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 *SPU 2022* are set out in Table S1a.

Table S1a: Timeline for Endorsement of *SPU 2022* Projections

4 March	The CSO released its Quarterly National Accounts estimates for Q4 2021.
8 March	The Council's Secretariat and Department staff met with the CSO to clarify technical details of latest Quarterly National Accounts estimates.
22 March	The Department sent its technical assumptions underpinning its forthcoming forecasts.
24 March	The Department sent the Council preliminary forecasts in line with Memorandum of Understanding requirements.
28 March	The Department presented its preliminary forecasts to the Council's Secretariat.
29 March	The Department sent a number of additional items in relation to its forecasts requested by the Council, including assumptions around migration, underlying wage growth social transfers and social contributions, as well as further detail on HICP inflation forecasts.
1 April	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.
4 April	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 *SPU 2022*.
12 April	The Department's forecasts were published in *SPU 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 24th March before opening the Department of Finance's preliminary forecasts.

Table S1b: The Council's Benchmark projections

% change in volumes unless otherwise stated

	2020	2021	2022	2023	2024	2025	2026	2027
Demand								
GNI*	-3.5	5.0	4.9	2.9	2.6	3.0	2.7	2.3
...of which (p.p. contributions)								
Underlying domestic demand[b] (p.p.)	-4.1	4.8	4.7	3.4	3.0	3.2	2.9	2.7
Adjusted net exports[b] (p.p.)	2.4	-0.3	0.4	-0.4	-0.4	-0.2	-0.1	-0.4
Other, incl. stocks (p.p.)	-1.8	0.5	-0.2	0.0	0.0	0.0	0.0	0.0
Underlying domestic demand[a]	-4.9	5.9	5.7	4.0	3.6	3.8	3.3	3.1
Consumption	-10.4	5.6	9.1	4.8	3.8	3.5	3.3	3.4
Government	10.9	5.3	-1.3	2.0	2.0	2.1	2.1	2.1
Underlying investment[a]	-3.6	7.3	3.7	3.9	4.7	6.5	4.9	3.1
Adjusted net exports	18.5	-2.0	2.6	-3.1	-3.1	-1.8	-1.1	-3.0
...of which								
Adjusted exports	-4.5	2.5	1.5	3.0	3.2	4.0	4.1	3.2
Adjusted imports	-14.0	5.1	0.9	6.3	6.3	6.6	6.2	5.7
Supply								
Potential output	-3.4	3.8	0.0	3.7	3.7	3.6	3.3	3.1
Output gap (% potential output)	-5.1	-3.7	-0.3	-0.1	0.2	0.6	0.9	1.1
Labour Market								
Labour force	0.8	4.2	1.1	1.5	1.2	1.5	1.4	1.4
Employment	-10.7	7.8	9.2	1.5	1.5	1.6	1.7	1.7
Unemployment rate (% labour force)	16.0	13.0	6.0	6.0	5.7	5.6	5.3	5.1
Prices								
HICP	-0.5	2.3	6.4	2.5	1.5	2.2	2.1	2.2
Personal consumption deflator	0.7	3.2	6.8	3.3	2.1	2.4	2.3	2.3
GNI* deflator	0.1	0.6	5.1	2.1	1.8	2.3	2.3	2.4
Other								
Nominal GNI*	-3.4	5.6	10.3	5.0	4.5	5.4	5.1	4.7
Nominal GNI* (€ billion)	208.2	219.8	242.3	254.5	265.8	280.1	294.3	308.3
Modified current account (% GNI*)	11.5	9.3	7.7	6.3	5.2	4.3	3.5	2.7
Savings ratio	25.2	21.9	14.2	12.4	12.3	12.1	12.3	12.4

