

An Roinn Airgeadais Department of Finance

Stability Programme Update 2020 Incorporating the Department of Finance's Spring Forecasts

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Prepared by Economics Division Department of Finance www.gov.ie/finance

Ireland's Stability Programme April 2020 Update Incorporating the Department of Finance's Spring Forecasts

Foreword

This update of Ireland's *Stability Programme* takes account of *Budget 2020* and other Government initiatives, and is prepared against the backdrop of the Covid-19 global pandemic. It includes an update of the economic and fiscal outlook (the Department of Finance's spring forecasts).¹ This document was submitted to the European Commission on 30th April 2020 in accordance with the requirements of the European Semester.

The *Stability Programme* was published in draft form on 21st April 2020 prior to submission to the European Commission.

The document has been prepared in line with the May 2017 guidelines on the format and content of Stability and Convergence Programmes, updated to take account of additional horizontal guidance provided by the European Commission to Member States in the context of preparing documentation during the Covid-19 global pandemic.

This document should be read in conjunction with Ireland's *National Reform Programme (NRP)* 2020, which sets out policies being advanced in response to challenges identified by the European Commission in its *Country Report: Ireland*, and which reports on progress towards *Europe* 2020 strategy targets.

The macroeconomic analysis and outlook contained in this document are based on data available at end-March 2020, and were finalised in mid-April. Officials from the Department subsequently presented the economic outlook to the *Irish Fiscal Advisory Council* on 8th April. The macroeconomic forecasts were endorsed by the *Irish Fiscal Advisory Council* on 10th April 2020.² The fiscal projections are based on data available at mid-April.

¹ The Department publishes two sets of macroeconomic and budgetary forecasts each year:

⁻ Department of Finance Spring Forecasts (contained in the Stability Programme Update), April;

Department of Finance Autumn Forecasts (contained in the Budget), October.

Both sets of forecasts normally cover a five-year horizon. On this occasion, however, the European Commission has provided guidance to the effect that, given the exceptionally uncertain economic situation, Member States can limit their forecasts to the current year; the guidance also provides for a more limited set of variables to be included than would normally be the case. The Department has incorporated most of the usual variables in this *Stability Programme*, as well as a projection for 2021. There is too much uncertainty at the current juncture for medium-term forecasts to be meaningful. Given this unprecedented uncertainty, the short-term numbers should be seen as a scenario rather than a forecast *per se*.

² The presentation provided to the Council, which may contain minor differences in figures, particularly related to government consumption, is available on the Department's website: <u>https://www.gov.ie/en/publication/3639c3-spu-2020-presentation-to-ifac/</u>

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³ In line with the Government's Open Data Initiative the data underpinning charts in this document are available on the Department of Finance website.

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1.1 Policy Strategy

The economic landscape – domestically and elsewhere – has fundamentally changed in the space of a few weeks. In Ireland, large swathes of economic activity have temporarily come to an effective standstill, in an effort to supress the transmission of the Covid-19 virus. Non-food retail, entertainment and hospitality are among those sectors at the economic front-line. With other sectors also affected – albeit to varying degrees – economic activity is now falling sharply in Ireland. The pandemic has also transformed the labour market, from one of full-employment at end-2019 to one in which unemployment is likely to reach its highest level on record in the second quarter, before easing back thereafter.

From a purely economic perspective, the central question relates to the depth and duration of the recession. Unfortunately, with uncertainty regarding *inter alia* the timeline for vaccine development, there is no immediate answer to this question. Instead, the key working assumption underpinning the baseline scenario set out in this document is that the shock to the global and Irish economies is a transient one: assuming that containment measures are effective in reducing the infection rate, economic activity would bottom-out in the second quarter, with a gradual recovery – domestically and internationally – beginning later this year and gaining momentum into next year. Having said that, it is not difficult to imagine a worse outcome.

The policy response has been swift and forceful. The Government has mobilised its balance sheet to expand healthcare provision and to cushion, in so far as possible, the contraction in private sector demand. This has been possible because of prudent management of the public finances in recent years. In addition, debt management operations mean that significant liquid assets have been accumulated for this year, even after allowing for a large stock of maturing debt. Importantly, there is almost no public debt falling due next year.

In broad terms, three key principles have guided the Government's approach to addressing the fall-out from the pandemic:

- Supporting the provision of additional healthcare capacity to minimise loss-of-life;
- Cushioning the impact of necessary restrictions on household incomes;
- Helping firms to bridge-the-gap until restrictions are relaxed.

The overarching approach has been to ensure economic activity recovers as quickly as possible once the virus is brought under control. The Government is working to limit business failures and worker layoffs with timely, targeted and temporary supports for both firms and employees; this is how the permanent, or 'scarring', effects of the crisis will be minimised. The fiscal policy response – to save lives and preserve living standards – adopted by the Government compares favourably with the practice elsewhere (table A12 in appendix).

In operational terms, there are several dimensions to this (see table 1). For employees, Government supports – in the form of the *Temporary Wage Subsidy Scheme* – have been geared towards ensuring the maintenance of a close link with the labour market (which will also benefit businesses). This is in line with international best practice, where a large body of evidence shows that workers become more detached from the labour market as the duration of unemployment increases. In addition, income supports for those losing employment due to the pandemic – the *Pandemic Unemployment Payment* – have been increased, while mortgage-owning households suffering an income shock will also benefit from loan forbearance.

Date Measures € billion 4.8 employee / household / business supports of which 1. employee supports^ 09-Mar Self-isolation unemployment benefit; sick pay for self-isolation Wage subsidy scheme; pandemic unemployment benefit 24-Mar 2. household supports 18-Mar Payment breaks available of up to 3 months on mortgage and personal loans 18-Mar Stamp duty on credit cards deferred by 3 months LPT deferred by 2 months 16-Mar 3. business supports^^ 09-Mar Liquidity funding for affected businesses 13-Mar Interest and penalties for late certain payments by employers suspended 13-Mar March 2020 RCT rate review suspended (construction sector) 18-Mar Payment breaks available of up to 3 months on business loans 20-Mar Rates payments for certain impacted sectors deferred until May Further liquidity funding & loan schemes for SMEs 09-Apr other supports 2.0 of which: 1. health sector supports^^^ Improving capacity, increasing staffing, overtime 09-Mar 25-Mar Securing capacity of private hospitals 07-Apr Additional funding (Covid-19 Action Plan) and supports for nursing homes^^^^ 13-Mar Customs 'green routing' for critical pharmaceutical goods 2. financial sector measures 18-Mar Central Bank reduced the Counter-Cyclical Buffer (CCyB) from 1% to 0% 3. housing sector supports 19-Mar Moratoriums on evictions and rent increases for duration of Covid emergency 19-Mar Notice period for tenancies of less than six months increased to 90 days 19-Mar Flexibility for BTL landlords to facilitate forbearance to affected tenants **Total measures** 6.8

Table 1: main policy responses, grouped by sector

* Certain additional sectoral measures are being funded from within existing resources.

^ Estimated level of expenditure across all schemes being in the region of €4.5 billion over the 12-week period ^^ Additional Exchequer funding of c €¼ billion will support liquidity measures of approximately €1 billion. ^^^ Approximately €2 billion gross required for Health measures including the delivery of the Covid-19 Action Plan. ^^^ Additional healthcare funding to expand capacity and procure equipment in accordance with the Covid-19 Action Plan.

Rounding may affect totals.

Source: calculations by Departments of Finance and Public Expenditure and Reform

In the case of the enterprise sector, the approach boils down to maximising the firm survival rate for micro-enterprises and SMEs. To this end, Government support is mainly in the form of short-term cash-

flow arrangements, such as guaranteed loan schemes and deferred tax payments. The rationale for this is to ensure that liquidity problems – including temporary revenue declines – for otherwise viable firms do not morph into solvency problems, thus preventing lasting economic damage. In addition, the Government is maintaining high levels of investment spending, a crucial support for the construction sector once the containment measures are relaxed.

While necessary, the fiscal cost of providing short-term support to the private sector – including through the operation of the automatic stabilisers – will be significant. For this year, a sharp deterioration in the fiscal balance is now expected, with a general government deficit of €23 billion in prospect. At an estimated 7.4 per cent of GDP, this means that the triggering of an *Excessive Deficit Procedure* in due course appears unavoidable, as will likely be the case for the vast majority of Member States in the European Union. More importantly, the downward trajectory in the debt-income ratio evident in recent years will be temporarily reversed; the debt-to-GDP ratio is forecast at 69 per cent (debt-GNI* at 125 per cent) this year, an annual increase of 10 percentage points. To put Ireland's deficit and debt projections into perspective, the IMF is forecasting an average deficit of 7.5 per cent of GDP in the euro area, with the debt-GDP ratio in the euro area rising by an average of 13 percentage points this year.

The fiscal starting position in Ireland is reasonably good. This reflects Government policy in recent years to build fiscal buffers – running headline budget surpluses and establishing the *Rainy Day Fund* – to prepare for an economic shock. This prudent approach means that the Government is in a position to absorb a short-term increase in borrowing. Financing conditions remain favourable; the continuation of this will be dependent upon economic recovery and the anchoring of budgetary policy in a declining debt trajectory over the medium-term.

On a more positive note, it is important to stress that the origins of this global economic crisis are fundamentally different to previous crises; the current crisis has not been triggered by the need to correct macroeconomic imbalances or policy mistakes. The same applies to the Irish economy, which had a (near) clean bill of health immediately prior to the pandemic (unlike the run-in to the previous crisis) with, for instance, an underlying balance of payments surplus and no evidence of a credit bubble. This means that, once the health protocols are lifted, economic activity, both at home and abroad, can be expected to recover relatively quickly.

That said, a rapid recovery to pre-pandemic levels of activity appears highly unlikely, with headwinds expected on several fronts. Firstly, the pandemic will likely trigger at least some behavioural changes for households and firms, with a rising propensity towards precautionary saving. Among households, demand for certain services will probably remain subdued for some time, notably the consumption of discretionary services that involve large public gatherings. Among firms, uncertainty will likely hold back investment in the short-term while, over the medium- and longer-term, supply-chains may be revamped or even shortened. Secondly, even if the pandemic is contained domestically, this may not be the case in other jurisdictions, which would weigh on external demand. Indeed, it is conceivable that world trade may continue to fall in the post-pandemic world. Thirdly, it is possible that, post-crisis, the need to repair public and private sector balance sheets will weigh on global activity. Economic history shows that recovery from 'balance sheet recessions' is relatively drawn-out; this is why the Government is providing liquidity support to reduce balance sheet impairment in the household and corporate sectors. Fourthly,

it remains to be seen how the crisis-induced tightening of financial conditions across the globe is reversed. In advanced economies, spill-overs from the 'real' economy to the financial sector have been limited thus far; a prolonged global downturn could jeopardise this.

All-told, therefore, a gradual – as opposed to a rapid, 'v-shaped' – recovery is the baseline scenario that underpins this update of the Government's *Stability Programme*. The key risk to the baseline scenario is one in which containment measures, domestically and internationally, remain in place for longer than is currently assumed (for instance due to a second wave, virus mutation or delays in vaccine development). This would delay the assumed economic recovery and result in larger 'scarring' effects – productive capacity would be permanently lost. A delayed recovery could result in a deficit in the region $\in 25 - 30$ billion this year.

Once recovery is firmly in train, it will be necessary to exit the extraordinary fiscal support introduced during the crisis. Most importantly, it will be crucial to put the debt-income ratio back on a declining path. This will necessitate repairing the public finances over the medium-term *inter alia* in order to address the likely reduction in the corporation tax revenue stream in the years ahead, the latter arising from international tax policy changes.

An added complication is the uncertainty regarding the outcome of negotiations between the EU and the UK on the future relationship that will be put in place at the end of the present transition period, during which existing arrangements govern bilateral trade between the two regions.⁴ Negotiations are currently ongoing, but the pace of these discussions has been affected by the pandemic. Both sides have committed to reaching an agreement before end-2020. When the transition period ends on 31 December 2020, government, business and citizens will face a range of changes. The level of change, and therefore the impact on the Irish economy, will be dependent on the outcome of the negotiations, including the risk of no future relationship agreement. This latter scenario, if realised, would imply tariffs on a wide range of Irish traded goods – both imports from, and exports to, the UK – and would entail severe disruption to bilateral trade between the two jurisdictions. It is too early to assess the outcome of the negotiations and, given these variable possible outcomes, the necessary preparedness and contingency planning work is continuing. However, the interplay between a prolonged pandemic-induced recession and a possible UK exit without a future partnership agreement in place would have severe implications for the Irish economy and public finances.

1.2 Short-Term Economic and Budgetary Outlook

The domestic health protocols necessary to suppress the transmission of Covid-19 will undoubtedly result in a sharp contraction of domestic demand in Ireland over the second quarter of this year. Broadly similar protocols in key export markets are having comparable effects, depressing external demand and weighing on Irish exports. In short, all components of GDP, with the notable exception of public consumption, are set to register significant falls in the second quarter; it is beyond doubt that the Irish economy is currently in the midst of a deep recession.

⁴ The UK formally exited the EU on 31st January of this year. Under the terms of the *Withdrawal Agreement* (ratified by Parliaments in both the EU and UK in January), the UK is in a transition period until end-2020 during which the *status quo* prevails. For the purpose of producing the baseline set of projections that underpin this document, the assumption is made of an orderly move to a new trading arrangement between the two regions.

The speed at which economic activity has reversed has few, if any, parallels, even by the standards of the financial crisis just over a decade ago (box 1). As recently as February, it was reasonable to assume that the main channel through which the Irish economy would be affected was via supply-chain disruption arising from containment measures in China. By early- to mid-March, however, it was clear that domestic spending – by households and firms – would be severely affected as containment measures were introduced in Ireland and that, simultaneously, demand was moving into reverse in our main trading partners.

Economic Activity Real GDP Real GNP Modified Domestic Demand	2019 5.5 3.3 3.0	-10.5 -11.7	6.0 6.1
Real GDP Real GNP	3.3		
Real GDP Real GNP	3.3		
		-11.7	7.4
Modified Domestic Demand	3.0		7.1
		-15.1	8.2
GNI*^	4.1	-15.5	9.6
Prices			
HICP	0.9	-0.6	0.4
Core HICP	0.9	-0.2	0.5
GDP deflator	1.5	1.2	1.5
Balance of Payments			
Trade balance (per cent of GDP)	14.4	35.7	35.5
Current account (per cent of GDP)	-9.5	10.6	11.1
Labour Market			
Total Employment ('000)^	2,323	2,106	2,221
Employment	2.9	-9.3	5.5
Unemployment (per cent)	5.0	13.9	9.7
Public Finances (per cent of GDP)			
General government balance	0.4	-7.4	-4.1
Debt ratio (year-end)	58.8	69.1	68.4
Debt ratio (per cent of GNI*)^	99.2	125.1	121.6
Net debt position (year-end)~	50.8	63.5	62.6

Table 2: summary – main economic and fiscal variables, per cent change (unle
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^ GNI* is based on GNI less depreciation of R&D-related service imports and trade in IP, depreciation of aircraft for leasing, and net factor income of re-domiciled PLCs.

Structural balance figures are not provided given extreme uncertainty regarding estimates of the output gap at this juncture.

~ net debt figures from 2020 estimated by mechanical extrapolation of assets.

Source: CSO for 2019 and Department of Finance 2020-2021. 2019 GNI* also estimated by Department of Finance

This update of the Government's *Stability Programme* is prepared against this unprecedented backdrop. The level of uncertainty is such that projections set out in this document should be considered a scenario rather than a forecast *per se*. Modified Domestic Demand (MDD), perhaps the best indicator of domestic economic conditions, is projected to fall by 15 per cent this year, a figure that has an exceptionally wide margin for error attached to it. The equivalent figure for GDP is a decline of

10¹/₂ per cent.⁵ For next year, growth rates for MDD and GDP are 8¹/₄ and 6 per cent respectively. These forecasts have been endorsed by the *Irish Fiscal Advisory Council* (see annex 6).

The quarterly profile for GDP is one in which economic contraction spans the first and second quarters, with a very sharp contraction in the second quarter. A modest recovery begins gradually in the third quarter and the pace gradually picking over the course of next year. Under this baseline scenario, economic activity does not reach its pre-pandemic level until 2022.

As outlined, the level of uncertainty regarding the short- and medium-term path for the economy is unprecedented. The range of possible economic outcomes covers the full spectrum: ranging from successful containment and gradual recovery beginning in the third quarter of this year ('best case') to a prolonged downturn ('worst case') in which containment and delay measures are kept in place for a longer period, with adverse implications for economic activity. A longer recession increases the possibility that some of the economy's productive capacity is permanently lost.

A very large public sector deficit is in prospect for this year, with two drivers. The first relates to the necessary expenditure measures implemented by Government to cushion the pandemic-induced economic contraction. The second relates to the decline in taxation revenue associated with the deteriorating economic situation. A headline deficit – again subject to a wide margin of uncertainty – in the region of 7½ per cent of GDP is currently projected. Crucially, this is based on the assumption that economic activity bottoms out in the second quarter, with gradual recovery thereafter. If this fails to materialise, a deficit of the order of €30 billion (around 10 per cent of GDP) is not unimaginable. In addition, Government will shortly bring forward an economic recovery plan, setting out its approach to repairing the damage caused by the pandemic. The costs of this are not included in the deficit projection outlined above, as decisions have not yet been taken.

From a policy perspective, a key issue is whether the deficit is cyclical or structural in nature. If the economic slowdown proves transient, then taxation revenue could reasonably be expected to recover next year while, at the same time, the temporary expenditure measures would be reined-in. In these circumstances, part – though not all – of the deficit would be eliminated with recovery. On the other hand, a slower-than-expected economic recovery would expose a structural element to the deficit which would need to be corrected over time.

Beyond the short-term, there are compelling reasons to believe that the new equilibrium may be very different from the old; the crisis will cast a long shadow. One reason is that highly globalised firms seek to reduce their reliance on just-in-time inventory management, prompting some 're-shoring' of activity. This, and other, longer-term effects of the pandemic will need to be considered, especially for the Irish economy with its deep integration into the wider global economy.

