

An Roinn Airgeadais Department of Finance

Draft Stability Programme Update 2021 Incorporating the Department of Finance's Spring Forecasts

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Ireland's Stability Programme April 2021 Update

Incorporating the Department of Finance's Spring Forecasts

Draft

Foreword

This update of Ireland's *Stability Programme* takes account of measures introduced in *Budget 2021* and other Government initiatives. It includes an update of the economic and fiscal outlook (the Department of Finance's spring forecasts).¹ This document will be submitted to the European Commission by 30th April 2021 in accordance with the requirements of the European Semester.

It was published in draft form and laid before Dáil Éireann on 14th April.

The document incorporates horizontal guidance provided by the European Council to Member States in March 2021 as part of the discussions on the European Semester (the annual cycle of economic monitoring and policy guidance in the European Union). It has been prepared in line with the May 2017 guidelines on the format and content of Stability and Convergence Programmes – the 'Code of Conduct'. This Code requires a comparison of forecasts with those of other institutions; these comparisons are set out in the annex. This document should be read in conjunction with Ireland's *National Recovery and Resilience Plan* which, for 2021, will incorporate Ireland's *National Reform Programme*.

The macroeconomic analysis and forecasts contained in this document are based on data available to end-March 2021. The fiscal projections, as well as the epidemiological data, are based on data to mid-April. The macroeconomic forecasts were endorsed by the *Irish Fiscal Advisory Council* on 7th April 2021 (annex 5),² a legal requirement set out in the so-called 'two-pack'. For comparison purposes, each set of forecasts that has been subject to this endorsement process is set out (in headline terms) on the Department's website.³

The document includes several boxes; these are self-contained pieces of analysis on various topical economic and fiscal related issues. Previous iterations of this document included a 'heat-map' which assessed macroeconomic imbalances; this will, instead, be published separately over the summer.

In line with the Government's *Open Data Initiative*, the data underpinning charts in this document are available on the Department of Finance website⁴.

¹ The Department publishes two sets of medium-term 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.

² The presentation provided to the Council, which may contain minor differences in figures, is available on the Department's website:

https://www.gov.ie/en/publication/5d363-spu-2021-presentation-to-ifac-1-april-2021/ ³ Available at:

https://www.gov.ie/en/publication/a10e1-database-of-past-forecasts/

⁴ Available at: https://www.gov.ie/en/publication/d7d58-spu-2021-chartpack/

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The data and analysis set out in this document are compiled by Department of Finance staff. Every effort is made to ensure accuracy and completeness. When errors are discovered, corrections and revisions are incorporated into the digital edition available on the Department's website. Any substantive change is detailed in the online version.

1.1 Policy Strategy

The flow of macroeconomic information since the autumn has been mixed. In headline terms, three key developments stand out and each will have a key bearing, not just on short-term economic activity, but on trends over the medium-term also. Two of these – an orderly end to the EU-UK 'transition period' as well as the development, and subsequent mobilisation, of several Covid-19 vaccines – contribute positively to economic prospects, while the third – the re-imposition of relatively severe containment measures during the first quarter of this year – works in the opposing direction. Relative to the Department's autumn forecasts, therefore, it is a case of two steps forward and one step backwards.

The UK's exit from the *Single European Market*⁶ – a slow-burning challenge that has cast a long shadow over the Irish economy since mid-2016 – concluded in an orderly manner at the end of last year. The *Trade and Co-operation Agreement*, agreed on Christmas Eve, now governs trade between Member States of the European Union and the UK; this ensures a continuation of tariff-free, quota-free trade in goods for Irish firms exporting to, and importing from, the UK.⁶ That said, bilateral trade under this new regime is far from frictionless, with administrative costs arising from non-tariff barriers (customs, regulatory and rules-of-origin checks) imposing an additional burden on firms trading with the UK.⁷