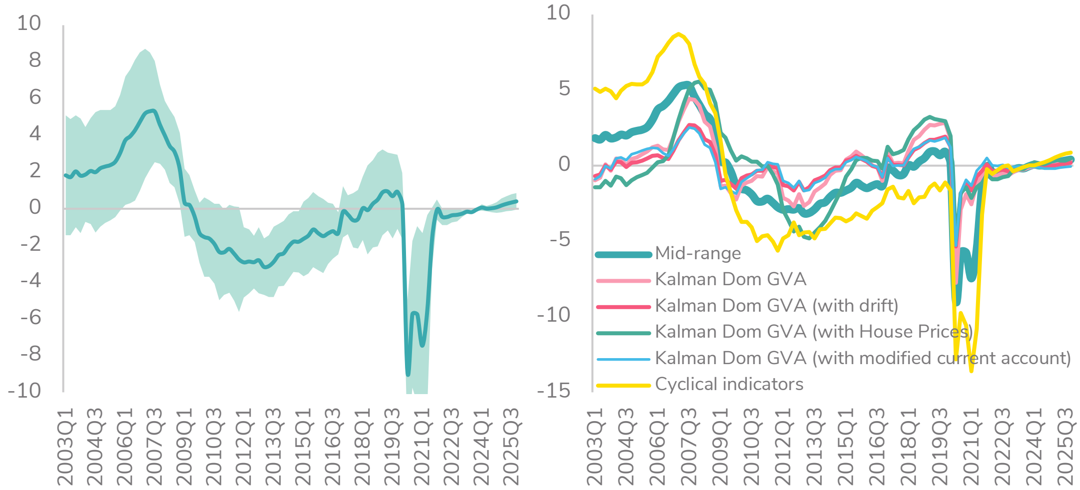
a Underlying (final) domestic demand, underlying investment, and underlying imports exclude "other transport equipment" (mainly aircraft) and intangibles.
b Underlying contributions to real GNI* growth rates in percentage points — here adjusted net exports is forecast based on adjusted exports and adjusted 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 cycle 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)

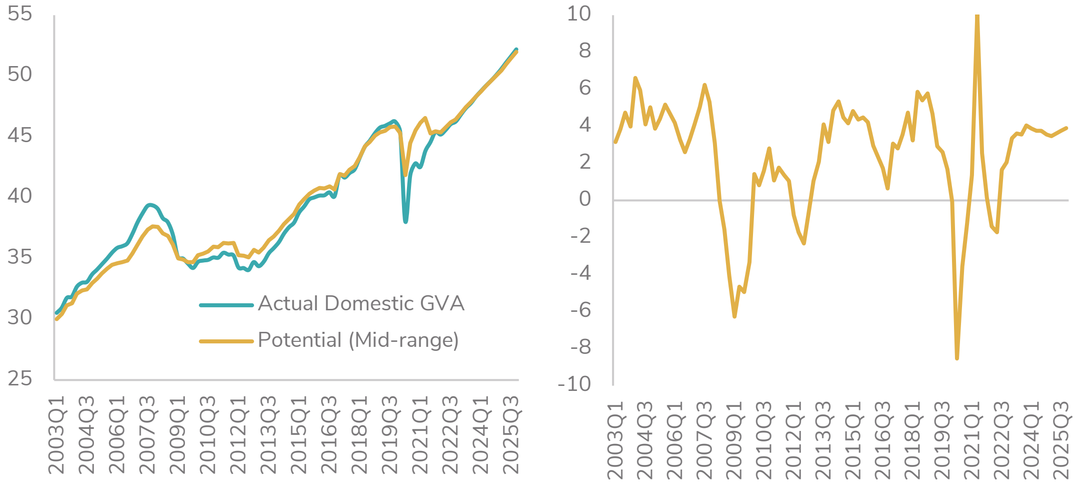


Sources: Fiscal Council workings.

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.

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 *SPU 2022*, but with additional risks identified by the Council.