⁵ Perhaps a more optimum approach in the current environment would be to publish a range; however, the *Code of Conduct* that sets out the content for Stability Programmes of all Member States requires 'point' estimates.

2.1 Summary

The economic situation in Ireland has been turned on its head in the space of a few weeks. The necessary health protocols put in place to suppress the transmission of Covid-19 have resulted in a sharp decline in economic activity. Spending by households and firms has fallen and will remain at exceptionally low levels until the suppression measures are relaxed. Protocols in other countries will reduce demand for Irish produced goods and services, i.e. exports. Spare capacity – under-utilised capital and labour – has built up at an exceptionally rapid pace, with the number of people temporarily unemployed increasing at an unheard-of rate in recent weeks. Inflationary pressures are almost non-existent, and the (underlying) current account of the balance of payments remains surplus. For the year, GDP is projected to fall by 10.5 per cent, with much of this decline concentrated in the second quarter. This projection is predicated on the assumption that the pandemic is brought under control within the next few months. If, however, health protocols remain *in situ* for longer than expected, this would compromise the assumed recovery later in the year and into next year.

2.2 Macroeconomic Outturn 2019

Despite heightened uncertainty throughout all of last year associated with the Brexit negotiations and the very real prospect of a disorderly exit, the Irish economy once again proved remarkably resilient. Preliminary figures show that GDP grew by 5.5 per cent over the year, with Modified Domestic Demand (MDD) growing at a solid 3 per cent rate. On a broad sectoral basis, gross value added in foreign dominated sectors grew by 7.3 per cent, in keeping with above-average growth by the multinational dominated sectors in recent years. The rest of the economy – essentially the domestic sectors – grew by just under 5 per cent, a robust rate.

Employment growth of around 3 per cent or higher was recorded for the seventh straight year, with the level of employment reaching 2.36 million in the fourth quarter and the unemployment rate edging below 5 per cent. In the face of a tightening labour market, 'Phillips-Curve' effects were evident, with private sector pay growing by around 4 per cent during the year⁶.

Supported by labour market developments, private consumption recorded solid growth of just shy of 3 per cent. That said, the household savings rate ticked-up during the year, consistent with persistent weakness in consumer sentiment in the face of Brexit-related uncertainty. On the investment side, some 21,000 new dwellings were built last year, more than double the level just three years previously. However, a continued weakness was evident in private sector investment in (non-aircraft) machinery and equipment, as Brexit-related uncertainty prompted firms to hold-off on large, costly and irreversible purchases. The headline investment numbers were heavily distorted by a surge in acquisitions of intellectual property assets; as these were sourced from abroad, the purchases had an equally distortive impact on imports.

⁶ In some advanced economies, a lively debate has been underway in recent years regarding the apparent 'death' – or 'flattening' – of the well-understood inflation-unemployment nexus.

On the external front, the level of exports exceeded €440 billion last year. Indeed, the level of exports was €120 billion in the fourth quarter, the fifth successive quarter in which the total value of exports exceeded €100 billion. Very strong growth was evident on the services side, up 14 per cent in the year, with ICT services growing in value-added terms by almost 20 per cent for a second successive year.

The overall trade balance and current account of the balance of payments were both distorted by IP on-shoring last year. However, the modified current account, which adjusts for these (and other) globalisation-related distortions, recorded an estimated surplus of around €13 billion, or 6.3 per cent of modified gross national income. In other words, the Irish economy was a significant net saver (gross savings less gross investment) on an underlying basis. This points to the fundamental sustainability of the Irish economy prior to the pandemic-induced crisis, notwithstanding evidence of some over-heating in pockets of the economy.

2.3 Macroeconomic Projections 2020

2.3.1 External assumptions

The Covid-19 pandemic (hereafter the 'pandemic') is the most significant shock to the world economy since the global financial crisis and, indeed, the impact is likely to be more severe. It is a truly exogenous shock – completely unrelated to economic conditions – and is synchronised across almost all economies. Moreover, it occurs at a time of already weak global conditions – lingering trade tensions, uncertainty regarding the UK's relationship with the European Union, rising geopolitical strains – and is likely to result in a significant decline in living standards almost everywhere this year.

	-		
	2019	2020	2021
External GDP growth			
United States	2.3	-5.9	4.7
Euro area	1.2	-7.5	4.7
United Kingdom	1.4	-6.5	4.0
Technical assumptions			
Euro-sterling exchange rate (€1=)	0.88	0.89	0.89
Euro-dollar exchange rate (€1=)	1.12	1.11	1.11
Brent crude (dollars per barrel)	64.1	39.2	41.1

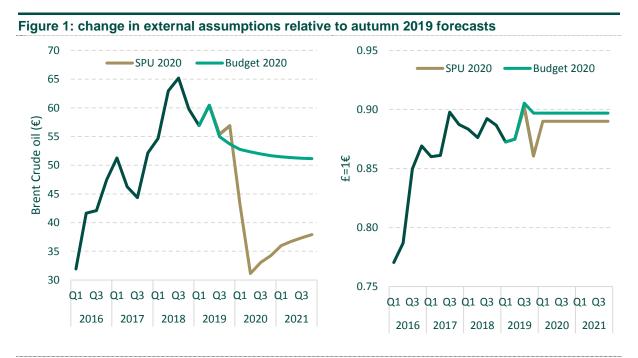
 Table 3: external assumptions, per cent change (unless stated)

Oil prices (futures) in 2020 – 2021 are calculated on the basis of futures markets as of end-March 2020. Exchange rate outturns as of end-March 2020 and unchanged thereafter. External growth forecasts sourced from IMF World Economic Outlook Database (April 2020 Update).

The shock has also exposed some underlying vulnerabilities in parts of the global economy, notably high levels of indebtedness in parts of the non-financial corporate sector. Reflecting this, the re-pricing of risk – with a rebalancing of investor portfolios towards the safest and most liquid financial assets – could have adverse balance sheet effects, especially if the crisis is prolonged. Additionally, the shock has triggered large capital outflows from several regions – mainly emerging market and developing economies – potentially leading to a more abrupt correction of imbalances than would have otherwise

been the case. In some cases, these capital flow reversals have been the largest on record and, if sustained, could potentially result in debt distress.

Initial assessments of the global impact focussed mainly on supply-chain disruption, arising from containment measures introduced in China, as well as bilateral trade exposures. The subsequent rapid spread of the pandemic beyond China during March prompted a re-assessment: it became clear that containment measures introduced around the world would depress spending by households (consumption), firms (investment) and foreign markets (exports). A supply-side shock had morphed into a demand-side shock and this has been confirmed by incoming, high-frequency data – soft and hard data in many of regions have followed a similar pattern, with a lag of a month or so, to that recorded in China (figure 2).



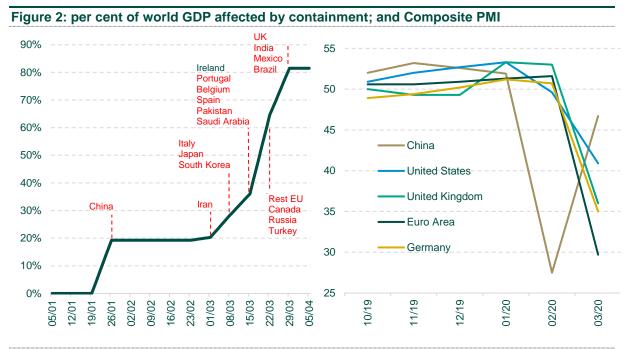
The Department's Autumn forecasts were set out in the Economic and Fiscal Outlook, October 2019. In relation to exchange rates, the standard approach is to hold these constant at rates prevailing at a certain cutoff point (end-March for the Department's spring forecasts and end-September for the Department's autumn forecasts). Source: Macrobond (for oil prices) and Central Bank of Ireland (for exchange rate data),

Against this extremely unfavourable backdrop, economic activity in Ireland's main export markets is now certain to contract in the second quarter of this year and, depending on the success or otherwise of containment measures, possibly in the third quarter also. For the year as a whole, GDP will likely decline significantly in the euro area, UK and US – the destinations for around two-thirds of Irish exports (table 3). World trade, already on a persistent downward trajectory since the last crisis, will decline further. For next year, a rebound is expected, largely as spending begins to 'normalise'. This assumed near-term rebound, however, is contingent upon a fading of the pandemic (either by successful containment or effective treatments becoming available)

Oil prices have fallen substantially in recent weeks with both demand-side (the sharp reduction in global economic activity during the second quarter) and supply-side (failure of producers to agree production

cuts until recently) at work. Futures markets currently suggest oil prices averaging around \$39 (€35) per barrel this year and \$41 (€37) per barrel next year.

In terms of exchange rates, the euro-sterling bilateral rate averaged around $\in 1 = \text{stg } \pm 0.89$ in the second half of March; on the basis of the purely technical assumption of no further change, this would imply a euro appreciation of just over 1 per cent relative to last year. The euro-dollar bilateral rate averaged $\in 1 = \$1.11$ over the same period; again, on the basis of the purely technical assumption of no further change, this would imply a euro depreciation of around 1 per cent this year relative to last year.



Quarantine dates based on school closures. 100 per cent of country GDP included once quarantine starts. Figures should be seen as indicative.

Note: The composite Purchasing Managers Index is a weighted average of activity in the manufacturing and services sectors, a reading below 50 indicates that the majority of businesses reported a deterioration compared to the previous month.

Source: Macrobond, UNESCO, IHS Markit, Department of Finance.

Box 1: Comparisons with the GFC – speed, scale and other issues

How does the current crisis compare with the most recent crisis, the so-called 'Global Financial Crisis' (GFC)? Several important differences are outlined in this box.

Firstly, the **origins of the current crisis are fundamentally different to the GFC**. In a sense, it is 'self-imposed' in that large parts of the global economy have been deliberately mothballed in order to preserve life. The GFC, on the other hand, was a multi-faceted crisis that, in its simplest form, reflected the correction of massive global imbalances associated with a mis-pricing of risk, with the financial sector being the epicentre.

Secondly, the **breadth of the current crisis is wider**: it is truly global in nature. Indeed, the cost in terms of loss-of-life could be higher in relatively poorer nations, with less-developed healthcare systems than in advanced economies. On the other hand, emerging and less developed economies were relatively isolated from the GFC, which was largely an advanced economy shock.

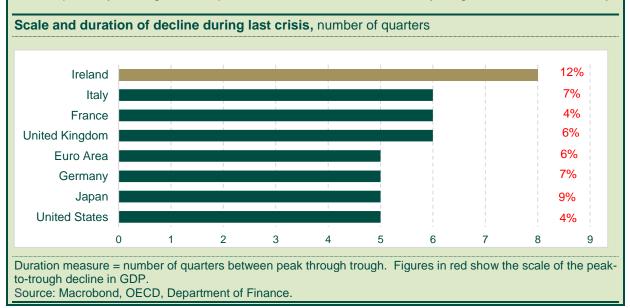
Thirdly, the current crisis has emerged at a **more aggressive pace than the GFC** and, symmetrically, it remains possible (if successful containment/ vaccine) that the rebound will be more rapid. The duration of the GFC was relatively prolonged (see figure below).

Fourthly, **the scale of the contraction could be more severe in the current crisis**. For many advanced economies, the IMF is forecasting a very large shock in the second quarter of the year, with the result that overall activity will fall very sharply. The forecasts in table 4 (main text) compare unfavourably with those set out below.

Fifth, the **financial sector was the epicentre of the GFC**, most notably the banking sector of advanced economies. Since then, structural changes in financial intermediation – the channelling of funds between borrowers and lenders – mean that the global financial system is less bank-centric, with market-based financing relatively more important. A health crisis is at the centre of the current crisis.

Finally, the **role of China in the recovery phase will likely differ** to previously. In the GFC, China provided an important source of demand for the world – and especially the euro area – economy. At the time, the authorities responded to the deterioration in global demand by boosting domestic fixed investment, financed in no small part by debt accumulation. This limited the impact of the global recession on China and boosted demand for imports *inter alia* from euro area economies (with Chinese national savings largely unchanged at the time, higher capital formation resulted in a lower balance of payments surplus).

While China is now the world's second largest economy, accounting for 11 per cent of world trade and 40 per cent of global demand for certain commodities, its scope to provide the similar support to the global economy in the current cycle appears to be more limited. For instance, it has also been severely affected by the pandemic, while its growth rate was already slowing in the pre-pandemic world. Perhaps more importantly, the high level of private sector indebtedness will likely weigh on its domestic activity.



2.3.2 The Irish economy in 2020

The scenario underpinning the outlook for the Irish economy this year and next is one in which containment measures are assumed to remain in place for three months, resulting in a very sharp contraction in the latter weeks of the first quarter and most of the second quarter. Thereafter, a very gradual recovery commencing in the third quarter is assumed; the pick-up is gradual, reflecting the fact that vaccination is not assumed to become available before next year.

	2019	2020	2021
	year-	year-on-year per cent change	
real GDP	5.5	-10.5	6.0
nominal GDP	7.2	-9.4	7.6
real GNP	3.3	-11.7	7.1
components of GDP	year-	on-year per cent ch	ange
personal consumption	2.8	-14.2	8.7
government consumption	5.6	9.1	-3.2
modified-investment	1.3	-37.3	22.5
stock changes^	0.1	0.0	0.0
exports	11.1	-7.7	7.5
modified-imports	11.9	-9.3	9.7
contributions to GDP growth	pontributions to GDP growth percentage point contributions		oution
modified domestic demand	1.8	-8.3	4.1
modified net exports	3.6	-2.2	1.8
stock changes	0.1	0.0	0.0
statistical discrepancy	0.0	0.0	0.0
current prices		€ millions	
GDP (nearest €25m)	347,225	314,650	338,675
GNP (nearest €25m)	266,625	238,200	258,700
GNI* (nearest €25m)^^	205,650	173,800	190,425

Table 4: macroeconomic prospects

Rounding can affect totals. ^ contribution to GDP growth.

^{^^} based on GNI less depreciation of R&D-related service imports and trade in IP, depreciation of aircraft for leasing, and net factor income of re-domiciled PLCs. Source: 2019 = CSO; 2020-21 = Department of Finance.

This recovery path over the second half of this year and into next year is a function of several factors, of which there is considerable uncertainty attached (see Box 5 on possible recovery scenarios). These include: the virus path; likely behavioural change by households and firms; the possibility of permanent scarring effects, and ongoing supply-chain and financial market disruption. Overall, the level of output is not expected to return to the pre-pandemic level until 2022 at the earliest (the methodological approach to constructing this scenario is described in Box 3).

Against the background of severe GDP declines in Ireland's main trading partners this year, external demand for Irish-produced goods and services is set to decline sharply. Exports of some sectors will likely come to a virtual standstill in the second quarter, with only a modest pick-up thereafter. Other

sectors such as pharmaceuticals and medical devices may benefit from increased demand, though an overall increase in output could be tempered by supply-side constraints (lost hours due to sickness-related absences and caring duties arising from childcare-related closures; supply-chain issues may have also held back production for some firms). In addition, exports associated with 'contract manufacturing' may have been impacted by containment measures in China during the first quarter. In overall terms, exports are expected to fall by nearly 8 per cent for the year as a whole, with the most severe decline likely in the second quarter.

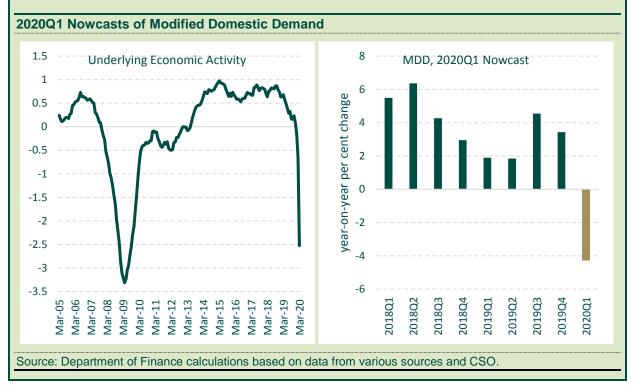
Box 2: Nowcasting 2020Q1: evidence based on high-frequency data

Constructing a set of economic forecasts is always challenging *inter alia* due to the inevitable lag with which macroeconomic data are published. For example, the complete set of macroeconomic data for the first quarter will not be published until June, while data for the second quarter – when the impact of the shock is expected to be greatest – will not be published until September.

This box, therefore, attempts to shed some light on what the information contained in the high-frequency (monthly) data may imply for Irish economic activity in the first quarter of 2020. This is an update of Box 1 in *Budget 2020 Economic and Fiscal Outlook*. Nowcasts (detailed below) play an important role in the Department's forecasting toolkit, by providing an estimate for domestic economic activity as developments unfold.

The Department's nowcast model uses statistical techniques to separate a common 'signal' from a large dataset of macroeconomic and fiscal variables. This signal, or measure of underlying economic activity, is presented below (left panel). The large decline in underlying economic activity in March is driven by the pandemic-related weakness evident in high frequency data for March, including a substantial increase in the numbers on the live register, weakness in soft (survey-based) data including PMI's, consumer sentiment and fiscal data.

The Department of Finance uses this measure of underlying economic activity to nowcast several key macroeconomic variables, including Modified Domestic Demand (MDD). Estimates for the first quarter are presented below. The nowcast for MDD suggests an annual decline of approximately 4 per cent for the first quarter. However, there is a considerable degree of uncertainty surrounding this estimate.



Personal consumer spending is expected to fall sharply in 2020, with several factors at play. Firstly, many households will suffer an income shock; that is a loss of income due to changed employment circumstances that is not fully offset by the transfer system. Other households – those whose income is unaffected – are simply not in a position to maintain consumption at previous levels, due to widespread retail closures. For this latter category, the household savings rate will rise. Even after containment measures are relaxed, it seems likely that the overall household savings rate will remain elevated for the near-term, for precautionary reasons as well as for balance sheet repair purposes.