The orderly resolution of the UK's exit from the European Union means that the key determinant of short-term Irish economic prospects is the epidemiology of the Covid-19 virus, and the associated vaccination programme. Just over a year since the *World Health Organisation* formally declared a pandemic, the global death toll has reached 2.9 million people, with a total of 133 million confirmed infections.⁸ These healthcare outcomes would have been significantly worse but for the public health containment measures put in place across the globe in order to limit transmission of the virus. These containment measures, however, have resulted in an economic shock that is without precedent in peace-time. Living standards across the world have been severely affected, with global GDP falling by an estimated 3¼ per cent last year, far more destructive than the shock to living standards caused by the Global Financial Crisis.⁹ Across the world, fiscal, monetary and financial sector policies have been mobilised to limit the economic fallout; without this exceptional level of support, the global contraction would have been closer to 9 per cent last year.¹⁰

Since the pandemic began, the scientific consensus has largely been that vaccination offers the most promising route to loosen the grip of the virus on the economy. In this context, the results of several clinical trials, undertaken over the course of last year, were published in late-autumn and confirmed a high efficacy rate for a number of vaccines, these having been developed in record time. The *European Medicines Agency* has subsequently approved four of these for use in the European Union, with others

⁵ The UK formally left the European Union at end-January 2020, but remained in the *Single European Market* until end-December 2020, as part of transitory arrangements.

⁶ The Department had previously estimated that the short-run impact of a disorderly end to the transition period could have knocked up to 3 percentage points off the level of GDP in the short-term.

⁷ The *Trade and Co-operation Agreement* covers trade in goods; work continues on a memorandum to govern trade in services, particularly financial services, between the two jurisdictions.

⁸ Source: Our World in Data, as per 8th April.

⁹ Global GDP was essentially flat in 2009, the peak of the Global Financial Crisis, this essentially being an advanced economy shock.

¹⁰ Source: IMF World Economic Outlook, April 2021.

in the pipeline. Following some initial logistical and supply constraints, vaccine roll-out has accelerated, with 12 per cent of the Irish population inoculated at the end of the first quarter. A step-change in vaccine coverage is expected by the end of the second quarter, raising the prospects of significant economic recovery from the summer onwards.

While tariff-free trade with the UK and vaccine mobilisation have both improved the outlook for the Irish economy beyond the near-term, the deterioration in the epidemiological situation at the tail-end of last year triggered the re-imposition of stringent public health containment measures in order to re-flatten the infection curve. Reflecting *inter alia* the emergence of new, more contagious variants of the virus,¹¹ the infection rate increased sharply, signalling the beginning of a 'third wave'. This third wave proved to be the most severe, with the infection rate surpassing that of previous waves and resulting in more hospitalisations and deaths.¹²

From an economic perspective, the containment measures have contributed to a stop-start sequence that has weighed on consumer and business confidence. A further contraction in domestic economic activity was almost certainly recorded in the first quarter, with a restrictions-induced fall in personal consumer spending relative to the previous quarter the main source of declining (modified) domestic demand.

The infection rate peaked in mid-January at 1,500 per 100,000 persons. Its subsequent downward trend (160 per 100,000 in early-April), alongside progress in vaccination, allows for some modest relaxation of containment measures over the second quarter, and this should underpin economic recovery. Given high transmissibility, however, Government has decided to proceed with the easing of restrictions on a gradual, phased and contingent basis, so the improvement in domestic economic conditions is likely to be modest at first. Primary and second-level education has been prioritised, with re-opening of schools for most students at the end of the first quarter; this will be followed by the re-opening of the construction sector, as well as non-essential retail and outdoor activities, over the course of the second quarter. Restrictions – at least in part – are likely to remain in place for some time in those areas that require face-to-face interactions, dampening activity in the hospitality and leisure sectors. The need to maintain partly-closed external borders will weigh on the international tourism sector over the rest of the year.

Against this backdrop, economic recovery should gain momentum over the second half of the year and into next year as public health containment measures are phased out. Thereafter, the biggest economic challenge will be the re-absorption of the unemployed and discouraged workers back into the workforce, a challenge that will be more difficult by structural changes triggered – or accelerated – by the pandemic.