Macro Risks Matrix

Likelihoods and impacts are as assessed by the Council

Likelihood	Impact	
High	High	**Monetary policy tightening**: as inflation gathers momentum in the world's major advanced economies, the impact of central banks increasing interest rates to far above prevailing rates in recent years could restrain economic growth in Ireland.
Medium	High	**Further energy price rises**: the impact of a further rise in energy prices could exacerbate an already-challenging global slowdown currently underway, with potentially significant ramifications for the Irish economy.
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	**International 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 international economic growth. This would reduce demand for Ireland's exports from its main trading partners. However, features of the Irish economy including the presence of multinational firms in less-cyclical sectors (such as pharmaceuticals and ICT) could potentially avert a recession for Ireland.
Medium	High	**De-globalisation and supply-chain disruption**: the pandemic could result in more permanent shifts away from trade and globalisation, exacerbating previous trade tensions and trends, with adverse implications for Ireland's small and open economy.
Medium	Medium	**Brexit**: it is possible that renewed frictions between the EU and the UK will harm growth prospects, and that the full impact of Brexit on the Irish economy will prove more severe than assumed.
Medium	Medium	**Less scarring effects**: the Council has previously noted that official estimates of scarring over the medium term were too high. It is possible that the recovery from the pandemic is incomplete for longer than assumed, and that scarring is lower as a result.
Medium	Medium	**Fuller recovery in consumer spending**: related to lower scarring effects, the nominal level of consumption was unchanged in *SPU 2022* compared to *Budget 2022*, despite significantly improved expectations for labour income. Higher net inward migration could also imply upside risks to labour income and household spending.
Medium	Medium	**Higher investment**: the potential for a greater response in terms of housing supply, encouraged by excess household savings, 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 (including income taxes), 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.
Not quantified	High	**War in Ukraine escalates**: economic activity would suffer as a result of broader conflict.
Not quantified	High	**New public health restrictions**: the impact of further restrictions due to vaccine-resistant variants of Covid-19, or a new pandemic, would be high.

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

Fiscal Risks Matrix

Likelihoods and impacts are as assessed by the Council

Likelihood	Impact	
Not Specified	High	**Escalation of War in Ukraine.** Disruption to energy supply could have significant economic and fiscal implications. *SPU 2022* does not specify a likelihood.
Not specified	Medium	**Refugee-related measures**. Were the number of refugees entering Ireland to exceed estimates on which *SPU 2022* were based, this would imply additional expenditure. Given the high levels of expenditure already allocated for in SPU 2022, the Council assesses a medium impact to be more appropriate.
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, *SPU 2022* forecasts already incorporate a significant impact (€2 billion). *SPU 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. In addition, planned reforms are likely delayed until 2024. 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.
High	Medium	**Other spending pressures/overruns**. Some obvious spending pressures have not been budgeted for. The Christmas Bonus has not been budgeted for this year (2021 cost was €313 million). More generally, core spending growth outlined in *SPU 2022* is below that required to maintain existing service levels given demographic and price pressures. This risk is added by the Council.
High	Medium	**Cost of living measures.** Additional measures to address the cost of living would negatively affect the public finances. In addition, some of the temporary measures could prove longer lasting than assumed in *SPU 2022*.
High	Medium	**Climate change and renewable energy targets**. *SPU 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 *SPU 2022* forecasts. Stand-Still costs in the coming years are significant, mostly due to inflation, but partially due to population ageing.
Medium	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. The Council asses this risk to be medium likelihood.
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 *SPU 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). €60 million has been allocated for Mica homes redress in 2022.
Medium	Low	**EU Budget contributions**. Stronger than assumed national income growth (relative to other EU countries) could lead to larger EU budget contributions.
Low	High	**Pandemic related budgetary measures**. The reintroduction of public health restrictions would significant economic and fiscal implications. More generally, if some of the pandemic related schemes (PUP, EWSS etc) were to be reintroduced, that would imply additional expenditure.
Medium	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 within the forecast horizon covered by *SPU 2022*.
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 (SPU 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 SPU 2022