In terms of composition, highly-impacted sectors such as non-food retail, accommodation and food services, and other forms of 'social consumption' (as described in the Wren-Lewis framework⁷) are expected to record an almost complete suspension of activity for the duration of the second quarter. The recovery in these sectors is expected to be very gradual, as behavioural change on the part of households in the face of an uncertain virus path will continue to impact on social consumption until a vaccination is available.

The overall impact on consumption for the year will be softened somewhat by ongoing purchases of necessities (food), household energy consumption and spending on certain categories of communication services. Second quarter consumption is expected to fall by almost 25 per cent compared with the first quarter (itself down around 5 per cent compared with the previous quarter). With some modest recovery in the second half of the year, this would lead to an overall fall in private consumption of 14 per cent for the year.

On the other hand, a significant increase in public consumption is anticipated. This category of aggregate demand consists of purchases of goods and services by the general government sector and, as such, the expansion of healthcare provision will support a significant increase in public consumption this year.

On the investment side, the majority of construction activity is expected to come to a complete standstill in the second quarter, following its designation as a largely 'non-essential' activity. The recovery in construction output is expected to be very gradual, due to a combination of social distancing in the workplace. Non-aircraft machinery and equipment investment is also expected to contract sharply, with firms expected to forego unnecessary outgoings for liquidity and working-capital purposes and, thereafter, holding-off on investment plans in the face of elevated uncertainty. Overall, modified investment (i.e. excluding IP assets and purchases of aircraft for leasing purposes) in the second quarter is expected to be down by almost 70 per cent on a quarterly basis, and by just under 40 per cent for the year as a whole.

The contraction in (modified) final demand – the sum of consumption (public and private), modified investment and exports – will reduce imports, softening the net trade impact this year. However, the import content of some of the most affected sectors, particularly social consumption and related services, is relatively low. Overall, a decline in modified imports (excluding IP assets and aircraft for leasing) of just over 9 per is expected for the year.

⁷ See Keogh Brown *et a*l (2009), The possible macroeconomic impact on the UK of an influenza pandemic, Health Economics.

In aggregate terms, therefore, GDP is now expected to contract by as much as 10.5 per cent this year, with MDD falling by 15 per cent. This sharp decline is supported by initial leading indicators such as March exchequer figures, particularly VAT receipts, live register numbers, purchasing managers index releases for March and the Department's 'nowcast' estimate for the first guarter.

Box 3: Methodological approach

Producing a set of macroeconomic projections during the first global pandemic in over a century is a challenging exercise. Short-run forecasting models are simply not calibrated to pick-up shocks of the speed and depth associated with the effective mothballing of c.20-30 per cent of the economy for a three-month period. The Department has, therefore, expanded its toolkit, drawing on the available albeit limited – empirical research in this area. This box summarises the approach.

In constructing the projections, the Department first prepared a set of pre-pandemic baseline forecasts. These are largely unchanged from those set out the Government's Medium Term Fiscal Strategy (January 2020), with GDP growth of 3.9 and 2.9 per cent projected for this year and next, respectively.8

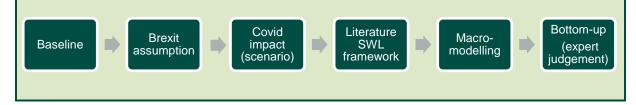
Underpinning these projections is a relatively benign form of Brexit, whereby a free-trade agreement is concluded at the end of the transition period (31 December 2020). The overall impact of this assumption is to reduce the level of GDP by 34 of a percentage point this year and next year, on average, relative to a counterfactual no-Brexit world, an estimate that is based on joint DoF / ESRI research.9

The expected impact of the pandemic is then layered onto this baseline. A range of methods are then to capture the impact of the pandemic. For instance, Wren-Lewis simulated the impact of a severe pandemic in the UK, which would reduce the baseline growth rate by 6 percentage points in one year.¹⁰ This was largely predicated on the pandemic lasting one quarter with a fairly quick recovery thereafter.

The expenditure side approach in the Department's projections is informed by this Wren-Lewis framework, particularly as regards the impacts of school closures, illness and a suspension of 'social consumption', with expert judgement applied at a granular basis throughout.

Another 'top-down' method involves using the results from a general equilibrium macroeconomic model, which allows a shock to enter an economy from a variety of domestic or external sources and propagate throughout the economy. These models can give broad estimates of the impacts under particular scenarios, as well as a likely recovery path. For instance, the results from the COMSO model (see Box 4) indicate a fall in GDP of about 11 percentage points compared with baseline and a recovery path that leads to late-2022.

Next a range of 'bottom-up' methods can be used: in essence, these approaches build up a level of GDP from the smallest building block (i.e. at a sectoral or product level) by making assumptions regarding the timing and coverage of domestic and international containment measures and the subsequent recovery scenario. This approach has informed the output side of the national accounts – namely what sectors suffer the largest loss of output as a result of closures (see Annex 1 to this chapter) - as well as the more traditional expenditure side approach (see charts in Annex 3 to this chapter).



⁸ Further detail on the baseline forecasts can be found in the presentation to IFAC, available at: https://www.gov.ie/en/publication/3639c3-spu-2020-presentation-to-ifac/

See Bergin et al (2019): Ireland and Brexit: modelling the impact of deal and no-deal scenarios.

Available at: <u>https://www.gov.ie/en/publication/ca41b6-r/</u>¹⁰ See Keogh Brown *et al* (2009), *op cit*.

Box 4: Modelling the economic impact of Covid-19

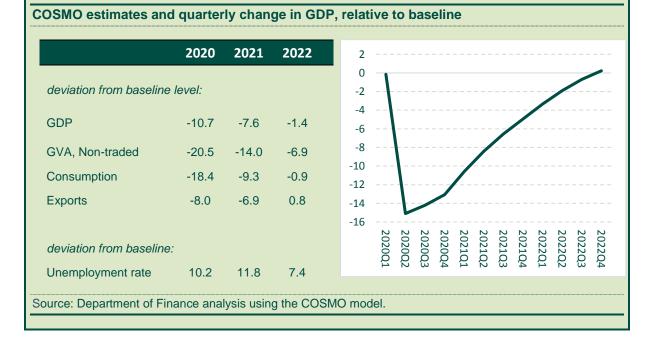
Quantifying the potential economic impact of the Covid-19 pandemic using COSMO (**Core Structural Mo**del of the Irish economy) poses unique challenges. Normally, economic shocks propagate through well-established transmission mechanisms. With Covid-19, however, the shock originates from a public health emergency and has several distinctive features, including an immediate physical shutdown of a wide range of economic activities and an exceptionally rapid decline in activity.

The pandemic shock scenario for Ireland is calibrated using a combination of domestic and external shocks. On the external front, the crisis has caused a simultaneous downturn across most advanced economies. This external shock is modelled as a scaled up version of the OECD's broader contagion scenario.¹¹ The original scenario involved a 2 per cent decline in domestic demand in advanced economies in the second and third quarters of 2020. This has been scaled up to reflect some of the latest data from China, and other estimates, to be an 8 per cent decline over the same period.¹²

On the domestic front, the shock involves:

- A shock that reduces consumption by 25 per cent over two quarters;
- A shock that reduces investment by 20 per cent over two quarters;
- An immediate loss of 280,000 jobs in the non-traded sector (consistent with the March Live Register release relating to the Pandemic Unemployment Payment);¹³
- An immediate reduction in output in the non-traded sector of close to the 30 per cent decline in employment in that sector.

The scenario results in a very sharp decline in GDP relative to baseline in 2020. This comes from the abrupt fall in consumption, with the resulting decline in output severely affecting investment. The maximum quarterly fall in GDP relative to baseline is 15 per cent in the second quarter. The drop in exports relative to baseline is driven by a contraction in the traded sector in response to the fall in world demand. The large increase in the unemployment rate reflects both the containment measures and the overall contraction of the economy. Under this scenario, the economy is not expected to return to its 'baseline' path until at least end-2022.



¹¹ OECD Interim Economic Assessment Coronavirus: The world economy at risk, March 2020.

¹² Impact of Covid-19 on the global economy Update 2: Severe recession. Deutsche Bank

Research, March 2020. National Economy Withstood the Impact of COVID-19 in the First Two Months. National Bureau of Statistics of China, press release March 2020.

¹³ CSO statistical release, 02 April 2020, Live Register March 2020.

2.3.2 The Irish economy in 2021

The assumed gradual recovery of the Irish economy over the second half of this year is expected to gain momentum next year. Having said that, the projected scenario is one in which activity levels do not return to end-2019 levels until the following year (figure 9 in the annex to this chapter sets out the assumed quarterly profile for GDP and the main aggregates).

Personal consumption expenditure is expected to increase by 9 per cent next year, with the comparatively high annual rate a function of the steep decline this year. The household savings rate, which is expected to be just over 19 per cent this year, is expected to remain at an elevated level, with much uncertainty surrounding the outlook for the labour market in the face of a possible second wave of the virus.¹⁴ Household consumption patterns are expected to change, with less 'social interactions' than would have been the case before the pandemic. By the end of next year, personal consumer spending is projected to be around 6 per cent below the level that prevailed at end-2019.

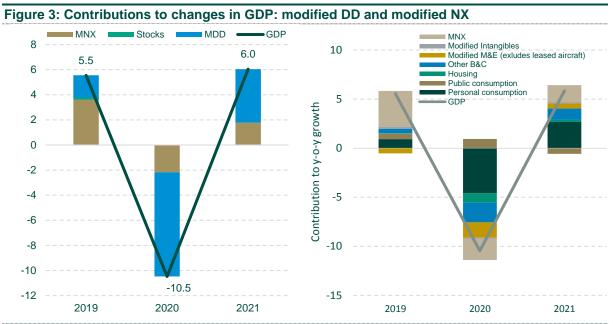
Public consumption should fall relative to this year, as some of the temporary exceptional expenditure is gradually unwound.

Private modified investment is also expected to remain below baseline throughout 2021 and, like private consumption, is not projected to return to its pre-pandemic level until 2022. In the face of uncertain demand and concerns regarding further containment measures, firms are expected to defer investment decisions. Difficulties in pricing risk may lead to some financing constraints, although public support measures will mitigate this. Overall, modified investment is expected to grow by 22 per cent next year. By end-2021, the level of modified investment is projected to be one-fifth lower than its pre-pandemic level.

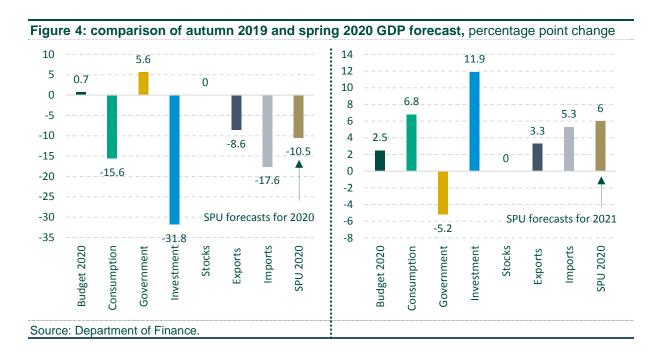
The projected scenario for key trading partners is similar, namely one where the recovery is only partially complete in 2021. Notwithstanding this, the sectoral mix of Ireland's exports should provide some support. Certain sectors are expected to belatedly return to the past levels towards the back end of next year, with overall exports passing the previous peak in 2021, and thus leading the recovery. Overall export growth of 7.5 per cent is expected for next year, with the value of exports projected to hit €450 billion, in nominal terms, for the year. Modified imports will respond to the pick-up in (modified) final demand with growth of just under 10 per cent expected for the year, again a function of the large decline this year.

Overall, the economy is projected to grow by around 6 per cent in 2021 if the assumptions underpinning this scenario come to pass.

¹⁴ The estimate for the household savings rate in 2020 has been updated since the publication of the draft SPU. This involves a re-profiling between household and corporate savings with no overall impact on national savings. See note to Table 5 for details.



Modified domestic demand represents the sum of private consumption, public consumption and investment excluding stocks, investments in aircraft by the leasing sector and net R&D imports. Modified net exports is net exports (exports less imports) excluding investments in aircraft by the leasing sector and net R&D imports. Other modified investment is machinery and equipment excluding investments in aircraft by the leasing sector, plus domestic R&D.



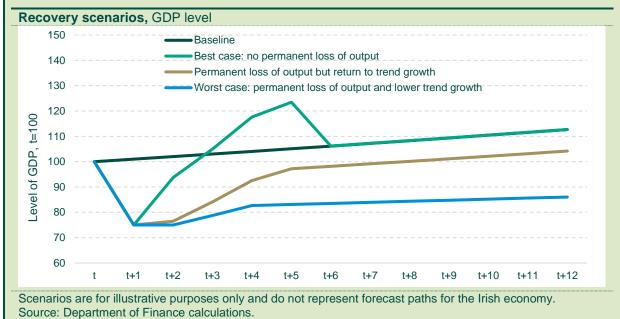
Source: CSO, Department of Finance.

Box 5: Recovery scenarios – alphabet soup

While the exact nature of economic recovery will depend on the path of the virus, both in Ireland and globally, there are several possible scenarios. Understanding these is important to chart the possible medium-term impacts of the virus on the economy and designing appropriate policy responses.

Firstly, it is important to distinguish between a scenario where all the economic output that was lost during the pandemic is regained and a scenario where there is a permanent loss of output. Secondly, economic growth could either return to its pre-pandemic trend rate or settle at a new, lower growth rate. This means that there are three potential recovery scenarios from the pandemic-induced-19 crisis:

- Best-case: no permanent loss of output and growth returns to the pre-pandemic trend rate. All of the spending foregone during the pandemic is subsequently recovered, i.e. purchases or investments that would have been made in this quarter are instead made later in the year, along with the expenditure that would have occurred in that period anyway. This is termed a V-shaped scenario and appears unlikely, not least because the nature of some of the expenditure forgone (e.g. dining out) means it is more likely to be permanently lost rather than deferred.
- 2. Middle-case: permanent loss of output, i.e. some or all of the spending foregone during the pandemic is not later recovered, but economic growth returns to its pre-pandemic trend rate. This is a U-shaped scenario, whereby the downturn and subsequent recovery are longer than a V-shape. This appears to be the most likely outcome at the current juncture
- 3. *Worst-case*: permanent loss of output and the trend growth rate is permanently lower postpandemic, i.e. an *L-shaped* scenario. This would arise due to scarring effects of the crisis and, whilst currently less likely, becomes more likely the longer the pandemic lasts.



The type of recovery depends, to some extent, on the nature of the shock – in particular, whether it is a supply- or demand-side shock. A supply shock occurs when there is a sudden change to the supply of goods and services in an economy, whereas a demand shock occurs when there is a sudden change in the demand for goods and services from consumers, businesses and government.

The current pandemic initially appeared to be a supply shock, with production shutting down, and consumers and businesses unable to purchase the goods and services they wanted. In such a scenario, a V-shaped recovery is more likely, as the underlying demand can be released as soon as the production shock is resolved. The duration of the pandemic, however, has morphed the shock into a combined supply and demand shock. With the substantial job losses seen across all affected economies and ongoing heightened uncertainty, demand has now also likely fallen. Consumers are saving rather than spending (at least, those who remain in employment) and businesses are choosing not to invest or are being forced to release employees. Behavioural change and scarring effects on the part of households and firms would exacerbate the demand-side impacts.

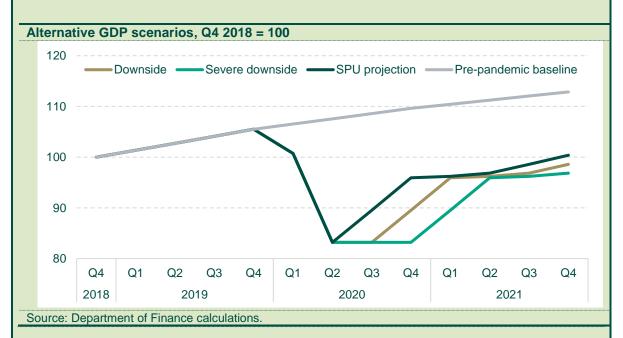
The combination of a hit to supply and demand means that the downturn is likely to be more severe and the recovery more protracted. This means that a U-shaped recovery is most plausible. It is most crucial, however, to avoid an L-shaped scenario, which would result in a severe and prolonged economic downturn and a significant worsening of living standards.

Box 6: Highly uncertain environment – more severe scenarios

The scenario that underpins the Department's projections is based on a very severe contraction of close to 20 per cent in the second quarter this year (following a milder contraction in the first quarter) with a gradual pick-up in the second half of the year, accelerating during 2021. This is based on the assumption that containment measures last for the duration of the second quarter, with a gradual easing thereafter. Under this scenario, the level of GDP at end-2021 remains almost 12 per cent below what it would otherwise have been in a no-pandemic world *inter alia* due to behavioural change on the part of households and firms.

This 'central' scenario implicitly assumes that the virus is essentially suppressed in the second quarter, so that a gradual easing of containment measures is possible. This, however, cannot be guaranteed – it will depend on the epidemiology of the virus which, of course, is unknown. Containment measures could be extended or, alternatively, containment measures could prove successful in suppressing the virus and allowing an easing of restrictions, only for a second wave to necessitate a reintroduction.

For these (and other) reasons, two alternative scenarios are presented below. Each scenario essentially plots a path whereby the lifting of containment measures is delayed. Thereafter, the recovery path is the same as under the central scenario, albeit with a lag. Under the downside scenario, the delay is of one quarter duration, whereas under the severe scenario the recovery is delayed by two full quarters (implicit within both of these scenarios is that there is no further progress towards vaccination).



The impact on GDP would be to further increase the overall contraction in GDP from 10.5 per cent this year, to 13.8 and 15.3 per cent in the downside and severe downside scenarios, respectively. The general government deficit is estimated to rise to approximately \in 27 billion in the downside scenario and \in 29 billion in the severe downside. In these scenarios, there is a possibility of a faster recovery next year, although the level of output would still remain well below the (now) hypothetical no-pandemic baseline.