In terms of policy support, Government's overarching objective has been to maintain a bridge to economic recovery, shoring-up household income and keeping firms afloat while restrictions remain in place. Discretionary policies have complemented the full operation of automatic fiscal stabilisers – the in-built fiscal supports arising from the cyclical decline in tax revenue and increase in unemployment-related spending, both of which are independent of formal decisions and / or legislation – with the public

¹¹ The B.1.1.7 variant, first identified in the South-East of England, has been the dominant strain in Ireland for much of this year; by end-February, around 90 per cent of cases were linked to this variant, which is estimated to be about 70 per cent more transmissible than the original virus.

¹² Over half of the Covid-related deaths in Ireland over the past year occurred during the third wave.

deficit widening significantly¹³. The direct financial supports provided by government compare favourably with other countries;¹⁴ indirect supports, such as credit guarantees, have complemented these direct measures.

While public debt has increased, prudent management of the public finances in the pre-pandemic period means that this rise in public indebtedness can be absorbed, and economic growth in the coming years is expected to help reduce the debt-income ratio. The fact that the pandemic is an exogenous shock – arising from outside the economic system and not the result of any significant imbalances that had accumulated – supports this approach. Importantly, notwithstanding the rising stock of public debt, the burden of servicing this has actually fallen on foot of the decline in borrowing costs.¹⁵ This reflects the accommodative stance of monetary policy in the euro area, with national central banks absorbing much of the increased debt issuance¹⁶ of their respective sovereigns. In summary, the overall macro-economic policy mix – fiscal and monetary – has been very supportive in cushioning the impact of the pandemic.

That said, it will be important to slow, and eventually halt, the pace at which debt is accumulated: higher debt is not a free lunch and, once the pandemic has subsided, it will be crucial to avoid any feedback loop between higher public debt and borrowing costs. Slowing the pace of debt increase will be achieved by reducing the fiscal deficit in a gradual, orderly manner that takes into account the need to continue providing some counter-cyclical support to the economy. The sequencing of deficit-reduction involves a phasing out of temporary supports once the health crisis abates and restrictions on mobility and economic activity are lifted. As economic recovery gains momentum, a cyclical improvement in the public finances should then support elimination of the deficit over time. On this basis, the baseline assumption is that the fiscal accounts can be returned to broad balance by the mid-part of this decade.

Once a critical mass of vaccination has been reached, a key fiscal challenge will be to pivot away from generalised supports towards more targeted measures that help workers and firms transition from declining sectors to new, expanding sectors. The need to pivot support is emphasised by the transformative nature of the pandemic: the virus has triggered major changes, with many of these likely to persist. Examples of possible structural change include: shifts in consumer preferences (e.g. changes in demand for social consumption); overhauls in the way production is undertaken (e.g. automation, remote working, re-shoring); and alterations in the way consumer spending occurs (e.g. online, home delivery). While some of these trends were underway pre-pandemic, the pace of change has undoubtedly accelerated over the past year-or-so.

From a policy perspective, this digitally-driven transformation of commerce has potentially far-reaching consequences. Most importantly, it appears that a reallocation of firms and workers across the economy will be necessary. For instance, it is clear the business model of some firms will no longer be viable while, on the other side of the equation, new firms in expanding areas will emerge. These lingering changes could also prompt some shake-up in the labour market: the demand for skilled labour may rise while that for unskilled labour could possibly move in the opposite direction. In such a scenario,

¹³ For a further analysis in this area see: Ireland's automatic fiscal stabilisers in context, Economic Insights, Department of Finance, April 2021. Available at https://www.gov.ie/en/publication/bc298-economic-insights-economic-developments-during-covid-19-and-beyond/

¹⁴ See *Taking Stock – The Fiscal Response to Covid-19,* Department of Finance, November 2020, available at: https://assets.gov.ie/99000/010f6d21-acee-417e-8a5e-d0a2ad64b97e.pdf

¹⁵ See Annual Debt Report 2020, Department of Finance, January 2021, available at:

https://www.gov.ie/en/publication/291b8-annual-report-on-public-debt-in-ireland-2020/

¹⁶ Via secondary market purchases.

a co-existence of unemployment and vacancies, due to a mismatch between the skills of the unemployment and those needed by employers, would not be unreasonable.