€ millions unless stated

	2020	2021	2022	2023	2024	2025
General Government Revenue	**82,647**	**96,961**	**105,775**	**110,940**	**115,995**	**120,635**
Income Tax	22,711	26,665	29,490	31,660	33,625	35,650
VAT	12,424	15,440	17,760	19,320	20,420	21,385
Corporation Tax	11,833	15,325	16,865	16,945	17,690	18,410
PRSI	10,625	11,798	12,977	13,886	14,788	15,675
Excise	5,448	5,840	5,700	6,180	6,445	6,725
Stamp Duties	2,090	1,485	1,940	2,015	2,170	2,330
Remaining GG Revenue	17,516	20,408	21,043	20,934	20,857	20,460
General Government Expenditure	**101,776**	**105,072**	**107,655**	**109,715**	**109,530**	**112,975**
Social payments	37,593	37,444	36,445	36,785	37,120	38,220
Compensation of employees	24,644	25,951	27,235	28,345	29,500	30,610
Intermediate consumption	14,908	16,245	16,525	16,910	17,310	17,540
Capital expenditure	8,516	8,498	10,630	11,820	12,695	13,815
Interest expenditure	3,830	3,291	3,315	3,565	3,360	2,930
Subsidies	6,400	6,937	2,340	1,650	1,675	1,705
Other	5,885	6,706	11,165	10,640	7,870	8,155
Primary expenditure	**97,946**	**101,781**	**104,340**	**106,150**	**106,170**	**110,045**
Current Primary expenditure	**89,430**	**93,283**	**93,710**	**94,330**	**93,475**	**96,230**
General Government Balance	**-19,129**	**-8,111**	**-1,880**	**1,225**	**6,465**	**7,660**

Sources: CSO; Department of Finance; and Fiscal Council workings.
Note: Remaining GG revenue is calculated as a residual. It is calculated as general government revenue minus the six exchequer revenue items which are listed above. As these specific revenue headings are on an exchequer basis, this residual measure may not be informative.

S5. Tax forecasts decomposed

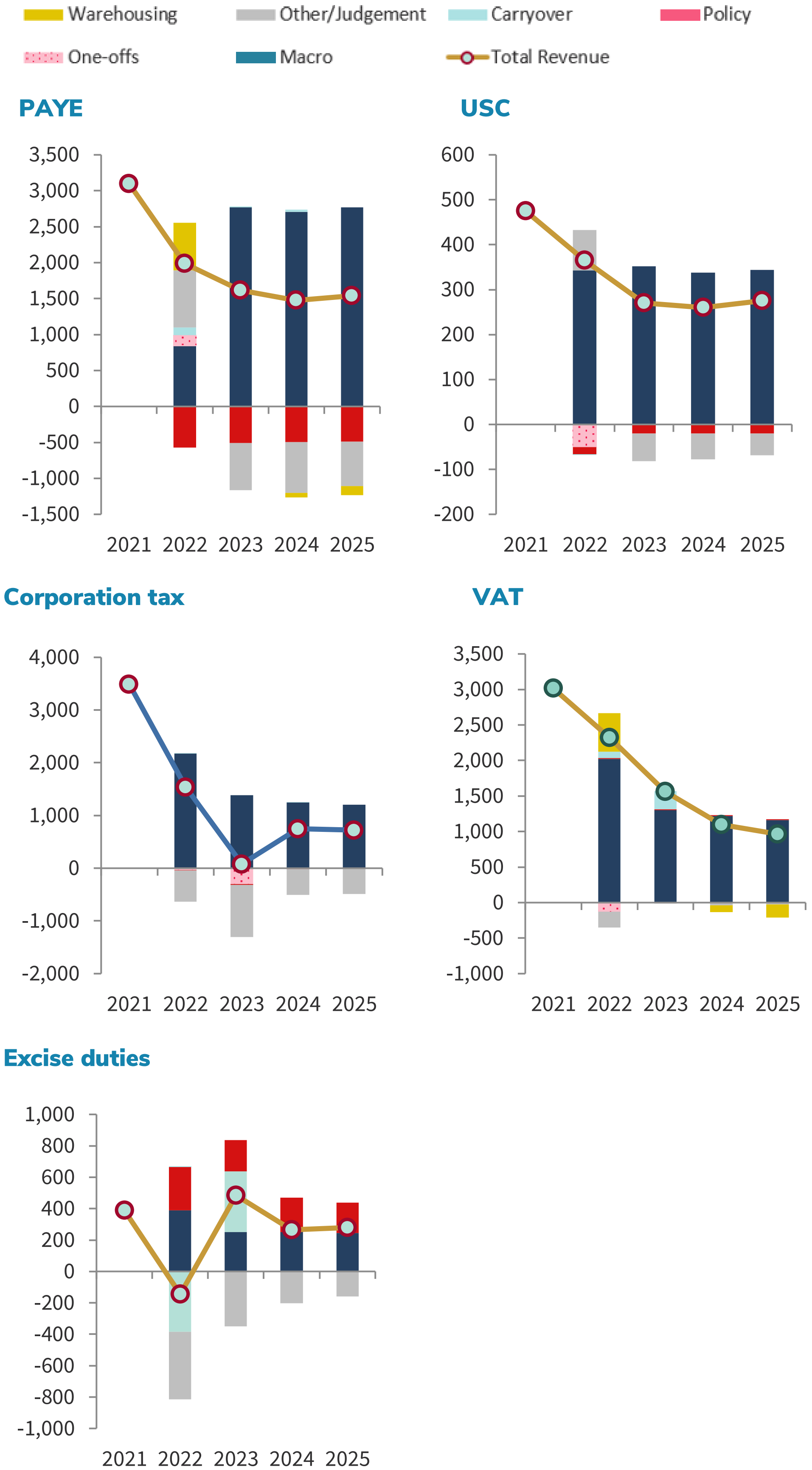
This section examines official forecasts for the main tax heads. The projected yearly changes in tax receipts are decomposed to better understand how the forecasts are arrived at.[1] The annual changes are attributed to a number of components:

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 net impact of warehousing of taxes from 2020 - 2022, with repayments from 2022-2025.
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.

[1] 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



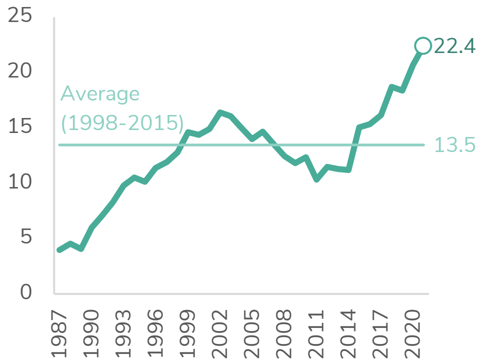
Sources: Department of Finance; and Fiscal Council workings.

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.

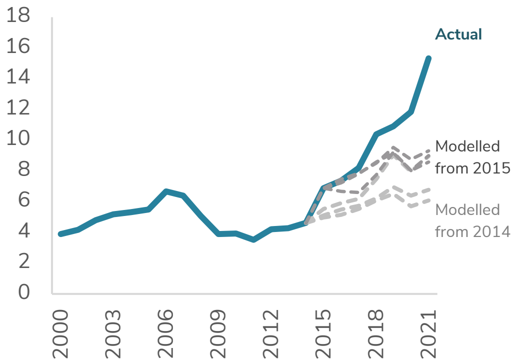
Corporation tax at record shares

% total Exchequer taxes



Receipts exceed model estimates

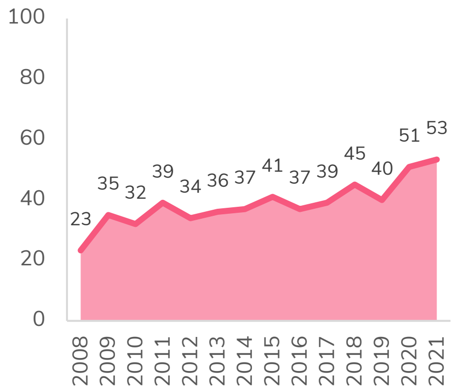
€ billions



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.