2.4 Balance of payments and flow-of-funds

A large current account deficit of 9.5 per cent of GDP was recorded last year, heavily influenced by the large-scale on-shoring of intellectual property (IP) assets in the second and fourth quarters. This reduced the trade balance to 14 per cent of GDP (via the import channel) and masks double-digit export growth last year, driven by the multinational-dominated ICT and pharmaceutical sectors.

As these imports of IP, the large depreciation bill associated with these assets, along with other globalisation-related factors, distort Ireland's headline current account, the modified current account (CA*) offers a better insight to the underlying external position. While the official modified current account for 2019 will be published by the CSO in the summer, the Department estimates a surplus of 6.3 per cent of GNI* last year. An underlying surplus of 4.7 per cent of GNI* is projected for this year. As the global economy is experiencing a reasonably symmetric shock, i.e. almost all countries are significantly affected by Covid-19, Ireland's *relative* external position is not expected to change substantially. This external surplus is expected to be maintained in 2021, as both the Irish and global economies recover from the pandemic-induced shock.

The current account can also be viewed from a domestic savings and investment perspective – a current account surplus implies that national savings are greater than national investment. Breaking this approach down by sector provides insights into the flow of funds between the household, corporate and government sectors of the economy.

This year, government funds are expected to support both the household and corporate sectors, with a negative savings-investment balance in the general government sector. Savings in the household sector are expected to rise, due to a combination of an inability to spend money on consumption and a rise in precautionary savings which, at a macro level, outweighs the fall in savings for those who have suffered unemployment as a result of the crisis. Modified corporate savings will decline due to a fall in profits in both the non-traded and traded sectors.¹⁵ In both sectors, investment will fall significantly, leading to an overall increase in the net savings position of households and corporates this year.

Next year, the net external position remains broadly unchanged. Government spending is expected to reduce, balanced out by household and corporate investment gradually picking up, as uncertainty unwinds and delayed investments are realised. Household savings are also projected to fall as consumption recovers.

¹⁵ Modified corporate savings and investment adjust for the same globalisation factors that impact the current account, namely trade in, and the depreciation of, IP and aircraft related to leasing, and the profits of redomiciled plcs. The modified savings less investment position of the economy is equal to the modified current account.

Table 5: savings, investment and the balance of payments, per cent of GDP

	2019	2020	2021
Gross Savings (per cent of GDP)	33.8	32.1	33.1
Modified Gross Savings (per cent of GNI*)	26.9	20.3	22.4
of which:			
- households	6.3	12.4	10.3
- modified corporate	16.1	14.6	13.0
- government	4.4	-6.7	-0.9
Investment [^] (per cent of GDP)	43.3	21.4	21.9
Modified investment (per cent of GNI*)	20.6	15.6	17.9
of which:			
- households	3.9	2.8	3.0
- modified corporate	12.9	8.2	10.3
- government	3.8	4.6	4.6
Current account (per cent of GDP)	-9.5	10.6	11.1
of which:			
- trade balance	14.4	35.7	35.5
- income balance	-23.8	-25.0	-24.4
Modified current account (per cent GNI*)	6.3	4.7	4.5
of which:			
- modified trade balance	76.7	87.8	84.3
- modified income balance	-70.4	-83.1	-79.8

Rounding can affect totals.

^ More specifically, Gross Capital Formation which is the sum of gross domestic fixed capital formation, changes in stocks and the statistical discrepancy.

The modified trade balance adjusts for imports of R&D services, trade in IP and trade in aircraft related to leasing. The modified income balance adjusts for depreciation of R&D service imports and trade in IP, depreciation of aircraft related to leasing, and the profits of redomiciled plcs.

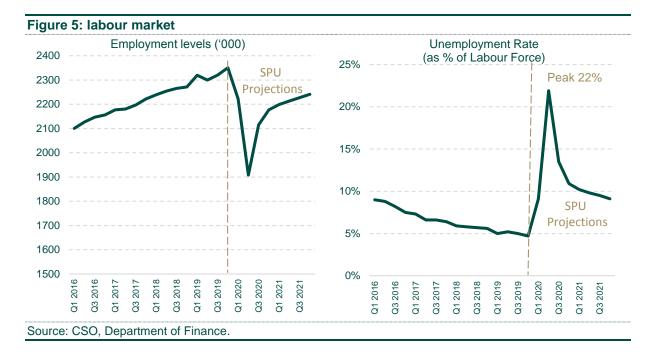
While the level of national savings is unchanged relative to the draft SPU, the composition of national savings in 2020 and 2021 has changed with a re-profiling between household and corporate savings.

Source: 2019 = CSO; 2020-21 = Department of Finance.

2.5 The Labour Market

The level of employment is projected to significantly fall this year from an average of 2.32 million in 2019 to 2.11 million, a loss of approximately 220,000 jobs (9¼ per cent decline). Employment losses will be concentrated in the second quarter, recovering somewhat during the second half of the year. With such an unprecedented shock to employment, the unemployment rate is projected to dramatically rise over the first half of the year, reaching a peak of 22 per cent in the second quarter, before falling over the second half of the year, as containment measures are gradually eased. This would mean an annual average unemployment rate of 13.9 per cent for this year.

For next year, conditions in the labour market are set to improve, conditional upon economic recovery as outlined above. The level of employment is projected to recover, with a gain of 115,000 (or 5.5 per cent growth) in job numbers. This increase in employment next year would see the unemployment rate fall to 9.7 per cent for 2021.



The unprecedented shock to the labour market will see a substantial impact not only to numbers in employment and unemployment, but also to wages. Earnings are likely to fall, not only for those linked to their employer via the *Temporary Wage Subsidy Scheme*, but also for those remaining in what could be termed 'standard' employment. Average pay per employee is projected to fall by 7.6 per cent for this year, a sharp drop from the 3.8 per cent increase recorded last year. Total compensation of employees (i.e. the wage bill) is projected to decline by 13.7 per cent in 2020.

	2019	2020	2021
Employment	2.9	-9.3	5.5
Unemployment rate (per cent)	5.0	13.9	9.7
Labour productivity^	2.2	7.6	-4.4
Compensation of employees*	7.6	-13.7	9.1
Compensation per employee*	3.8	-7.6	3.8

Table 6: labour market developments, per cent change (unless stated)

^ GDP per hour worked.

*Non-agricultural sector.

The wage bill and pay figures for 2019 are Department of Finance estimates pending publication of the 2019 National Income and Expenditure data. The change in per head wages is a function of the movements in the total pay bill (compensation of employees) and total employees, with the pay bill falling faster than the change in employees. This is a function of a number of factors including the TWSS, PUP, (including transitions between these two schemes), reduced hours and in some cases temporary pay cuts. Source: 2019 = CSO: 2020-21 = Department of Finance.

Note: These projections make the assumption that all individuals on the Temporary Wage Subsidy Scheme (TWSS) are employed whereas claimants of the Covid-19 Pandemic Unemployment Payment (PUP) are categorised as unemployed and are thus captured in the unemployment rate estimates presented. However, it is likely that many persons in receipt of the PUP may not meet the official statistical classification of unemployed as defined by the International Labour Organisation (ILO) and utilised by the CSO. For example, if an individual in receipt of the PUP has not taken specific steps to find work they may be classified as being outside the labour force rather than unemployed, while a worker with a reasonable expectation of returning to work within the next few months may still be defined as being employed despite being in receipt of the PUP. For this reason, the unemployment projections are likely to exceed the official CSO estimates. See Labour Force Survey ILO definitions available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/EU_labour_force_survey_methodology

2.6 **Price Developments**

Table 7: price developments, per cent change

Inflationary pressures in Ireland remained subdued last year, with 'core' inflation – the Harmonised Index of Consumer Prices (HICP) excluding the volatile components of unprocessed food and energy – of just 0.9 per cent.

It is likely that headline consumer price inflation in Ireland will be negative this year, due to the unprecedented decline in economic activity. Energy prices are assumed to fall significantly, given developments regarding the wholesale price of oil. On the domestic front, both services and goods prices are expected to decline this year *inter alia* reflecting the contraction of domestic demand. For the year as a whole, consumer price inflation in Ireland is forecast to decline by -0.6 per cent; 'core' inflation is projected at -0.2 per cent.¹⁶

For next year, HICP inflation is projected at 0.4 per cent, with core inflation of 0.5 per cent. The GDP deflator – a wider measure of price changes in the economy – is forecast at 1.5 per cent this year and at 1.2 per cent for next year.

	2019	2020	2021
GDP deflator	1.5	1.2	1.5
Personal consumption deflator	2.1	-0.1	0.7
Harmonised index of consumer prices (HICP)	0.9	-0.6	0.4
Core HICP inflation^	0.9	-0.2	0.5
Export price deflator (goods and services)	0.0	1.2	1.6
Import price deflator (goods and services)	-0.4	1.1	1.7
Terms-of-trade (good and services)	0.4	0.1	0.0

^ Core inflation is HICP inflation excluding the most volatile components, namely energy and unprocessed food. Source: 2019 = CSO; 2020-21 = Department of Finance.

2.7 Risks

The baseline forecast set out in this document is path-dependent: it assumes the virus is brought under control sooner rather than later and, as a result, containment measures are gradually relaxed. Because of uncertainty regarding the path for the virus, there is, accordingly, an unprecedented level of uncertainty attached to the trajectory for the economy and the public finances. Table 8 presents some of the key risks to this macro-economic scenario.

¹⁶ In the very near term, as many retail outlets and other businesses have ceased trading as a result of the containment measures, measuring consumer prices could prove challenging.

Table 8: macroeconomic risk assessment matrix

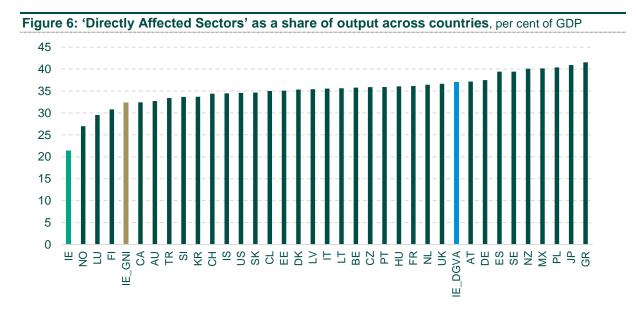
Risk	Likelihood	Origin	Impact and main transmission channel
Downside			
Larger virus outbreaks globally	Medium	External	High – the fallout from the pandemic may be more severe, triggering other disruptions such as a further tightening of financial conditions or contagion form emerging economies.
Geopolitical factors	Medium	External	High – geopolitical uncertainty may disrupt growth in key regions, generating headwinds for output and employment in Ireland.
De-globalisation	Medium	External	High – 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.
Financial market disruption	Medium	External	High – a prolonged downturn could lead to spill-overs to the global financial sector, possibly with negative feedback loops emerging (debt overhangs – including corporate debt – could 'feed back')
"Hard-Brexit"	Medium	External	High – an outcome to the continuing EU-UK negotiations which resulted in a WTO-type arrangement between the EU and UK would have a particularly detrimental impact on Irish-UK trade.
Second wave of virus	Medium	Ext / dom	High – A rise in infections later in the year leading to further containment measures would significantly weaken trading partners and the Irish economy
Concentrated production base	Low	Domestic	High – Ireland's production base is highly concentrated in a small number of high-tech sectors, with the result that output and employment are exposed to firm- and sector-specific shocks.
Loss of competitiveness	Low	External	Medium – as a small and open economy, Ireland's business model is very much geared towards export-led growth, which, in turn, is sensitive to the evolution of cost competitiveness relative to other economies.
Housing supply pressures	Medium	Domestic	Medium – supply constraints in the housing sector can adversely impact on competitiveness by <i>inter alia</i> restricting the mobility of labour.
Stagnation	Medium	Domestic	Medium – the longer the duration of recession, the higher the probability that some firms and workers become permanently detached from production, reducing the potential growth rate of the economy.
Upside			
Successful policy response	Low	Domestic	Medium – a more successful policy response could help to limit the severity of the negative economic shock.
Larger fall in imports	Low	External	Medium – a larger fall in imports than expected <i>inter alia</i> due to disruption to supply-chains or higher than assumed import content of lost output would offset some of the aggregate impacts.
Less scarring effects	Low	Domestic	Medium – less permanent scarring effects causing a quicker bounce back and shorter recovery period.
Early vaccination	Low	Domestic	High – early vaccination will allow individuals to return to work and businesses to re-open earlier than expected.
Sectoral export upside	Low	External	Medium – stronger export numbers in key and resilient sectors (ICT, pharma, medical devices etc.).
Source: Department of Finance			

Annex 2.1: the output approach - complementing the expenditure projections

The purpose of the analysis in this annex is to provide an indicative estimate of the potential fall in output across each economic sector. The results of this 'output approach' rely heavily on judgement and, therefore, should be treated as indicative.

The Department's approach to short-term forecasting has focussed on the income and expenditure side of the national accounts. In more recent years, the CSO has provided greater detail regarding the output side of the accounts, by NACE A21 sector. Work is progressing to integrate this output side into short-term forecasts.¹⁷

More immediately, however, the containment measures put in place to restrict the spread of the virus has meant that economic activity in many sectors of the economy has been significantly reduced. The OECD (2020) recently estimated that 21 per cent of Irish economic activity (i.e. GDP) takes place in sectors most likely to be directly affected by the containment measures introduced. However, this figure is affected by globalisation-related issues, which inflate Ireland's GDP and have limited impact on Irish living standards. The share increases to 32 per cent when expressed as a percentage of modified GNI and to almost 37 per cent when expressed as a percentage of 'domestic' gross valued added.



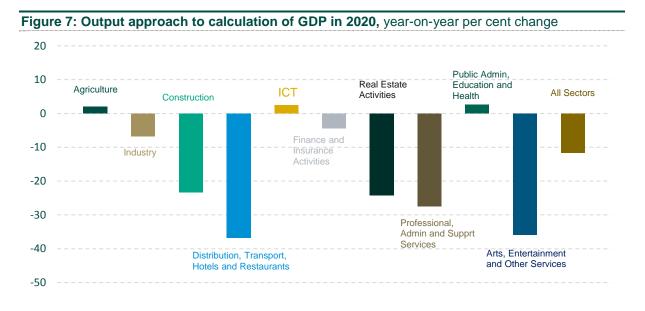
Note: Affected sectors are as per OECD (2020). These include manufacturing of transport equipment, construction, wholesale and retail trade, air transport, accommodation and food services, real estate services excluding imputed rent, professional service activities, arts, entertainment and recreation, and other service activities. The OECD calculations assume an economy-wide output shutdown, rather than a shutdown confined to particular regions only. IE represents the affected sectors as a share of GDP; IE_GNI represents the affected sectors as a share of modified GNI or GNI*; IE_DGVA represents the affected sectors as a share of Domestic Gross Value Added. Source: OECD (2020) and Department of Finance calculations.

Given the sectoral nature of the shock, the output side of the accounts has complemented the analysis of income and expenditure dynamics in compiling the Department's baseline scenario. In an effort to estimate the loss in economic output as a result of containment measures, activity is grouped into the

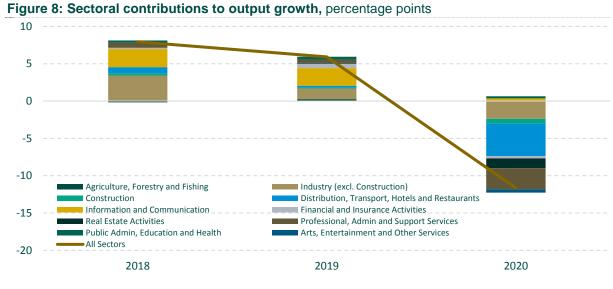
¹⁷ Later this year, the Department will publish a methodological paper detailing its approaches (modelling-techniques, etc.) for producing short- and medium-term macroeconomic forecasts.

10 high-level NACE sectors and, for each quarter this year, an assumption is made regarding the extent to which output will decline in each sector. The economic impact of the pandemic is assumed to be most significant in the second quarter, with the containment measures being gradually relaxed over the second half of the year. In terms of the size of output shock, this relies on available evidence regarding the exposure of the individual sectors to containment measures as well as, inevitably, assumptions and judgement (figure 7).

Overall, Irish economic output could fall by approximately 10½ to 11½ this year, broadly consistent with the expenditure approach described in the main text. The losses of economic output vary widely from sector-to-sector, with services activities tending to be more adversely affected than manufacturing activities. In particular, it is assumed that the loss of output will be greatest in the distribution, transport, hotels and restaurants sector and the arts and entertainment sector. There will also be a substantial decline in professional administrative and support activities, real estate activities and in construction.

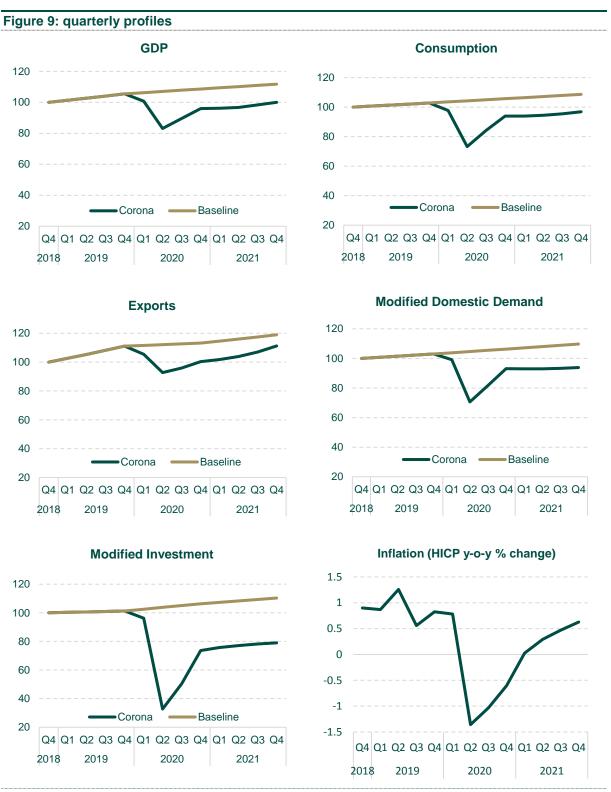


Source: CSO, Department of Finance.