While this reallocation process is unlikely to be without at least some friction, the priority for Government is to help smooth the transition from the pre- to the post-pandemic economy. For workers, this involves better aligning the demand for, and supply of, skilled labour, including via up-skilling, re-skilling and public investment in other active labour market programmes. The overarching labour market policy objective will be to prevent a drift from short- into longer-term unemployment. In the case of the corporate sector, the Government has no role in propping-up firms whose business model is no longer viable; instead, Government will continue to maintain the necessary conditions that promote firm-creation and market dynamism.

Crucially, the overall policy mix – counter-cyclical fiscal policy complemented by an accommodative monetary policy stance at the euro area level and supportive regulatory environment – has helped to limit spill-overs to the financial sector. Accordingly, the financial sector has not been an amplifier of the cycle, an important distinction between the current recession and its predecessor. This has cut both ways: during the most acute phases of the pandemic, forbearance on the part of the banks and non-bank lenders has played an important role in limiting the immediate economic and social fallout. Beyond the short-term, one important risk is the possibility that a rise in the insolvency rate and subsequent rise in non-performing loans post-pandemic, hinders the capacity of the financial sector to finance the transition to the 'new normal'.

Finally, once the worst effects of the pandemic have passed, long-standing issues will return to the fore. Ireland's population is ageing rapidly and the fiscal costs are substantial: age-related public expenditure will rise by more than 3 percentage points of modified Gross National Income by 2030 simply to maintain service at existing levels. To put this into perspective, this would be the equivalent of \in 7 billion in today's prices.¹⁷

At the same time, there is a need to finance the 'two transitions': the transition to carbon (net-) neutrality and the transition to a digitised economy. While corporation tax revenue has helped to plug the gap in many areas of public policy in recent years, this is unlikely to continue beyond the short-term and, indeed, international reform in this area has the potential to undermine this revenue stream in the not-too-distant future. While the exact quantum of potential revenue loss depends on many factors, the baseline assumption is that annual corporation tax revenue is around €2 billion lower by the mid-part of this decade; this revenue-at-risk figure will be revised as more information becomes available over time.

1.2 Short-Term Economic and Budgetary Outlook

The Irish economy began the year on a weak footing. Following a contraction in domestic economic activity in the final quarter of last year, the stringent¹⁸ containment measures in place for all of the first quarter have weighed on domestic economic activity in the opening months. Only a limited easing of restrictions is in prospect for the second quarter, as set out in the Government's statement on 30th March 2021.¹⁹

https://www.gov.ie/en/publication/c199e-department-of-finance-submission-to-the-commission-on-pensions/ ¹⁸ Amongst the most stringent in the world, according to the Oxford Blavatnik School of Government 'stringency

¹⁷ See *Submission to the Commission on Pensions*, Department of Finance, March 2021, available at:

index'. ¹⁹ Government statement available at:

https://www.gov.ie/en/press-release/81029-government-announces-phased-easing-of-public-health-restrictions/

That said, there is evidence to suggest that the relationship between the level of stringency on the one hand and the level of economic activity on the other, has weakened over successive infection waves. This would appear to reflect greater resilience on the part of households and firms. For instance, business continuity arrangements appear to be in a better position than this time last year, *inter alia* because the IT architecture necessary for remote working is now *in situ*. In a similar vein, many businesses have retrofitted their workplaces with the necessary infrastructure to facilitate social distancing. So, from a macroeconomic perspective, the suspicion is that the decline in activity in the first quarter has been less severe than during the spring of last year. Available data – high frequency indicators as well as real-time information relating to mobility and payments – lend support to this view. Estimates from the Department's 'nowcast' model²⁰ suggest that modified domestic demand (MDD²¹) contracted by around 6 per cent in the first quarter relative to the previous quarter.

Beyond the first quarter, it is clear that forecasting short-term developments with any degree of precision is challenging in the current environment. Nevertheless, constructing a plausible pathway for the economy has an important public good dimension: the baseline scenario set out in this document provides a central assessment against which Government can monitor ongoing economic developments and calibrate policy accordingly.