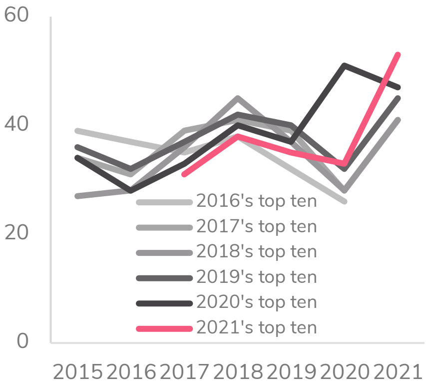
Receipts are concentrated

% 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 2021	15.3
% of Exchequer taxes	22.4
Estimates of excess: lowest estimate	6.0
central estimate	7.6
highest estimate	9.2
% net receipts from Top 10 corporate groups	56
% net receipts from Top 10 companies	53
% net receipts from Top 100 companies	79
% net receipts from Foreign-owned MNEs	81

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.

Table S7.1 Stand-Still costs higher than forecast increases

Annual change in € billion (gross voted current spending)

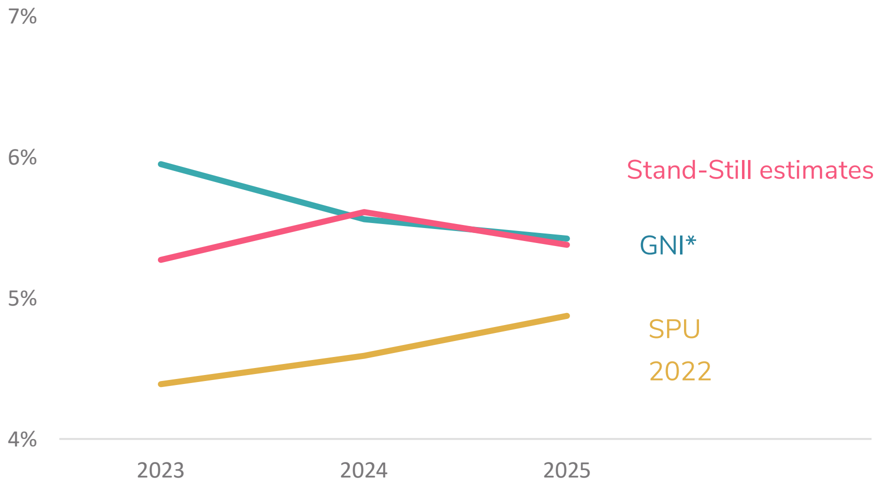
	2023	2024	2025	2026	2027
Stand-Still scenario	3.5	4.0	4.0	4.3	4.7
- demographic pressures	0.2	0.8	0.7	0.9	0.9
- price pressures	3.3	3.3	3.3	3.4	3.9
Total Increases in *SPU 2022*	3.2	3.3	3.6		
Gap to Stand-Still	0.2	0.8	0.4		

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

To stand still, the Council estimates that increases of the order of €3.8 billion per year would be required over the medium term (2023–2025). By comparison, *SPU 2022* spending forecasts show spending increasing by around €3.4 billion per year to 2025.

Figure S7.1 Stand-Still estimates of spending are in line with medium-term output growth

% change year-on-year



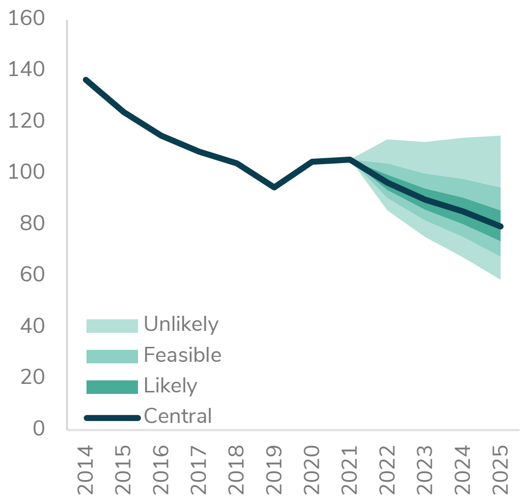
Source: Department of Finance; and Fiscal Council workings.
Notes: "SPU 2022" refers to the annual change in core gross voted current spending, which excludes temporary costs such as Covid-19-related payments and the humanitarian contingency allocation of €3bn in 2023.