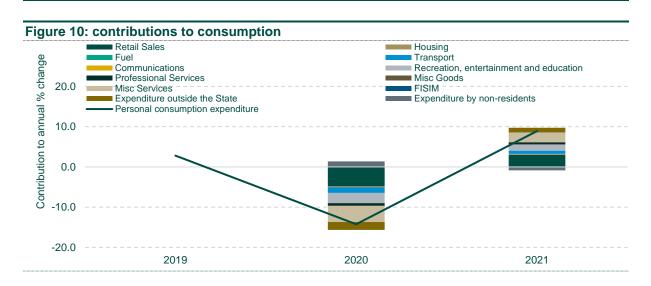
Source: CSO, Department of Finance.



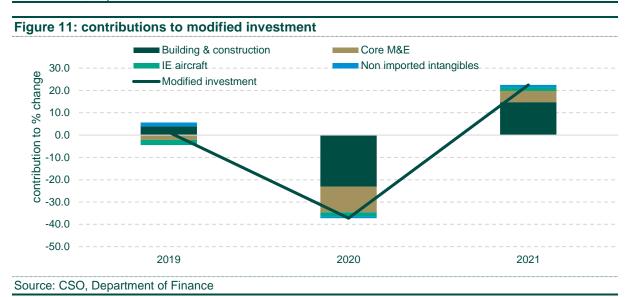


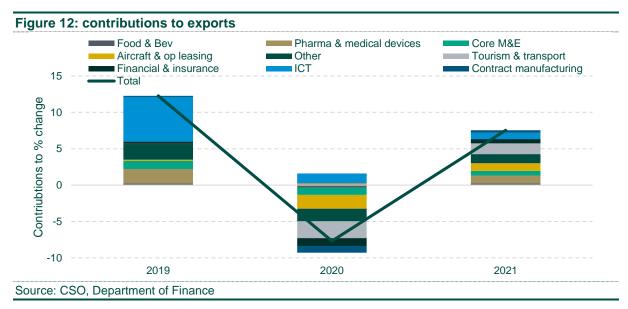
Baseline refers to pre-pandemic forecasts, corona refers to SPU projections. Source: CSO, Department of Finance.

Annex 2.3: contributions to consumption, investment and exports



Source: CSO, Department of Finance





3.1 Summary

The Government has adopted a counter-cyclical fiscal stance in order to cushion the pandemic-induced economic contraction. Discretionary fiscal measures – both revenue and expenditure – have complemented the full operation of the automatic stabilisers. While necessary in the short-term, the fiscal cost will be large, with an Exchequer deficit of \in 15.6 billion in prospect for this year. Even with gradual recovery, the Exchequer is projected to remain in the red next year, with a deficit of \in 11.1 billion likely.

3.2 Fiscal Outturn 2019¹⁸

Total Exchequer tax receipts of \in 59.3 billion last year were 2.4 per cent (\in 1.4 billion) ahead of the 2019 profile and 6.8 per cent (\in 3.8 billion) higher in annual terms. The over-performance against profile was mainly due to the exceptionally strong corporation tax performance recorded last year. All the major tax headings recorded strong positive annual growth, reflective of the broad-based economic growth experienced last year.

From an expenditure perspective, total gross voted expenditure of $\in 67.4$ billion for 2019 was 1.2 per cent ($\in 0.8$ billion) above the 2019 Revised Estimates for Public Services profile. The bulk of this inyear increase is directly related to Government decisions to provide additional support for the delivery of public services, including healthcare ($\in 383$ million). Accordingly, gross voted current expenditure was 1.3 per cent ($\in 757$ million) above profile, with gross voted capital expenditure 0.3 per cent ($\notin 24$ million) ahead of expectations.

Aggregate non-tax revenue and capital receipts of \in 5.1 billion were up 8.5 per cent in annual terms, in part due to the proceeds of the wind-up of IBRC. Non-voted expenditure was, in net terms, \in 127 million lower than the previous year due to a range of factors, including savings on debt servicing costs.

In aggregate terms, therefore, a headline Exchequer surplus of $\in 0.6$ billion was recorded last year, the second consecutive Exchequer surplus. Adjusted for the impact of the Exchequer loan to *Irish Water*, the Exchequer balance was $\in 1.4$ billion last year.

3.3 Fiscal Outlook 2020

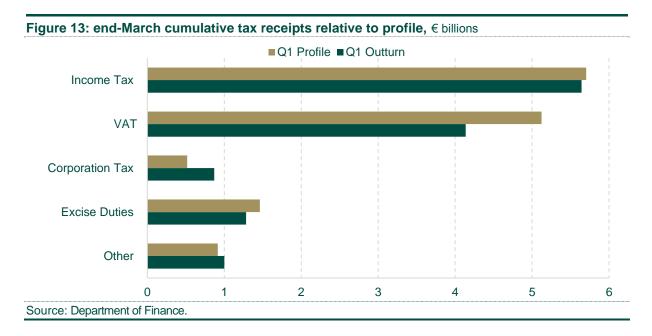
3.3.1 Tax forecast

At end-March, taxation receipts were 1.1 per cent (€138 million) higher than in the first quarter of last year. Importantly, however, this performance mainly reflects strong annual growth in the early part of the year. In March, aggregate receipts moved onto a sharp downward trajectory due, in the first instance, to forbearance measures designed to provide cash-flow support to firms (mainly deferred VAT payments). The 20 per cent year-on-year decline in receipts during March is expected to accelerate

¹⁸ Provisional outturn, final figures to be audited by C&AG and published in Finance & Appropriation Accounts.

over the second quarter; moreover, the downward trajectory will also become more broad-based with other taxation components adversely affected. There are already signs of a deterioration in the tax position in some of the higher frequency heat map tools used by the Department (see annex 1), although the scale of this will become clearer in time.

Based on the economic assumptions set out earlier, total taxation revenue is projected to decline by 16.4 per cent this year. At €49.6 billion, this would take this income stream back to below 2017 levels. The decline in taxation revenue will be broad-based. The fall in the national wage bill – employment and earnings per capita – will reduce income tax by an estimated €4.7 billion (20.4 per cent) relative to last year. Much lower consumer spending will weigh on VAT (down €2.8 billion, 18.6 per cent) and excise (down €0.8 billion, 14.2 per cent) receipts. The assumed decline in corporate profitability will lower corporation tax receipts by a projected €0.7 billion (6.5 per cent) compared with last year. The smaller tax headings will also likely decline.



3.3.2 Non-tax revenue

Non-tax revenue this year is projected at $\in 2.8$ billion, which is $\in 0.7$ billion higher-than-assumed in the Department's autumn forecasts. The upward revision mainly reflects higher-than-projected payments to the Exchequer from the Central Bank, arising from its disposals of the Floating Rate Notes (FRNs) last year.¹⁹ While these exceptional receipts flatter the Exchequer position, the majority of this additional income is not treated as general government revenue under the European statistical methodologies. Accordingly, these receipts do not benefit the general government position on a one-for-one basis. Overall capital resources are assumed to be larger versus *Budget 2020* projections, reflecting drawdown from the *Rainy Day Fund*.

¹⁹ The Floating Rate Notes were issued to replace the promissory notes originally issued to recapitalise *Anglo Irish Bank* and *Irish Nationwide Building Society.*

3.3.3 Expenditure

The *Revised Estimates for Public Services* (REV) 2020, published on 18th December 2019, set out an overall Government Expenditure Ceiling of €70.4 billion. These Estimates were not voted on before the dissolution of *Dáil Éireann*. Following Government formation, the Estimates for individual Departments will need to be refreshed and consolidated, and in some cases re-structured, to reflect the changed overall allocations, taking into account the impact on expenditure of the Covid-19 crisis.

For the purposes of the fiscal projections in this document, the overall allocation of \in 70.4 billion in the REV is taken as the baseline level of expenditure. This expenditure is then increased by \in 8 billion to account for measures taken in response to the Covid-19 crisis and also the estimated impact on income supports over the second half of the year of the projections in relation to unemployment. Any further expenditure measures required to respond to the Covid-19 crisis would impact on this overall expenditure amount of \in 78.4 billion.

A number of expenditure measures have been agreed as part of the response to the public health emergency arising from Covid-19. In particular, almost \in 2 billion is to be provided to support the Health service. In the area of Employment Affairs and Social Protection, the measures agreed by Government will, over a 12-week period, provide, based on current estimates, at least c. \in 4 billion to \notin 4½ billion in income supports, sick pay and illness benefit for impacted workers. This estimate takes into account that the introduction of the *Temporary Wage Subsidy Scheme* (TWSS) and enhanced *Pandemic Unemployment Payment* (PUP) will reduce the level of expenditure on the Sick Pay and Illness Benefit Scheme over this 12-week period.

In the short-term, the TWSS will support the maintenance of a crucial link between employers and their employees. In recognition of the liquidity problems facing businesses, local authorities are working with the most impacted businesses in relation to deferral of payment for commercial rates. The Revenue Commissioners have also set out a series of actions to support small- and medium-sized enterprises experiencing cash-flow difficulties. When economic activity begins to recover, businesses will need further liquidity supports and this is recognised by the decision to provide additional Exchequer funding of c. $\in 1/4$ billion that, taking into account the re-purposing of the Brexit loan scheme for Covid-19, will support the provision of approximately $\in 1$ billion in liquidity measures. Further support measures in this area are under consideration.

Expenditure in the year-to-date reflects the impact of the Covid-19 crisis. Gross voted expenditure at the end of the first quarter was 7.1 per cent (\in 1,135 million) above profile with all additional expenditure occurring in March. This reflects additional expenditure in Health and on income supports directly related to the Covid-19 crisis, and also as part of contingency arrangements, accelerated draw down of funds by Government Departments to ensure that that they and bodies under their aegis are in a position to meet all liabilities promptly. In annual terms, gross voted expenditure was up 13.3 per cent (\in 2,001) million) at end-March. Gross voted current spending was 7.1 per cent (\in 1,054 million) above expectations and 11.8 per cent (\in 1,667 million) higher year-on-year. Gross voted capital expenditure was 7.2 per cent (\in 81 million) ahead of target, and 38.3 per cent (\in 334 million) higher in annual terms.

3.3.4 Summary

Putting all of these component parts together implies a projected Exchequer deficit of €15.6 billion for this year. This is based on the assumption that containment measures are relaxed over the summer and gradual economic recovery begins in the autumn. If this does not materialise, the Exchequer deficit will, accordingly, be even larger.

3.4 Fiscal Outlook 2021

3.4.1 Tax forecast

The assumed economic recovery will boost taxation receipts over the course of next year although the central assumption is that by end-2021, total tax revenue will not have recovered to last year's peak level. In terms of direct taxes, the recovery in the labour market should support an increase in income tax receipts while the projected turnaround in corporate profitability will benefit corporate taxation receipts (these are expected to begin to decline the following year as the impact of international tax changes takes hold). Indirect taxes – mainly VAT and excise duties – will benefit from higher levels of consumption. In sum, the taxation stream will generate receipts of \in 54.2 billion next year, based on current assumptions for the economy and historical relationships between taxes and their bases.

3.4.2 Non-tax revenue

Non-tax revenue will continue to benefit from dividend payments to the Exchequer in the coming years. In particular, payments by the Central Bank should continue, albeit at a lower level. The payment schedule for the National Asset Management Agency (NAMA) surplus has been amended to reflect the Government's decision to direct NAMA to retain ownership of its subsidiary National Asset Residential Property Services. In addition to the \in 2 billion to be transferred in 2020, \in 1.2 billion will be paid to the Exchequer in 2021, with \in 500 million payable in 2022. Forecasts for payments in 2021 and beyond are subject to favourable market conditions and the ability for NAMA to realise its remaining assets.

3.4.3 Expenditure

The updated fiscal projections published on 9th January this year set out gross voted expenditure for 2021 of \in 73.4 billion an increase of \in 3 billion (4¼ per cent) on the overall expenditure amount set out in REV 2020. For the purposes of the fiscal projections in this document, this amount is the assumed expenditure baseline position, with an adjustment of \in 1½ billion included in respect of additional Live Register related expenditure amount for next year will be revised to reflect the budgetary policy for 2021 taking into account the public health position at that time and in particular incorporating any element of the additional 2020 expenditures, mainly in the Health area, that may be required on an ongoing basis in 2021 in order to respond to Covid-19.

3.4.4 Summary

Taking all of the above together, 2021 will see an improvement in the Exchequer position, public finances, with a deficit of \in 11.1 billion in prospect.

Table 9: fiscal risk assessment matrix		
Risk	Likelihood	Impact and main transmission channel
Domestic		
Pandemic-related budgetary pressures	High	High – if the pandemic crisis persists for longer than currently expected, the fiscal costs will be significant.
Ageing population	Medium	Medium – Ireland's population is ageing rapidly with significant outlays annually simply to maintain existing levels of service in the context of demographic pressures
Corporation tax concentration risks	High	Medium – corporation tax revenue has increased significantly in recent years and the 'Top 10' payers contribute around 45 per cent of this tax. Revenue from this source will begin to fall from 2022 due to international tax policy changes.
Dividend payments	Low	Medium – lower-than-expected dividend payment arising from the State's shareholdings in banks or commercial semi-state companies.
EU Budget Contributions	Medium	Medium – stronger-than-expected growth in national income can increase the Irish contribution to the EU budget, while there is no clarity on how the UK's exit will impact upon the EU Budget.
Contingent liabilities	Low	Medium – contingent liabilities continue to decline although the public finances would be adversely affected in the event these liabilities were 'called' (table 19 provides more detail).
External		
Bond market conditions	Low	Medium – government financing has benefitted from supportive bond market conditions and any change could result in higher debt service costs. The fact that the bulk of outstanding public debt is at fixed rates and that the maturity profile is relatively long help to mitigate this risk.
Changes to tax 'drivers'	Medium	Medium – macroeconomic 'drivers' are used to forecast taxation receipts and changes in the composition of economic activity can impact upon the public finances.
Climate change and renewable energy targets	High	High – Ireland is obliged to reduce greenhouse gas emissions by 20 per cent on 2005 levels by 2020. Separately, Ireland has a binding 2020 target that 16 per cent of all energy be from renewable sources. Failure to meet these targets will imply financial costs or sanctions.
Litigation Risk	Medium	Medium – An adverse or unexpected outcome of litigation against the State which resulted in additional expenditure over and above that provided could pose a risk to the achievement of budgetary targets.
Source: Department of Finance.		

	2019	2020	2021
CURRENT BUDGET			
Expenditure			
Gross voted current expenditure	60,050	70,205	65,850
Non-voted current expenditure*	7,930	7,775	7,470
Gross current expenditure	67,980	77,980	73,320
less expenditure receipts and balances	13,270	14,660	13,750
Net current expenditure	54,710	63,320	59,570
Receipts			
Tax revenue	59,315	49,565	54,215
Non-tax revenue	3,350	2,795	1,750
Net current revenue	62,665	52,355	55,965
CURRENT BUDGET BALANCE	7,995	-10,960	-3,605
CAPITAL BUDGET			
Expenditure			
Gross voted capital expenditure	7,365	8,165	9,050
Non-voted capital expenditure*	1,705	1,175	1,185
Gross capital expenditure	9,070	9,340	10,235
Less capital receipts	30	30	30
Net capital expenditure	9,040	9,310	10,205
Capital resources	1,735	4,715	2,745
	7 205	4 606	7 460
CAPITAL BUDGET BALANCE	-7,305	-4,595	-7,460
Exchequer Balance	645	-15,555	-11,065

* Central Fund. ** Projected GEC. Figures are rounded to the nearest €5 million and may affect totals. Note: Fiscal numbers are presented on an *ex-post* basis. Source: Department of Finance.

	2019	2020	2021
Revenue	74,300	65,735	69,155
: tax revenue	59,315	49,565	54,215
- Income tax	22,935	18,265	19,945
- VAT	15,120	12,305	13,880
- Corporation tax	10,890	10,185	10,815
- Excise duties	5,940	5,095	5,585
- Stamp duties	1,515	1,205	1,350
- Motor tax	960	925	915
- Customs	350	305	340
- Capital gains tax	1,075	865	930
- Capital acquisitions tax	535	415	450
: A-in-As (inc. PRSI, NTF and balances)	13,270	14,690	13,780
: non-tax revenue	1,685	1,405	705
: capital resources	30	75	455
Expenditure	75,345	86,145	82,370
: gross voted current expenditure	60,050	70,205	65,850
: gross voted capital expenditure	7,365	8,165	9,050
: non-voted current expenditure	7,930	7,775	7,470
- debt servicing	5,220	4,735	4,025
Balance excl. transactions with no GG impact	-1,045	-20,410	-13,220
Revenue transactions with no GG impact	3,405	6,030	3,335
: non-tax revenue	1,670	1,390	1,045
: capital resources	1,735	4,640	2,290
Expenditure transactions with no GG impact	1,710	1,175	1,185
: non-voted current expenditure	5	5	5
: non-voted capital expenditure	1,705	1,170	1,180
Balance of transactions with no GG impact	1,695	4,855	2,150
Exchequer balance	645	-15,555	-11,065

Figures are rounded to the nearest €5 million and may affect totals. Source: Department of Finance.

4.1 Summary

A significant deterioration in the budgetary accounts is in prospect for this year. General government revenue is set to fall by 17 per cent, mainly due to lower taxation revenue. At the same time, general government expenditure is set to increase, largely reflecting discretionary measures to support households and firms. A deficit of the order $\in 23.1$ billion – 7.4 per cent of GDP – is now anticipated. This will trigger the opening of an *Excessive Deficit Procedure* in due course.²⁰ While the assumed gradual economic recovery next year will help to reduce the fiscal imbalance, the deficit is unlikely to be eliminated.