The baseline projection set out below rests on a number of conditioning assumptions. The most important relates to the epidemiology of the virus (and its variants). Vaccine roll-out is assumed to accelerate over the second quarter and thereafter, as supply and logistical constraints are overcome. As the more vulnerable sections of the population are increasingly immunised, the healthcare outcomes – hospitalisation, intensive care, fatality – of any subsequent infection wave will be less severe and *ceteris paribus* should not overwhelm the healthcare infrastructure. Accordingly, wider vaccine coverage will allow for a gradual relaxation of containment measures and a modest pick-up in economic activity from the second quarter, with recovery gaining momentum from the summer onwards. As the majority of the remaining restrictions are lifted – probably at the end of the year or early next year – economic activity should begin to normalise, although this 'new normal' may be somewhat different to the pre-pandemic norm.

In this scenario, the assumptions regarding the relaxation of containment measures are reflected, in the first instance, in the pathway for consumer spending. By far the most important driver of consumer spending is the assumed decline in the household savings rate: as restrictions are relaxed, the *flow* of 'forced' (or involuntary) savings is reduced as households once again have the opportunity to purchase goods and services. This is particularly the case for so-called 'social consumption', which covers spending on meals out, trips to the cinema, etc.

The baseline forecasts also rest on the assumption that households will finance some additional spending from the accumulated *stock* of 'excess' savings. While the Department estimates that the building-up of deposits exceeded 'normal' by around $\in 11 - 12$ billion over the past year-or-so, economic theory suggests that households tend to adjust their consumption patterns in response to *permanent* shocks to income rather than to *transitory* income gains. The income distribution of savers is another factor which supports the view that much of this windfall gain will not be used to finance additional consumer spending, as much of the additional savings is likely to have been undertaken by higher income households whose marginal propensity to consume is typically lower. Accordingly, the forecasts

²⁰ See Daly and Rehill (2020) "Where are we now? Examining Irish Economic Developments in Real-Time" for further detail on Department's nowcasting models.

²¹ Generally regarded as the most meaningful measure of economic activity in Ireland.

for consumer spending assume around one-fifth of this windfall gain is consumed over the 18 months beginning in the third quarter of this year.

An additional outlet for these excess savings is the domestic housing market (from an economic perspective, this is also a form of saving in that it generates a stream of services – housing services – over time). With supply remaining constrained in the short-term, if these additional funds are channelled into housing assets the impact could be to inflate prices. In relation to other forms of investment, these should recover as uncertainty begins to wane, with firms beginning to re-build their productive capacity.

	2020	2021	2022	2023	2024	2025
Economic Activity						
Real GDP	3.4	4.5	5.0	3.5	3.2	3.1
Real GNP	0.6	4.4	4.5	2.8	2.6	2.5
Modified Domestic Demand	-5.4	2.6	7.4	3.8	3.4	3.4
Real GNI*^	-4.2	2.5	5.5	3.0	2.7	2.7
Prices			-		-	
HICP	-0.5	1.1	1.9	1.5	1.6	1.9
Core HICP	-0.1	0.7	1.7	1.5	1.6	1.9
GDP deflator	-0.5	0.4	1.8	1.5	1.6	1.6
Balance of Payments (per cent of GL	DP)					
Trade balance	30.0	40.5	38.7	37.9	37.1	36.6
Current account	4.6	15.1	13.1	11.8	10.7	9.8
Labour Market						
Total Employment ('000)^	1,972	2,051	2,276	2,351	2,405	2,457
Employment	-15.1	4.0	11.0	3.3	2.3	2.2
Unemployment (per cent)	18.7	16.3	8.2	6.7	6.0	5.5
Public Finances (per cent of GDP, un	less stated)					
General government balance	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2
Structural budget balance*	-0.7	-1.0	-1.9	-1.2	-0.9	-0.4
Debt ratio (year-end)	59.5	62.2	60.2	59.0	57.7	55.4
Debt ratio (per cent of GNI*)^	105.6	111.8	107.4	105.8	103.9	100.1
Net debt position (year-end)~	51.2	54.3	54.1	53.0	51.6	49.7

Table 1: summary – main economic and fiscal variables, per cent change (unless stated)

* estimates of the structural budget balance are subject to even greater uncertainty than normal.