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.

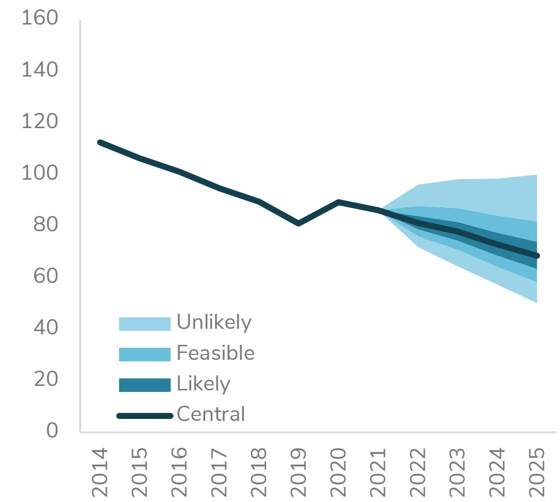
Gross debt fan chart

% GNI*



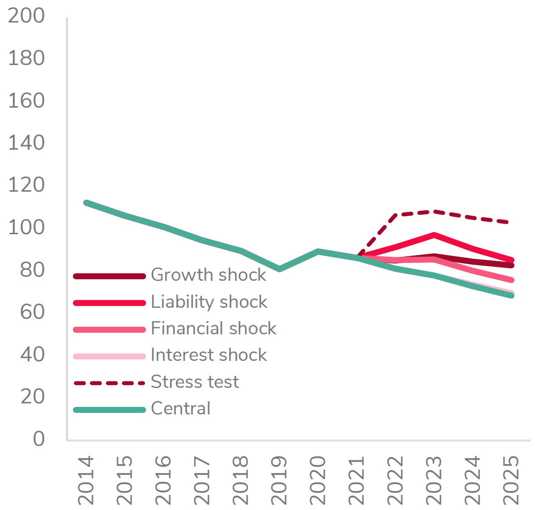
Net debt fan chart

% GNI*



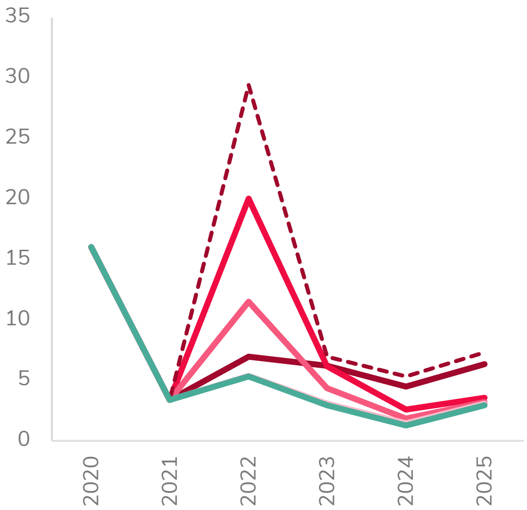
Shock scenarios

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 *SPU 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, 2021, and 2022 the Council has assessed that "exceptional circumstances" exist, due to the ongoing Covid-19 pandemic and the fallout from the war in Ukraine. 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 has remained in place in 2022 and the European Commission have deemed that the conditions are met for its continuation into 2023 with a deactivation in 2024.