4.2 General Government Balance in 2020

General government revenue amounted to €87.5 billion last year, the equivalent of 25.2 per cent of GDP. The equivalent figure for general government expenditure was €86.1 billion, or 24.8 per cent of GDP. As a result, a general government surplus of 0.4 per cent of GDP was recorded.

Revenues of the general government sector are set to fall significantly this year, mainly due to the decline in taxation revenue outlined earlier. In terms of the main components, taxes on income and wealth – in Ireland this is mainly personal and corporate taxation – are set to decline by 14½ per cent relative to last year. Taxes on production and imports – mainly VAT, excise and customs – are projected to fall by 19½ per cent. Social contributions – mainly PRSI receipts in an Irish context – are set to fall by 12 per cent, broadly mirroring the performance of personal income tax receipts. Other receipts, a category which *inter alia* includes dividend payments to the State, looks set to fall, in part due to the ECB recommendation that banks not pay dividends, at least until October 2020.

Taking all of these likely developments into account, general government revenue is projected at €72.5 billion (23.1 per cent of GDP) for this year.

On the other side of the equation, the policy response to the pandemic will result in a ramping-up of general government expenditure this year. The provision of additional healthcare will raise expenditure in the compensation of employees (the public pay-bill) and intermediate consumption (the purchase of non-pay goods and services by general government). In addition, the rise in unemployment and the higher levels of (Covid-19 related) unemployment payments will increase social payments and transfers. The projections for general government investment spending as well as interest payments on the national debt are broadly unchanged relative to the Department's autumn 2019 forecasts.

General government expenditure is projected at €95.7 billion this year, the equivalent of 30.4 per cent of GDP. Taken in conjunction with the assumed revenue projection, this implies a general government

²⁰ The European Council has endorsed a proposal from the European Commission to activate, for the first time, the so-called 'General Escape Clause' of the *Stability and Growth Pact*. The activation of the clause will suspend the fiscal requirements applying to Member States under the preventive arm of the Pact. However, as the 3 per cent of GDP deficit threshold is enshrined in the Treaty on the Functioning of the European Union, it is not expected that the activation of the clause will preclude the launching of an *Excessive Deficit Procedures* at a later stage.

deficit of €23.1 billion. At 7.4 per cent of GDP, this deficit would be in excess of the Treaty reference value and, if confirmed, would inevitably result in the opening of an *Excessive Deficit Procedure* for Ireland.

The deficit projection outlined above is based on the assumption that economic activity bottoms out in the second quarter, with gradual recovery thereafter. In addition, Government will shortly bring forward an economic recovery plan, setting out its approach to repairing the damage caused by the pandemic. The costs of this are not included in the deficit projection outlined above, as decisions have not yet been taken.

4.3 General Government Balance in 2021

The assumption of gradual economic recovery later this year and into next year should benefit general government revenues, notably through the taxation channel. Taxes on income and wealth are forecast to increase by 7.5 per cent next year, on the back of a recovery in employment and stronger corporate profitability. Higher levels of non-food consumption should support taxes on production and imports. As previously highlighted, however, a more cautious approach to consumer spending may be a lasting feature of the pandemic, with implications for taxes (VAT, excise duties) reliant on this expenditure. The assumed recovery in the labour market will support social contributions, while other general government receipts next year will remain weak. Overall, general government revenue is projected at \notin 79.5 billion (23.5 per cent of GDP) next year.

General government expenditure looks set to fall next year as temporary policy support is unwound. Purchases of goods and services should normalise following the temporary spike this year; the same is true for social transfers. The downward path for interest expenditure will continue, although at a slower pace: while the effective interest rate on public debt continues to decline, the State is carrying a larger burden of debt on foot of the very large deficits this year and next. All-in-all, general government expenditure is projected at \in 93.3 billion (27.5 per cent of GDP) next year, implying a general government deficit of \in 13.8 billion (4.1 per cent of GDP).

Table 12: exchequer balance to GGB, € million (unless sta

	0010		0001
	2019	2020	2021
Exchequer balance	645	-15,555	-11,065
Walk ¹	695	-7,580	-2,750
General Government balance	1,340	-23,135	-13,820
of which:			
General Government revenue	87,455	72,545	79,445
Taxes on production and imports	27,205	21,910	24,975
Current taxes on income, wealth	36,630	31,355	33,715
Capital taxes	530	415	450
Social contributions	14,510	12,760	13,650
Property Income	1,650	1,150	570
Other	6,930	4,960	6,090
General Government expenditure	86,115	95,685	93,265
Compensation of employees	23,940	24,280	24,945
Intermediate consumption	12,000	14,260	13,590
Social payments	30,700	34,855	33,745
Interest expenditure	4,460	3,950	3,755
Subsidies	1,675	3,685	1,590
Gross fixed capital formation	8,075	8,825	9,040
Capital transfers	1,685	1,990	2,360
Other	3,590	3,840	4,235
memo items			
GGB per cent GDP	0.4	-7.4	-4.1
GGB per cent GNI*	0.7	-13.3	-7.3
Total revenue per cent GNI*	42.5	41.7	41.7
Total expenditure per cent GNI*	41.9	55.1	49.0

Figures are rounded to the nearest €5 million and may affect totals.

1. The 'walk' from the exchequer balance to the general government balance is set out in table A1 in the appendix. Note: Fiscal forecasts are presented on an *ex-post* basis. These incorporate the impact of measures announced in *Budget* 2020 over the medium term. Full details of these measures are available at <u>www.budget.gov.ie</u>. Source: Department of Finance, Department of Public Expenditure and Reform, CSO.

4.4 Comparison of Forecasts

In its *World Economic Outlook* (April 2020), the IMF has estimated the scale of the impact of the Covid-19 responses on public finances of its 189 members. Figure 14 shows the projected deficit and change in debt ratio for euro area Member States this year. All euro area Member States will run significant deficits this year, with an average area-wide deficit of 7.5 per cent of GDP. This is in line with the Department's estimate of 7.4 per cent of GDP for Ireland. In terms of the debt dynamics, the average increase in public indebtedness for euro area Member States is 13 percentage points this year; the equivalent figure for Ireland is 10 percentage points (Department of Finance estimate for Ireland).

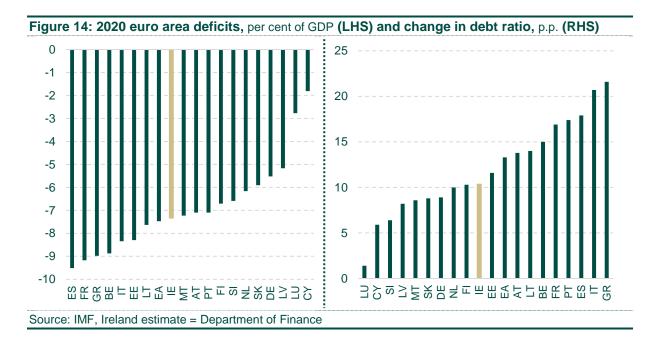
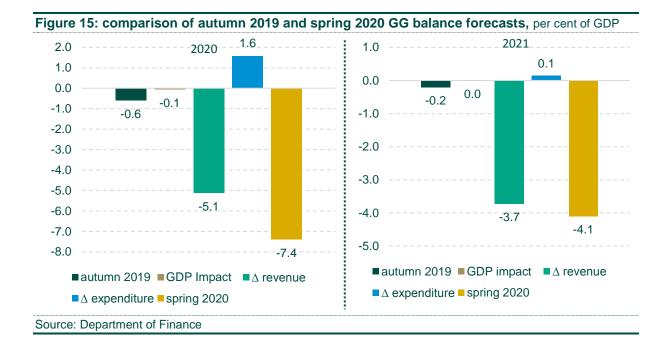


Figure 15 compares the Department's spring forecasts for the general government balance with its autumn forecasts, published in the *Economic and Fiscal Outlook* in October 2019. The forecast for the general government balance has deteriorated due to the decline in revenue and increase in expenditure, largely reflecting discretionary measures to support households and firms.



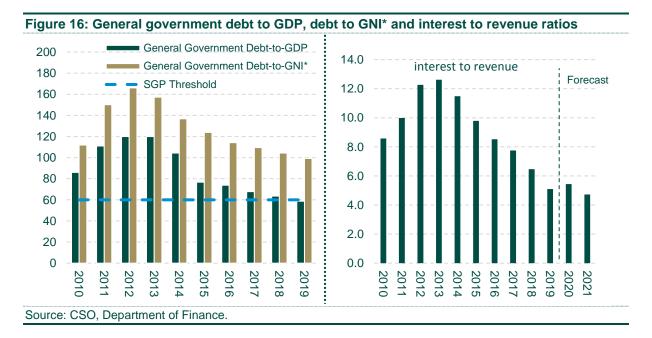
5.1 Summary

CSO data confirm the debt-to-GDP ratio last year was brought below the Treaty reference value of 60 per cent, the first time since 2008 and an important milestone. The downward trend in this ratio, however, is likely to be reversed this year, as general government liabilities accumulate in order to provide short-term support for the households and firms. General government debt is projected at €217.5 billion this year; this would amount to 69.1 per cent of GDP or 125.1 per cent of GNI*.

While public indebtedness remains high, several structural factors help to reduce the risk associated with this. For instance, the weighted average maturity is relatively long while favourable financing conditions in recent years have enabled more expensive debt to be refinanced at lower rates. In addition, significant liquid assets have been accumulated to pre-fund this year's maturities, the latter amounting to around €19 billion. There are minimal refinancing needs next year.

5.2 Debt Developments

Data from the CSO show that, at end-2019, general government gross debt in Ireland stood at \in 204.0 billion. Expressed as a fraction of GDP, this ratio was 58.8 per cent; accordingly, this was below the 60 per cent of GDP threshold that is set out in the Treaty. Ireland was, therefore, fully compliant with both Treaty requirements – deficit and debt – last year, the first time this has been achieved since 2007.



For this year, the large gap between revenue and expenditure will largely be financed by issuing Irish sovereign debt, thereby increasing general government liabilities. In nominal terms, the stock of outstanding liabilities is set to reach €217.5 billion, an increase of €13.4 billion relative to last year. As a share of national income, the debt-to-GDP ratio is set to increase to 69.1 per cent (debt-to-GNI* to 125.1 per cent): the increase in both ratios reflects the increase in absolute public indebtedness

(numerator in the ratio) as well as the fall in national income (denominator in the ratio). For next year, the assumed deficit will result in a further accumulation of indebtedness. However, the debt-to-GDP (and -GNI*) ratio should resume its downward trajectory, given the projection for nominal GDP growth.

Debt interest payments as a percentage of total general government revenue is a useful way of assessing repayment capacity. This metric is dependent on domestic revenue streams, and so is less prone to distortion by the effects of globalisation on the Irish economy. Figure 16 shows the portion of general government revenue absorbed by debt interest repayments over the period 2010-2021. After peaking in 2013, this metric has subsequently been on a downward trajectory, reflecting a combination of higher general government revenue and lower interest repayments. With the anticipated fall in revenue this year the ratio has undergone an upward shift, albeit still maintaining a downward trend.

While it is important to analyse debt dynamics using a wider set of variables, legal obligations – as set out in the *Stability and Growth Pact* - are set with reference to movements in the debt-to-GDP ratios. The debt-to-GDP ratio for this year is 10 percentage points higher than the 2019 year-end figure, which was 58.8 per cent of GDP. The forecast movements in debt levels and debt dynamics are set out in Table 13.

	2019	2020	2021
Gross debt (€ billions)	204.0	217.5	231.5
Gross debt ratio	58.8	69.1	68.4
Change in gross debt ratio(=1+2+3)	-4.8	10.4	-0.7
Contribution to change in debt ratio:			
General Government deficit (1=1a+1b)	-0.4	7.4	4.1
: interest expenditure (1a)	1.3	1.3	1.1
: primary deficit (1b)	-1.7	6.1	3.0
Stock-flow adjustment (2=2a+2b+2c+2d+2e+2f+2g)	-0.1	-3.1	0.1
: change in liquid assets (2a)	0.3	-2.7	0.6
: interest adjustments (2b)	0.2	0.2	0.0
: equity transactions (2c)	-0.7	-1.5	-0.7
: accrual adjustments (2d)	0.1	0.3	0.2
: impact of ISIF (2e)	0.1	0.0	0.0
: collateral held (2f)	0.0	0.0	0.0
: other (2g)	-0.2	0.7	-0.1
Nominal GDP contribution (3)	-4.2	6.1	-4.9
Memorandum items:			
: average interest rate	2.2	1.9	1.7
: gross debt per cent of GNI*	99.2	125.1	121.6

Table 13: general government debt developments, per cent of GDP (unless stated)

Source: CSO, Department of Finance and National Treasury Management Agency (NTMA).

5.3 Debt Composition

Figure 17 shows the compositional breakdown of the stock of general government debt at end-2019. Some notable changes to the composition from end-2018 are the decline in Floating Rate Bonds issued in 2013 to replace the IBRC promissory notes held by the Central Bank of Ireland (CBI) and a reduction in EU/UK Programme liabilities reflecting the repayment of the first three tranches of the UK bilateral loan.

The NTMA purchased and subsequently cancelled €3 billion of Floating Rate Bonds from the CBI in 2019, replacing them with medium to long-term fixed rate market funding. The outstanding balance of Floating Rate Bonds was reduced to €8.5 billion at year-end. It was reduced by a further €0.5 billion in the first quarter of 2020.

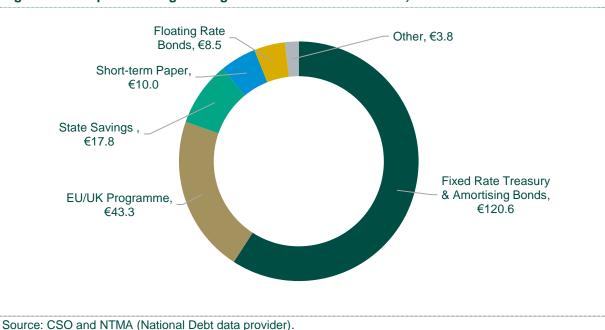


Figure 17: composition of general government debt at end-2019, € billions

Note: the "other" category includes consolidation adjustments in respect of debt, including government bonds held by general government entities.

General government debt, as defined under the Excessive Deficit Procedure (EDP) regulation, is a gross measure of government liabilities. Net general government debt (obtained by deducting the value of financial assets corresponding to the categories of financial liabilities which comprise Gross Debt) is reported in table 14. The assets deducted include:

- Exchequer cash and other assets
- Irish Strategic Investments Funds (ISIF) Cash •
- Other cash and assets held by general government.

	2019	2020	2021
General government debt (gross)	58.8	69.1	68.4
EDP debt instrument assets	8.0	5.6	5.8
Net debt position	50.8	63.5	62.6

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5.4 Credit ratings

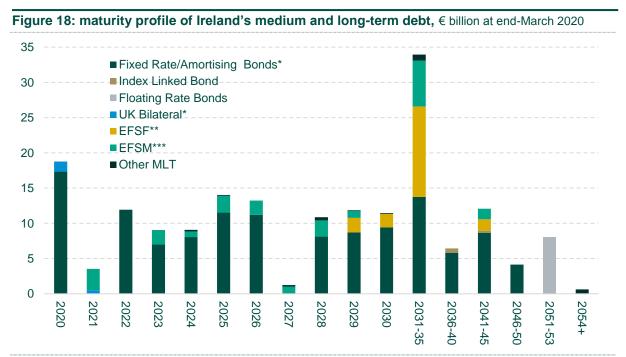
Ireland's long-term credit rating is now firmly in the "A" category with all of the main rating agencies as set out in the table below.

Rating Agency	Long-term rating	Short-term rating	Outlook
Standard & Poor's	AA-	A-1+	Stable
Moody's	A2	P-1	Stable
Fitch Ratings	A+	F1+	Stable

Source: institutions cited and NTMA.

5.5 Funding Development

The NTMA has so far this year issued \in 11 billion of Government bonds, with a weighted average yield of just below 0.3 per cent and a weighted average maturity of over 10 years. It includes two new benchmark bonds: (1) a new 15-year benchmark bond issued in January raised \in 4 billion at a yield of 0.45 per cent, and (2) a new 7-year bond issued in April raised \in 6 billion at a yield of 0.24 per cent. There was also a bond auction in March, with \in 1 billion of the 1.1 per cent 2029 bond being sold at a negative yield of -0.16 per cent.



Note that the figures in the chart are unaudited figures.

Figures include the effect of currency hedging transactions. Rounding can affect totals.

*Includes NTMA repo activity.

** EFSF loans reflect the maturity extensions agreed in June 2013.

*** EFSM loans are also subject to extension, such that their original aggregated weighted average maturity will be a maximum of 19.5 years. It is not expected that Ireland will have to refinance any of its EFSM loans before 2027. However, the revised maturity dates of individual EFSM loans will only be determined as they approach their original maturity dates. The graph above reflects both original and revised maturity dates of individual EFSM loans. Source: NTMA (National Debt data provider).

Exchequer cash balances at end-March were over \in 22 billion, up from \in 16.5 billion at end-2019. A significant portion of these balances will be utilised in April to fund the large bond maturity. There is another bond maturing in October. The total balance outstanding on these two bonds is over \in 17 billion. These represent the last of the five large bond maturities over the two year-period October 2018 – October 2020. In terms of official sector debt, there are four tranches of the UK bilateral loan maturing this year, the first of which was in February. The final tranche of the loan is repayable in Q1 2021. Each tranche is £0.4 billion.