^ 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.

~ net debt figures from 2021 estimated by mechanical extrapolation of assets.

Source: CSO for 2020 and Department of Finance 2021-2025. 2020 GNI* also estimated by Department of Finance

Taking these developments into account – increased spending by households and firms as restrictions are eased – alongside another positive contribution from Government spending, MDD is projected to increase by 2½ per cent this year (GDP by 4½ per cent). As public health containment measures are phased out, MDD should accelerate further next year; a growth rate of 7½ per cent (GDP of 5 per cent) is projected, in part reflecting a 'catch-up' period as pent up consumer and business spending drives above-trend growth. On this basis, the level of MDD would revert back to its pre-pandemic level by the final quarter of 2021.

Beyond the short-term, an important but still open question relates to the extent of any permanent destruction to the economy's productive capacity from the pandemic, so-called 'scarring' effects. There are several channels through which these could arise, including an increase in long-term unemployment, the scrapping of parts of the capital stock (some machinery and equipment is extremely specialised and cannot be re-deployed from declining to expanding sectors) or through lower productivity. At this stage, the evidence base is extremely limited and the scale of 'scarring' will only become clear over time, as more data become available. As a very preliminary estimate, the Department's medium-term projections are based on average MDD growth of 3½ per cent per annum over 2023-2025. Indeed, notwithstanding reversion to trend growth rates by 2023, the level of MDD and consumption at the end of the forecast horizon would still be below the level suggested by their respective pre-pandemic trends (figure 12), with employment also lagging. It must be stressed, however, that until the pandemic subsides, any assessment of scarring is highly tentative; estimates are also time-sensitive and will be revised as additional information becomes available.²²

Sectors where activity has been most curtailed by the public health containment measures have tended to be relatively labour-intensive, where product delivery requires face-to-face contact and, therefore, not conducive to remote working. As a result, the fall-out in the labour market has been particularly severe: at the end of last year, the number of hours worked was nearly 10 per cent below its level immediately prior to the pandemic.

The fall-out in the labour market prompted large-scale government intervention to maintain the employer-employee link and to support household incomes. The partial re-opening of contact-intensive activity over the remainder of this year should provide some support to the labour market, with employment projected to increase by 79,000 (4 per cent). For next year, an additional (net) 226,000 (11 per cent) jobs are projected to be added, though the level of employment will still remain below its pre-crisis peak.

Of course, the baseline projections are contingent on a range of epidemiological assumptions and implied public health restrictions. For this reason, a downside scenario is also included in this document based on a severe epidemiological scenario whereby the current, stringent restrictions remain *in situ* for a prolonged period. In these circumstances, GDP growth this year would be almost 1 percentage point lower than the main baseline projection, and would be 2½ percentage points lower next year. As a result, by the end of next year, the Irish economy would be approximately 4½ per cent smaller than it would under the baseline forecasts. An intermediate scenario which involves some level of repeated restrictions, each of diminishing impact, before the full benefits of the vaccination programme kicks in is also considered and would have roughly two-thirds the impact of the downside scenario.

The shock to private sector income has been much less severe than the shock to private sector output and expenditure, the reason being the exceptionally large level of public sector support for private sector incomes. While necessary, this has come at considerable cost: last year, a general government deficit of \in 18.4 billion (5.0 per cent of GDP) was recorded. For this year, a deficit of \in 18.1 billion is in prospect, the equivalent of 4.7 per cent of GDP. This projection is based on the assumption of no-policy change: on this basis, some of the most costly transfers from the government sector to the private sector are due to expire at end-June, and any extension would worsen the deficit. Public indebtedness is projected at \in 239.3 billion this year, the equivalent of 111.8 per cent of GNI*; this would put the Irish debt-income ratio amongst the highest in the developed world.

²² For a detailed overview of the scarring literature see: Scarring effects, Economic Insights, Department of Finance, April 2021. Available at: https://www.gov.ie/en/publication/bc298-economic-insights-economic-developments-during-covid-19-and-beyond/

A deficit of 2.8 per cent of GDP is projected for next year, as most of the emergency temporary supports will have been withdrawn. Public indebtedness is projected at €247.4 billion, 107.4 per cent of GNI*.

