activities and investment in intangibles specifically related to R&D service imports and trade in intellectual property).

Modified gross national income (GNI*): 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.

Net Expenditure: A measure of government expenditure used to assess compliance with the Expenditure Benchmark. Net Expenditure 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. In addition, net expenditure smooths the impact of government investment in large scale projects by using a four year average of government investment instead of the one-year impact of government investment.

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.

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. It includes the total nominal value of all debt owed by public institutions in Member States, except that part of debt 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. Under the Council's principles-based approach to the Domestic Budgetary Rule, the thresholds of at least 0.5 percentage points of GNI* in a single year or at least 0.25 percentage points on average per year in two consecutive years apply.

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 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.

Underlying domestic demand (UDD): A measure of domestic economic activity that comprises consumer spending, government current spending, and investment spending (excluding investment in aircraft and intangibles, such as research). At a conceptual level, the Council prefers to use this measure over modified domestic demand. Excluding all aircraft investment and all intangibles, as is the case with underlying domestic demand, is useful since these investments tend to reflect activity in sectors which are dominated by foreign-owned multinational firms, with little value added likely to accrue to Irish residents.

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