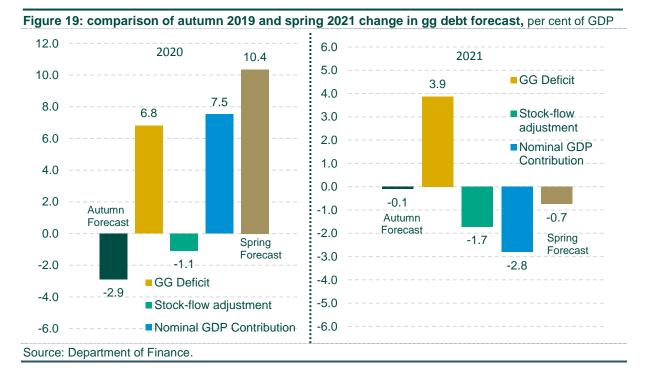
The Exchequer will maintain lower cash balances at end-2020 than it has in recent times given the minimal refinancing needs in 2021. There are no benchmark bond maturities next year.

5.6 Comparison of Forecasts

Figure 19 below compares the Department's autumn forecasts for general government debt published alongside the Budget 2020 with its spring forecasts published in this document.

For this year, the debt ratio is projected at 69.1 per cent, a 12½ percentage point increase relative to the autumn forecasts, while for next year the debt ratio of 68.4 per cent represents 12 percentage point increase from the autumn forecasts.

The main reason underlying the increase in the debt ratio is the deterioration in the denominator effect along with an increase in the nominal debt forecast – from €199 billion to €218 billion for this year; and from €206 billion to €232 billion for next year.



6.1 Introduction

Ireland currently has a favourable demographic profile compared with many other EU Member States. At 38 years of age, Ireland's population has the youngest median age in the EU, with the highest share of the population aged less than 15 years (21 per cent) and the lowest share of the population aged 65 years or over (14 per cent).²¹ Additionally, Ireland has the fourth highest fertility rate in the EU.

Despite this, unfavourable demographic trends in the coming decades will have significant implications for the economy and the evolution of the public finances. Foremost amongst these is a projected significant rise in age-related public expenditure, as a larger share of the population moves into age brackets requiring such spending. Given the budgetary implications of likely demographic shifts, a range of reform measures have been implemented in recent years in order to mitigate the future impact on the public finances.

6.2 Background

Reflecting the importance of population ageing in Ireland and elsewhere in Europe, the EU Economic Policy Committee (EPC) undertakes an assessment of the impact of long-term demographic trends on the public finances of the Member States every three years.²² The main results from the most recent Ageing Report (in 2018) are summarised in Table 23. It is important to note that work is currently being updated as part of the 2021 Ageing Report. However, the results in this chapter follow the 2018 Report. The ageing costs rely partly on long-term demographic projections produced by *Eurostat.*²³ Further analysis in an Irish-specific context was carried out and included in the Department of Finance's *"Population Ageing and the Public Finances in Ireland"*, published in September 2018.²⁴ An update to this analysis will be published in a paper by the Department of Finance next year.

Ireland's demographic profile is set to change significantly over the coming decades. The share of the population aged 65 and over is set to double by the mid-point of the century while the share of the working age population is projected to gradually decline over the same period.²⁵ Reflecting these changes, the old age dependency ratio is set to increase from approximately 21 per cent in 2016 to a peak of 46 per cent in the mid-2050s.²⁶ Put another way, while there are currently around 5 persons of working age for each person aged 65 and over; by 2050, the equivalent figure will be just over 2.

https://ec.europa.eu/info/sites/info/files/economy-finance/ip065_en.pdf.

²¹ Annual Eurostat population data released in July 2019.

²² The EPC provides economic analyses, opinions on methodologies and draft formulations for policy recommendations, in particular on structural policies for improving growth potential and employment in the EU.
²³ The macro-economic assumptions and the methodologies used in the European Commission (EC)-EPC 2018 Ageing Report

²³ The macro-economic assumptions and the methodologies used in the European Commission (EC)-EPC 2018 Ageing Report are published in the 2018 Ageing Report: Underlying Assumptions and Projection Methodologies.

²⁴ https://www.gov.ie/en/publication/2e8463-population-ageing-and-the-public-finances/

²⁵ Working age population (WAP) defined for these purposes as those aged 15-64.

 $^{^{26}}$ Old age dependency ratio = (population aged 65 and over/population aged 15-64).

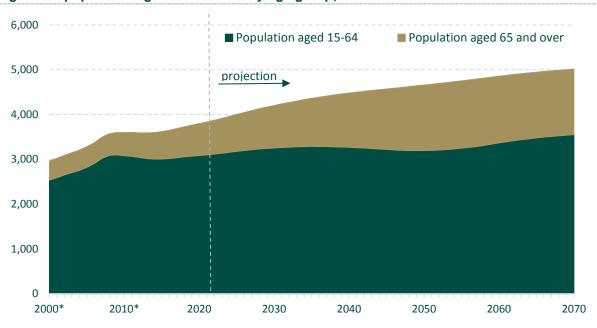


Figure 20: population aged 15 and over by age group, 000s

* 2000-2015 population data from the CSO. Population estimates from 2016 onwards are based on Eurostat projections. Source: Eurostat 2015-based demographic projections and CSO Population and Migration estimates.

6.3 Long-Term Budgetary Prospects

Total age-related expenditure is projected to increase by more than 4 percentage points of GDP over the projection period, peaking at 20 per cent of GDP in 2059.27 When seen through the prism of GDP, age-related public expenditure in Ireland is projected to remain well below the EU average over the forecast horizon (EU-28 average total age-related expenditure is projected to be 26.6 per cent of GDP in 2070). However, these metrics are heavily affected by denominator effects as GDP overstates the size of the Irish economy.28

As mentioned above, the Department of Finance published "Population Ageing and the Public Finances in Ireland" in September 2018. One innovation in this document is the scaling of expenditure projections by GNI*, as presented in Table 16 below. This provides a more realistic picture of the underlying repayment capacity of the economy.

When scaled by GNI*, total age-related expenditure is expected to increase by 6.5 percentage points by 2070, to 30.3 per cent of GNI*, above the projected EU and euro area average for the same point in time.29

²⁷ Expenditure developments are in reference to the base year, 2016. The exercise to project age-related expenditure is carried out on a 3-year cycle. The next update, taking in the period 2019-2070, is due to be published in the first half of 2021.

²⁸ This is discussed in more detail in "GDP and 'Modified GNI'- Explanatory Note", Department of Finance. Available at: https://www.gov.ie/en/publication/498058-gdp-and-modified-gni-explanatory-note-may-2018/ ²⁹ As above, expenditure developments are in reference to the base year, 2016.

Table 16: long-term spending projections, per cent of GDP unless otherwise stated

	2020	2030	2040	2050	2060	2070
Total age-related expenditure	15.0	16.6	17.8	19.4	20.0	19.3
- Total pension expenditure	5.1	5.8	6.7	7.4	7.2	6.6
: Gross state pension	3.8	4.3	5.2	6.1	6.3	6.0
: Public service occupational pension	1.3	1.5	1.5	1.4	0.9	0.6
- Health care	4.3	4.6	4.9	5.1	5.2	5.1
- Long-term care	1.4	1.7	2.1	2.7	3.1	3.3
- Education	3.5	3.6	3.2	3.4	3.5	3.3
- Unemployment benefits	0.8	0.9	0.9	0.9	0.9	0.9
Main Demographic Developments	2020	2030	2040	2050	2060	2070
Labour input (growth rate)	0.8	0.5	0.1	0.0	0.5	0.4
: Employment (growth rate)	0.9	0.6	0.1	-0.1	0.5	0.4
: Hours worked per employee (growth rate)	-0.1	-0.1	0.0	0.0	0.0	0.0
Labour productivity (growth rate)	2.4	1.3	1.5	1.5	1.5	1.5
: Total Factor Productivity (growth rate)	1.8	0.9	1.0	1.0	1.0	1.0
: Capital deepening (growth rate)	0.6	0.4	0.5	0.5	0.5	0.5
Potential GDP (growth rate)	3.3	1.8	1.6	1.5	2.0	1.9
population aged >= 65 ('000s)	712	947	1,212	1,461	1,488	1,464
Population aged 15-64 ('000s)	3,085	3,255	3,268	3,196	3,366	3,550
Old-age dependency ratio (per cent)	23.1	29.1	37.1	45.7	44.2	41.2

Rounding may affect totals.

Source: Ageing Report 2018 and Department of Finance calculations.

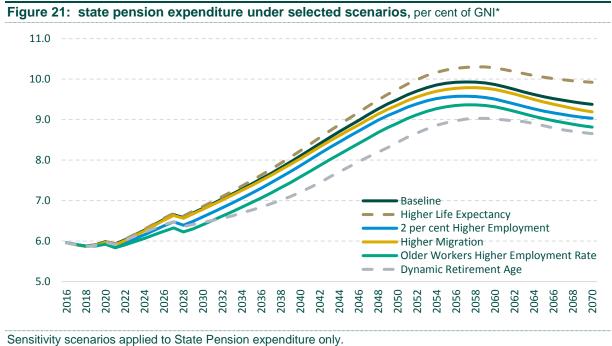
Pension-related expenditure, the biggest component of age-related expenditure, is projected to increase by 2.5 percentage points while expenditure on healthcare and long-term care is projected to increase by 1.7 and 3.0 percentage points of GNI*, respectively. Operating in the other direction, the projected expenditure on education and unemployment benefits is expected to decrease by 0.4 percentage points over the projection period, to 5.2 and 1.4 per cent of GNI*, respectively.

	2020	2030	2040	2050	2060	2070
Total age-related expenditure	23.6	26.0	28.0	30.4	31.2	30.3
- Total pension expenditure	8.0	9.1	10.5	11.7	11.3	10.3
: Gross state pension	6.0	6.8	8.1	9.5	9.9	9.4
: Public service occupational pension	2.0	2.3	2.4	2.2	1.5	1.0
- Health care	6.6	7.2	7.7	8.0	8.2	8.2
- Long-term care	2.2	2.7	3.4	4.0	4.7	5.1
- Education	5.6	5.6	5.0	5.3	5.5	5.2
- Unemployment benefits	1.2	1.4	1.4	1.4	1.4	1.4

Rounding may affect totals. Source: Ageing Report 2018 and Department of Finance calculations. In order to test the robustness of the pension projection results to a range of assumptions, a sensitivity analysis was carried out in line with the harmonised range of shocks agreed by the Ageing Working Group (AWG).³⁰ The sensitivity scenarios are applied exclusively to the State Pension (SP).

As illustrated in Figure 21 below, a scenario with higher life expectancy (by two years) results in increased SP-related pension expenditure, as, ceteris paribus, recipients spend longer in retirement. In these circumstances, SP expenditure in 2070 is 0.5 percentage points of GNI* higher than in the baseline scenario.

The *Roadmap for Pension Reform 2018-2023* sets out a commitment to link future changes in the State pension age to life expectancy, subsequent to the already planned increases in 2021 and 2028.³¹ The impact of such a policy is highlighted in the dynamic retirement age scenario in Figure 21. This scenario is estimated to reduce – relative to the baseline – SP expenditure by 0.7 percentage points of GNI* by 2070. These scenarios serve to highlight the sensitivity of the public finances and age-related related spending to changes in the underlying assumptions.



Source: Department of Finance calculations.

³⁰ The sensitivity shocks were applied exclusively to social security pension schemes (PSS). The higher life expectancy scenario assumes an increase in life expectancy at birth of two years by 2070 compared to the baseline scenario. The higher employment rate of older workers scenario assumes an increase of 10 percentage points in the employment rate of older workers (55 to 74) between 2018 and 2030 and maintains its value thereafter. The dynamic retirement age scenario links the retirement age to increases in life expectancy. In particular, the statutory retirement age follows the evolution of life expectancy in every year, i.e. if life expectancy increases by 10 per cent of a year in a given year, the statutory retirement age will increase by 10 per cent of a year.
³¹ The Roadmap for Pension Reform 2018-2023, sets out a commitment that there will be no further increase in the State pension

³¹ The Roadmap for Pension Reform 2018-2023, sets out a commitment that there will be no further increase in the State pension age prior to 2035 other than those already provided for in 2021 and 2028 and that any future changes after 2035 will be directly linked to increases in life expectancy.

6.4 Policy Strategy

A range of policy reforms have been introduced in recent years to address the budgetary challenges posed by population ageing, a number of which are detailed below:

Public service pensions

The Single Public Service Pension Scheme (Single Scheme) for all new entrants to public service employment took effect from 1 January 2013. Under this scheme, pension benefits are based on career average earnings rather than final salary. The Single Scheme minimum pension age was raised to 66 years bringing it in line with the statutory state pension age, rising progressively to 67 in 2021 and 68 in 2028. In addition, post-retirement pension increases for Single Scheme members are linked to consumer prices (CPI) rather than wage movements of existing public servants.

Department of Public Expenditure and Reform estimates suggest that the long-term annual savings from the introduction of the Single Scheme will reduce the expenditure on public service pensions by 35 per cent. Of the total savings, over a half are attributed to changes to indexation (CPI linkage), almost a third are due to the impact of career averaging, and the remainder arising from the increase in the pension age, removing professional added years and removing supplementary pensions. A significant and growing reduction in longer-term pension expenditure is therefore envisaged once Single Scheme members begin to retire.

The Public Service Pay and Pensions Act 2017 provided for the introduction of a permanent Additional Superannuation Contribution (ASC) for public servants from January 2019. This contribution is in addition to existing pension contributions made by public servants. As provided for in the 2017 Act, the 2019 rates were revised in 2020 and these are now the permanent rates going forward in relation to ASC. Public service workers are now paying significant contributions towards the cost of their pension entitlements and the ASC is helping to place public service pensions on a more sustainable, long-term footing.

The Public Service Superannuation (Age of Retirement) Act 2018, which was enacted in December 2018, provides for a new compulsory retirement age of 70 for public servants recruited prior to 1 April 2004. This Act gives affected public servants the choice to work beyond the age of 65 to 70 years, on existing terms and conditions, subject to the normal standards of health and performance, etc. This new retirement age reflects the fact that people are living longer, healthier lives and that many public servants wish to remain at work past the age of 65.

State pensions

A number of reform measures have been implemented in recent years to improve the sustainability of the state pension system. The State Pension Transition payment was abolished in 2014, which had the effect of increasing the State Pension eligibility age to 66, and the age of eligibility will further rise to 67 in 2021 and then to 68 in 2028. Separately, the criteria to qualify for a contributory pension were amended to increase the minimum number of years of paid contributions required for a contributory pension from five to ten years in April 2012.

The Roadmap for Pensions Reform 2018-2023 includes measures designed to further address the long term sustainability of the State Pension system. It proposes the introduction of a 'total contributions approach' (TCA) to replace the current 'yearly average' contributions test for the State Pension (Contributory). This will ensure that the level of pension payments would be directly proportionate to the number of social insurance contributions the person has over their working life, thereby removing some of the anomalies associated with the current averaging approach. Following on from a consultation process, officials in the Department of Employment Affairs and Social Protection are designing the scheme. It is anticipated that there will be significant recognition for homecaring periods in the new model. The intention is to bring a proposal to Government setting out that design in the near future. When the incoming Government has agreed the approach to be taken, work required to introduce this reform will be initiated including drafting necessary legislation and the development of required administration and ICT systems.

In line with a further commitment in the Roadmap, the Department of Employment Affairs and Social Protection, in consultation with the Department of Public Expenditure and Reform, is developing proposals for setting a formal benchmark for State Pension Contributory payments and the indexation of future changes in pension rates of payment.

6.5 Conclusion

Ireland faces a number of challenges arising from population ageing. In summary, ageing costs are expected to increase by 6.5 per cent of GNI* by 2070.³² Ireland also faces a challenge from a moderating pace of growth as additional labour supply becomes scarcer with labour productivity becoming the main source of improved living standards.

A range of policy reforms to combat population ageing, have already been enacted, such as increases in the State pension age, as well as reform of public service pension entitlements. Analysis by the Department of Finance suggests that an increase in both the employment rate of older workers and of those of working age will help to counteract the costs associated with the 'greying' of the population. However, in order to safeguard the public finances, additional policy responses - including fiscal restraint in non-age related spending - will be necessary. While the outcome of the current crisis remains uncertain, the policy challenges associated with population ageing are only likely to have been heightened by the additional demand placed on the public finances in tackling the Covid-19 pandemic.

³² Relative to 2016, the base year of the expenditure projections.



Table A1: difference between exchequer balance and general government balance, € million

	2019	2020	2021
Exchequer balance	645	-15,555	-11,065
Exclude equity and loan transactions	-2,480	-4,835	-2,420
Adjust for interest accrual	570	590	130
Adjust for tax accruals	275	480	465
Adjust for other accruals	230	365	220
Net lending/borrowing of NCSSBs^	400	-325	-160
Impact of ISIF	440	45	45
Net lending/borrowing of Social Insurance Fund	1,485	-2,135	-295
Net lending/borrowing of other EBFs*	305	-85	160
Net lending/borrowing of Local Government	-530	-1,680	-895
Rainy Day Fund	0	0	0
General government balance (GGB)	1,340	-23,135	-13,820
GGB, per cent of GDP	0.4	-7.4	-4.1
Nominal GDP	347,225	314,650	338,675

Rounding may affect totals. GDP is rounded to nearest €25m ^NCSSB = non-commercial semi-state bodies *EBF = extra-budgetary fund

Source: Department of Finance, Department of Public Expenditure and Reform, CSO and NTMA estimates.