While public indebtedness has increased, the burden of public debt has fallen. This is true in Ireland and in most advanced economies, and largely reflects the decline in interest rates associated with large-scale central bank purchases of sovereign debt (sometimes referred to as 'quantitative easing'). This means that, notwithstanding the increase in public debt, the sustainability of this higher indebtedness has actually improved.

Beyond 2022, all fiscal supports are assumed to have been withdrawn. With a recovering economy, this should be sufficient to better align revenue and expenditure by the mid-part of the decade. There are, however, clear downside risks to this pathway for the public finances. International corporate tax reform could weigh more heavily on this revenue stream than is currently assumed and, leaving aside the fiscal implications, could undermine Ireland's attractiveness as a location for inward investment. Having said that, the public finances are in a much better position to absorb the expected shock to corporate tax revenue than, say, a decade and a half ago. The tax base is wider than prior to the global financial crisis and, importantly, there is time to build up the resilience of the public finances before international reforms move to the implementation phase.

2.1 Summary

The domestic economic outlook is very different to that which underpinned *Budget 2021* last October. The *Trade and Co-operation Agreement* between the EU and UK has improved the outlook for the economy, as has the roll-out of Covid-19 vaccines. On the other hand, the onset of the third infection wave at the turn of the year, fuelled by the more transmissible B.1.1.7 variant, is a setback for the economy. The stringent public health restrictions mean that the domestic economy likely contracted in the first quarter of this year, albeit not to the same extent as during the first wave last year. Only limited recovery is in prospect for the second quarter. Overall, therefore, since last autumn it is a case of two steps forward, one step backwards.

The forecasts set out in this chapter are based on the assumption that the ending of the third infection wave allows for a very gradual, phased and incremental easing of public health containment measures over the course of the second quarter. This, of course, cannot be taken for granted: while the infection rate has fallen from its peak earlier this year, it remains stubbornly high. Additionally, the infection rate is now rising once again in many continental European countries, with recovery in many Member States of the European Union postponed until the third quarter.

The short-term forecasts assume that the pace of vaccination ramps up over the second quarter, in line with the Government's projection that four-fifths of the adult population will be (partly – at least 'one dose') inoculated by end-June. Rising vaccine coverage will allow for a more significant easing of containment measures over the summer, with positive implications for economic activity. Lower levels of public health restrictions are assumed in the second half of the year, with minimal restrictions on economic activity next year, allowing for a substantive, and sustained, economic recovery.

Conditioned upon these assumptions, modified domestic demand (MDD) is projected to increase by 2½ per cent this year (GDP growth of 4½ per cent). MDD growth is expected to accelerate next year, reaching 7½ per cent (GDP by 5 per cent), as pent-up consumer and business demand is released. Given very high levels of uncertainty, the margin of error around these projections is sizeable. Overall, MDD is projected to pass to its pre-pandemic level around the fourth quarter this year, though the recovery in employment will continue to lag. Over the medium-term, MDD growth is projected to average 3½ per cent per annum; the equivalent for GDP is an annual average growth of 3¼ per cent. However, despite broadly returning to trend growth rates by 2023, at the end of the forecast horizon the level of consumption and MDD will both remain below the levels that otherwise would have been reached had both continued series grown at pre-pandemic trends (figure 12) since the onset of the pandemic, with employment also lagging.

The labour market has been borne the brunt of the pandemic. When those in receipt of the Pandemic Unemployment Payment (PUP) are included, the Covid-adjusted unemployment rate is projected to average around 16¹/₄ per cent this year, before declining to 8¹/₄ per cent next year as the economy is fully re-opened.

2.2 Macroeconomic Outturn 2020

In keeping with patterns evident elsewhere, the fallout from the pandemic was not uniform across the various sectors that constitute the Irish economy. Sectors where transactions between producers and

consumers are 'contact-intensive' were severely affected, with most workplaces largely shut for most of last year.