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]	-9.2	-3.6	-0.8	0.5	2.4	2.7
General government balance	-5.1	-1.9	-0.4	0.2	1.2	1.4
General government balance Limit	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**
General government debt (% GNI*)[5]	104.7	105.6	96.5	89.9	85.4	79.4
General government debt	58.4	56.0	50.1	46.3	43.8	40.7
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	-1.3	0.4	1.3	1.1	1.3	1.3
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	-0.7	1.8	0.9	-0.3	0.2	0.0
1yr deviation (€ bn)	-3.1	4.0	8.6	7.9	9.5	10.0
1yr deviation (p.p.)	-0.8	0.9	1.8	1.6	1.8	1.8
2yr deviation (€ bn)	-1.7	0.5	6.3	8.2	8.7	9.7
2yr deviation (p.p.)	-0.5	0.1	1.4	1.7	1.7	1.8
Expenditure Benchmark						
(a) Reference rate of potential growth (% y/y)	6.1	6.0	6.0	6.2	6.0	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	6.0	6.0	6.2	6.0	5.5
GDP deflator used	-1.2	-0.4	4.1	2.2	1.9	1.7
Limit for nominal net expenditure growth (% y/y)	**4.9**	**5.6**	**10.3**	**8.5**	**8.0**	**7.3**
Net expenditure growth (% y/y)	12.1	5.2	5.8	0.9	0.3	3.9
Net expenditure growth (corrected for one-offs) (% y/y)	0.1	7.3	8.4	3.9	3.7	4.1
1yr deviation (corrected for one-offs) (€ bn)	3.8	-1.4	1.7	4.3	4.2	3.3
1yr deviation (corrected for one-offs) (% GNI*)	1.8	-0.6	0.7	1.7	1.5	1.1
2yr deviation (corrected for one-offs) (€ bn)	4.0	1.2	0.1	3.0	4.3	3.7
2yr deviation (corrected for one-offs) (% GNI*)	1.9	0.6	0.0	1.2	1.6	1.3
Limit for nominal net expenditure growth (€bn)	**3.9**	**4.5**	**9.0**	**8.0**	**7.8**	**7.4**
Net expenditure increase (€bn)	9.6	4.7	5.5	0.9	0.3	4.0
Net expenditure increase (corrected for one-offs) (€bn)	0.0	5.9	7.3	3.7	3.6	4.2
Current Macroeconomic Aggregates						
Real GDP growth (% y/y)	5.9	13.5	6.4	4.4	4.0	3.8
Potential GDP growth (% y/y)	9.6	13.9	6.1	3.4	3.5	3.5
Output gap	-1.8	-1.0	-0.5	-0.1	0.0	0.2
GDP deflator used (% y/y)	-1.2	-0.4	4.1	2.2	1.9	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 SPU 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 SPU 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 have been met in 2021, with the outturn for the general government deficit at 1.9 per cent of GDP, below the 3 per cent reference value in the SGP. This was despite the ongoing exceptional circumstances related to the Covid-19 pandemic. The debt-to-GDP ratio fell to 56 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	-1,095	690	-551	0	0	0
Expenditure	0	9,600	8,400	6,580	3,835	500	300
Net one-offs	0	10,695	7,710	7,131	3,835	500	300

Sources: CSO; Department of Finance; and Fiscal Council workings.
Note: The Council continues to consider the reduction in the rate of VAT for the hospitality sector not a one-off, but instead treat it as a discretionary revenue raising measure based on historical precedent and that this measure has already been extended twice. Estimates above remove spending on the PUP per the calculation of the structural balance.

In 2022, based on *SPU 2022* forecasts, the domestic budgetary rule will be complied with. The deficit-to-GDP ratio is forecast to fall further to 0.4 per cent of GDP, below the 3 per cent of GDP reference value in the SGP. The structural balance is forecast to be in a surplus of 1.3 per cent of GDP in 2022 and therefore 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 8.4 per cent, below the Expenditure Benchmark limit of 10.3 per cent.[2]

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 3.9 per cent over 2023-2025, below the Expenditure Benchmark limit. The debt-to-GDP ratio is forecast to fall to 40.7 per cent of GDP in 2025, a significant downward revision from the 46.6 per cent forecast in *Budget 2022* and well below the 60 per cent of GDP reference value in the SGP.

[2] 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.