Table A2: general government balance, per cent of GDP (unless stated)

	2019 (€m)	2019	2020	2021						
	Not been Prove been									
	Net lending by									
General government balance	1,340	0.4	-7.4	-4.1						
Central government ¹	1,870	0.5	-6.8	-3.8						
Local government	-530	-0.2	-0.5	-0.3						
	General government									
Total Revenue	87,455	25.2	23.1	23.5						
Total Expenditure	86,115	24.8	30.4	27.5						
Net lending/borrowing	1,340	0.4	-7.4	-4.1						
Interest expenditure	4,460	1.3	1.3	1.1						
Primary balance	5,795	1.7	-6.1	-3.0						
One-off / other temporary measures ²	0	0.0	0.0	0.0						
Main components of revenue										
Total taxes	64,365	18.5	17.1	17.5						
Taxes on production and imports	27,205	7.8	7.0	7.4						
Current taxes on income, wealth etc.	36,630	10.6	10.0	10.0						
Capital taxes	530	0.2	0.1	0.1						
Social contributions	14,510	4.2	4.1	4.0						
Property Income	1,650	0.5	0.4	0.2						
Other	6,930	2.0	1.6	1.8						
Total revenue	87,455	25.2	23.1	23.5						
p.m.: Tax burden	79,495	22.9	21.3	21.8						
	Main components	of expenditure								
Compensation of employees	23,940	6.9	7.7	7.4						
Intermediate consumption	12,000	3.5	4.5	4.0						
Social payments	30,700	8.8	11.1	10.0						
Social transfers in kind via mkt producers	6,825	2.0	2.4	2.2						
Social transfers other than in kind	23,870	6.9	8.7	7.8						
Interest expenditure	4,460	1.3	1.3	1.1						
Subsidies	1,675	0.5	1.2	0.5						
Gross fixed capital formation	8,075	2.3	2.8	2.7						
Capital Transfers	1,685	0.5	0.6	0.7						
Other	3,590	1.0	1.2	1.3						
Total expenditure	86,115	24.8	30.4	27.6						
p.m. : Government consumption	41,975	12.1	14.8	13.4						
GDP at current market prices	347,225	347,225	314,650	338,675						

Rounding may affect totals.

1 The Coillte No 2 and Eircom No. 2 pension funds, both in respect of former civil servants, have been reclassified by the CSO in the social security funds sub-sector of general government. These are included in the central government sub-sector for presentational purposes.

2 The European Commission have proposed that rather than recording the temporary Covid-19 support measures in this category they will be presented under the General Escape Clause. See Table 1 for details. Source: Department of Finance, Department of Public Expenditure and Reform, CSO and NTMA estimates.

	A 1	0	Tatal	New Dete	Neter
	Autumn	Spring	Total	New Data	Notes
	2019	2020	Δ		
General Government Revenue					
Taxes on production and imports	27,240	21,910	-5,330	-5,330	1
Current taxes on income, wealth	37,490	31,355	-6,135	-6,135	1
Capital taxes	495	415	-80	-80	1
Social contributions	15,575	12,760	-2,815	-2,815	1
Property Income	1,250	1,150	-100	-100	1
Other	6,620	4,960	-1,660	-1,660	1
Total revenue	88,670	72,545	-16,125	-16,125	
General Government Expenditure					
Compensation of employees	23,730	24,280	550	550	2
Intermediate consumption	14,210	14,260	50	50	2
Social payments	30,995	34,855	3,860	3,860	2
Interest expenditure	4,015	3,950	-65	-65	
Subsidies	1,440	3,685	2,245	2,245	2
Gross fixed capital formation	8,815	8,825	10	10	
Capital transfers	2,340	1,990	-350	-350	2
Other^	5,145	3,840	-1,305	-1305	2
Total expenditure	90,685	95,685	5,000	5,000	
General government balance	-2,020	-23,135	-21,115		

Table A3: comparison of vintages of receipts and expenditures for 2020, € million

Rounding may affect totals

[^] Recall that the *Economic and Fiscal Outlook* included the Brexit contingency. This affects comparisons.
 ¹ The economic impact of the Covid-19 pandemic impact on revenue, mainly on tax and PRSI receipts

2 Includes the measures set out in Table 1

Source: Department of Finance.

Table A4: general government interest expenditure, € million

	2019	2020	2021
National Debt Cash Interest	5,045	4,570	3,860
per cent tax revenue	8.5	9.2	7.1
per cent of GDP	1.5	1.5	1.1
National Debt Cash Interest Accruals	-430	-505	-100
Consolidation and Grossing Adjustments	-65	-50	-15
Accrued promissory note interest	0	0	0
Other	-90	-65	10
Total Interest on ESA2010 basis	4,460	3,950	3,755
per cent of total general government revenue	5.1	5.4	4.7
per cent of GDP	1.3	1.3	1.1

Table A5: projected movement in general government debt, € billion

2019	2020	2021
205.9	204.0	217.5
-0.6	15.6	11.1
1.0	-8.5	2.1
0.9	0.4	0.2
0.2	1.7	0.9
-3.3	4.3	-0.1
204.0	217.5	231.5
	205.9 -0.6 1.0 0.9 0.2 -3.3	205.9 204.0 -0.6 15.6 1.0 -8.5 0.9 0.4 0.2 1.7 -3.3 4.3

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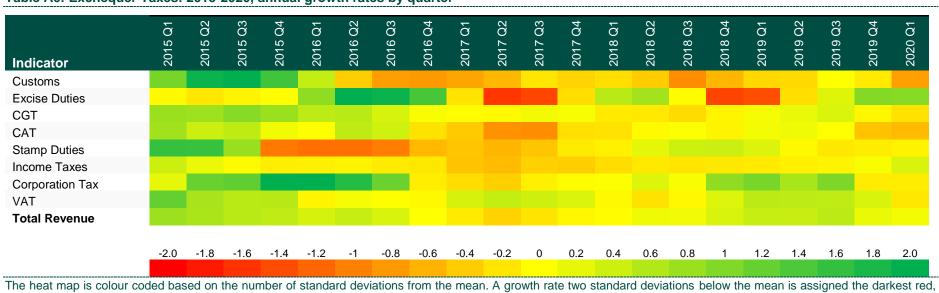


Table A6: Exchequer Taxes: 2015-2020, annual growth rates by quarter

The heat map is colour coded based on the number of standard deviations from the mean. A growth rate two standard deviations below the mean is assigned the darkest red, with dark green used to represent two standard deviations above the mean. For more details see Tax Forecasting Methodological Review 2019, available here: https://www.gov.ie/en/publication/76468a-tax-forecasting-methodological-review-2019/. Source: Department of Finance

Annex 2 Comparison of macroeconomic and fiscal forecasts

Table A7: range of forec	asts, per cent	change (econor	mic) per cent GDP (fis	scal)	
2020	GDP	HICP	employment	GGB	Debt
Department of Finance	-10.5	-0.6	-9.3	-7.4	69.1
Central Bank of Ireland	-8.3	-0.9	-11	-6.0	66.0
ESRI	-7.1	n.a.	-7.6	-4.3	n.a.
IMF	-6.8	0.4	n.a.	-5.2	63.3
2021	GDP	HICP	employment	GGB	Debt
Department of Finance	6.0	0.4	5.5	-4.1	68.4
Central Bank of Ireland	n.a.	n.a.	n.a.	n.a.	n.a.
ESRI	n.a.	n.a.	n.a.	n.a.	n.a.
IMF	6.3	1.7	n.a.	-0.8	60.0

Source: latest forecasts from the institutions cited.

Note European Commission (Feb 2020) and OECD (January 2020) projections do not include Covid-19 impacts and as such are not included.

Table A8: Macroeconomic aggregates

	2019	2020	2021
Economic activity	vear-on-v	vear per cent change (u	nless stated)
Real GNP	3.3	-11.7	7.1
Real GDP	5.5	-10.5	6.0
Nominal GDP (nearest €25m)	347,225	314,650	338,675
Nominal GNP (nearest €25m)	266,625	238,200	258,700
Nominal GNI* (nearest €25m)	205,650	173,800	190,425
Components of GDP		year-on-year change	
Personal consumption	2.8	-14.2	8.7
Government consumption	5.6	9.1	-3.2
Investment	94.1	-55.8	8.3
Modified investment	1.3	-37.3	22.5
Modified domestic demand	1.8	-8.3	4.1
Exports	11.1	-7.7	7.5
Imports	35.6	-24.1	8.2
Modified imports	11.9	-9.3	9.7
Contributions to real GDP growth		percentage point	
Domestic demand (excl. stocks)	23.5	-27.9	4.1
Stock changes	0.1	0.0	0.0
Net exports	-18.2	17.4	2.0
Dries developmente		ar an waar nar aant aha	200
Price developments	-	ar-on-year per cent cha	-
HICP	0.9	-0.6	0.4
GDP deflator	1.5 2.1	1.2 -0.1	1.5 0.7
Personal Consumption Deflator	2.1	-0.1	0.7
Labour market	yea	n-on-year per cent char	nge
Employment	2.9	-9.3	5.5
Unemployment	5.0	13.9	9.7
Labour Productivity	2.2	7.6	-4.4
Compensation of Employees	7.6	-13.7	9.1
Compensation per Employee	3.8	-7.6	3.8
External		per cent of GDP	
Trade balance	14.4	, 35.7	35.5
Current Account	-9.5	10.6	11.1
Source: CSO (for 2019) and Department (-2021	

Table A9: exchequer & general government aggregates

	2010	2020	2024
	2019	2020	2021
Exchequer (€ millions)			
Exchequer Balance	645	-15,555	-11,065
Tax Revenue	59,315	49,565	54,215
General government (€ millions)			
Total Revenue	87,455	72,545	79,445
Total Expenditure	86,115	95,685	93,265
General government balance	1,340	-23,135	-13,820
General Government (per cent of GDP)			
Total Revenue	25.2	23.1	23.5
Total Expenditure	24.8	30.4	27.5
General government balance	0.4	-7.4	-4.1
Interest expenditure	1.3	1.3	1.1
Primary balance	1.7	-6.1	-3.0
Gross fixed capital formation	2.3	2.8	2.7
Gross debt	58.8	69.1	68.4
Net debt	50.8	63.5	62.6
General Government (per cent of GNI*)			
Gross debt	99.2	125.1	121.6
Net debt	85.8	115.0	111.3

Rounding may affect totals. Source: Department of Finance, Department of Public Expenditure and Reform, CSO and NTMA

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Autumn 2013	2.0	2.3	2.8								
Spring 2014	2.1	2.7	3.0	3.5	3.5						
Autumn 2014	4.7	3.9	3.4	3.4	3.4						
Spring 2015		4.0	3.8	3.2	3.2	3.0	3.0				
Autumn 2015		6.2	4.3	3.5	3.2	3.1	3.0	2.9			
Spring 2016			4.9	3.9	3.9	3.3	3.1	2.9			
Autumn 2016			4.2	3.5	3.4	3.2	2.8	2.6			
Spring 2017				4.3	3.7	3.1	2.7	2.5			
Autumn 2017				4.3	3.5	3.2	2.8	2.6			
Spring 2018					5.6	4.0	3.4	2.8			
Autumn 2018					7.5	4.2	3.6	2.5	2.6	2.7	
Spring 2019						3.9	3.3.	2.4	2.5	2.6	
Autumn 2019					-	5.5	0.7	2.5	2.8	2.7	2.6
Spring 2020						5.5	-10.5	6.0	n.a	n.a	n.a
Outturn	8.8	25.1	5.0	7.2	6.7	5.5					

Table A10: Previous GDP forecasts endorsed by the Irish Fiscal Advisory Council, per cent

Source: Department of Finance Forecasts

Note: Autumn forecasts refer to the Draft Budgetary Plans.

Spring forecasts refer to the Stability Programme Updates.

	2042	204.4	2045	2040	0047	204.0	2040	2020	2024	2022	2022	2024
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Autumn 2013	-7.3	-4.8	-3	-2.4								
Spring 2014		-4.8	-3	-2.2	-1.2	0.0						
Autumn 2014		-3.7	-2.7	-1.9	-0.9	0.3						
Spring 2015			-2.3	-1.7	-0.9	-0.1	0.7	1.7				
Autumn 2015			-2.1	-1.2	-0.5	0.2	1.0	1.8	2.5			
Spring 2016				-1.1	-0.4	0.4	1.2	2.0	2.8			
Autumn 2016				-0.9	-0.4	-0.3	0.2	0.7	1.1			
Spring 2017					-0.4	-0.1	0.1	0.6	1.0			
Autumn 2017					-0.3	-0.2	-0.1	0.3	0.8			
Spring 2018						-0.2	-0.1	0.3	0.4			
Autumn 2018						-0.1	0.0	0.3	0.4	1.1	1.4	
Spring 2019							0.2	0.4	0.7	1.0	1.3	
Autumn 2019							0.2	-0.6	-0.2	0.1	0.4	0.7
Spring 2020							0.4	-7.4	-4.1	n.a.	n.a.	n.a.
Outturn	-6.1	-3.6	-1.9	-0.5	-0.2	0.1	0.4					

Table A11: Previous general government balance forecasts, per cent of GDP

Source: Department of Finance Forecasts, CSO (for outturn) Note: Autumn forecasts refer to the Draft Budgetary Plans. Spring forecasts refer to the Stability Programme Updates.

Annex 4 International policy responses

Table A12: Types of response internationally: Ireland v selected other countries

Policy / intervention	IE	UK	FR	DE	IT	NL	SE	AS	NZ	USA	CA	SW	SthK	BE	SI
Loan/Credit lines schemes	✓	✓	√	✓		√		✓	√	✓	√	√	✓	√	
Delay in social insurance payment for companies		\checkmark					\checkmark							\checkmark	\checkmark
Suspension of utilities payments					✓										
Tax relief/delay	\checkmark	\checkmark	\checkmark		✓	\checkmark	\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Grants/Direct payments		✓		\checkmark					\checkmark						
Wage support scheme	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark			
Self-employed income assistance	\checkmark	✓	\checkmark	\checkmark	✓	\checkmark	✓					\checkmark		\checkmark	\checkmark
State purchase of corporate bonds													\checkmark		
Temporary nationalisation of sector		\checkmark													
Bankruptcy protection/Bailout assurance				\checkmark		\checkmark		\checkmark				\checkmark			
Loan repayment breaks	✓				\checkmark				\checkmark				\checkmark		
Government assumption of sick pay costs	\checkmark						\checkmark		\checkmark						
Investment incentive scheme								✓							
Direct support to apprentice								\checkmark							
Source: calculations by Departments of Finance a	and Publi	c Expend	iture and	Reform											

Annex 5 Ireland's National Reform Programme: Summary of Progress

Preparation of our National Reform Programme (NRP) is an important part of the European Semester process.

Following updated guidance from the European Commission, this years NRP has been streamlined and includes information on Ireland's initial response to Covid-19. As the process of forming a new Government remains underway, following elections held on 8 February, this years NRP has been prepared on a "no change policy basis".

Ireland's NRP reports on the progress made and measures taken to address key economic and social policy challenges, including those identified in the European Commission's Country Report on Ireland published in February and Country Specific Recommendations. Issues addressed in this years streamlined NRP include:

- Covid-19;
- Brexit;
- Climate Action Plan;
- Future Jobs Ireland;
- Regional Development;
- Project Ireland 2040;
- Childcare;
- Housing and Homelessness.

The NRP also reports on progress in addressing the policy recommendations given to Ireland under the 2019 European Semester process. Country Specific Recommendations (CSRs) are tailored, concrete recommendations for actions in areas where it is considered that individual member States should focus their reform efforts. Ireland received three CSRs in 2019 covering:

- Public finances, healthcare expenditure, and pension reform;
- Access to affordable childcare, and upskilling with particular attention on vulnerable groups and people living in households with low work intensity;
- Investment in low carbon and energy transition, the reduction of greenhouse gas emissions, sustainable transport, water, digital infrastructure and affordable and social housing, taking into account regional disparities. Enhance diversity within the economy and increase the productivity of Irish firms through funding for research and inovation as well as by reducing regulatory barriers to entrepreneurship.

Furthermore, the NRP provides an update with regard to Ireland's progress towards achieving the UN Sustainable Development Goals.

Lastly, the NRP outlines the use of European Structural and Investment Funds, including investment guidance on the Just Transition Fund, and reports on stakeholder engagement.

Annex 6 Irish Fiscal Advisory Council's Endorsement of the Macroeconomic Forecasts

Advisory Council
www.FiscalCouncil.ie admin@FiscalCouncil.ie (+353) 1 863 2005 Whitaker Square, Sir John Rogerson's Quay, Dublin D02 K138, Ireland.
10 April 2020
Dear Secretary General Moran,
The Council has a statutory obligation to endorse, as appropriate, the macroeconomic forecasts prepared by the Department of Finance on which <i>Stability Programme Update 2020</i> will be based. ¹
The Department's forecasts cover a one-year-ahead forecast horizon (2020 and 2021). This is shorter than the five-year-ahead forecast horizon adopted by the Department in recent publications and reflects temporary flexibilities granted by the European Commission, given the current challenges faced by Member States. The flexibilities also mean that supply-side variables are not included in the publication.
The Department provided its forecasts to the Council on 6th April 2020. The Council discussed these forecasts with Department of Finance staff on 8th April 2020, ahead of the Council's endorsement meeting.
The Council's approach to endorsing the Department's macroeconomic forecasts has three elements:
 a comparison of the Department of Finance's macroeconomic forecasts to the Council's Benchmark projections;
• a consideration of the methodology used to produce the forecasts; and
• a review of past forecast errors for evidence of systematic bias.
The Irish Fiscal Advisory Council endorses as within the range of appropriate forecasts the set of macroeconomic projections prepared by the Department of Finance for the Stability Programme Update covering the years 2020 and 2021.
The Council is satisfied that the forecasts are within an endorsable range, taking into account the methodology and the plausibility of the judgements made.
This endorsement comes as the Irish economy faces an exceptionally deep economic shock as a result of the Covid-19 pandemic. There is very high uncertainty at this time around any set of economic forecasts, given the uncertain path for the spread of the pandemic, containment measures and global impacts.
¹ The Fiscal Responsibility Act 2012, as amended by the Ministers and Secretaries (Amendment) Act 2013, states that: "The Fiscal Council shall— (a) endorse, as it considers appropriate, the macroeconomic forecasts prepared by the Department of Finance on which the Budget and stability programme will be based".
Council: Sebastian Barnes · Martina Lawless · Michael McMahon · Dawn Holland



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The Council will discuss the endorsement process and assess the macroeconomic projections in its forthcoming Fiscal Assessment Report, due in May 2020.

Yours sincerely,

Jehn bel

Sebastian Barnes, Acting Chairperson.



An Roinn Airgeadais Department of Finance

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