Box 1: The evolving relationship between stringency and activity²³

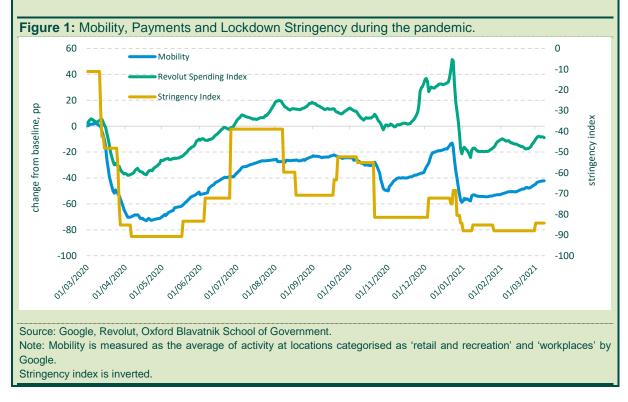
One side effect of the pandemic has been to change the way economists monitor emerging macroeconomic trends. Given the speed of developments over the past year or so, and because of lags inherent in the production of official data, economists all over the world have increasingly resorted to exploiting the information-content embedded in payments data, GPS-mobility data, etc. This shift to so-called 'big data' is likely to be a permanent, or structural, phenomenon.

In order to be able to assess economic activity in real-time, the Department of Finance monitors, and publishes, a suite of real-time indicators. These data cover different sectors of the economy and, while less comprehensive than official data, these can help shine a light – in real time – on emerging economic developments.

Importantly, these data can help to answer the question of whether the relationship between the level of lockdown stringency and economic activity has evolved over time. The data are set out in the graph below which shows stringency (as measured by the Oxford University 'stringency index'), activity (as proxied by mobility – measured by *Google* mobility data) and payments (as measured by data provided by *Revolut*).

The key takeaway is that the dramatic fall in activity evident in 'lockdown 1.0' – as reflected in payments data and mobility data – does not seem to have been repeated in subsequent lockdowns triggered by rising infection waves. This is most likely due to the more widespread adoption of new technologies by consumers and firms.

During 'lockdown 3.0' which covered the first quarter of this year (and which largely remains in place), the level of stringency is in line with that of lockdown 1.0 (and is amongst the most stringent in the world). Notwithstanding this, the level of spending and mobility has fallen by only around half of that in the first lockdown. Whether or not this is borne out by official data remains to be seen, but the available evidence at this point in time is suggestive of a weakening in the stringency-activity relationship. Such a phenomenon would be consistent with patterns in other countries.

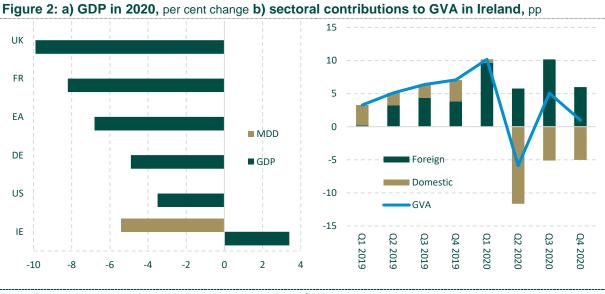


²³ For further information on the use of and insights from real-time data throughout the pandemic see: The pandemic through the prism of high frequency indicators, Economic Insights, Department of Finance, April 2021. Available at: https://www.gov.ie/en/publication/bc298-economic-insights-economic-developments-duringcovid-19-and-beyond/

Perhaps the most obvious example was the *retail, distribution, accommodation and food services* sector, where gross value added (a close approximation for GDP) fell by 17 per cent over the course of the year. On the other hand, sectors where output can be delivered digitally (public sector, financial services, etc.) or where production can take place in a socially-distanced manner (such as parts of manufacturing), were better able to adapt, and so were less affected by public health containment measures. At the more extreme end of the latter category were the pharmaceutical and ICT sectors, where output rose sharply last year, driven by strong international demand for immunological drugs, Covid-related products, as well as the shift to home-working and e-commerce.

These divergent sectoral developments help to explain Ireland's unusual economic performance last year. While GDP rose by 3½ per cent last year, this was largely the result of strong output (subsequently exported) in the pharma and ICT sectors; as these sectors are mostly foreign-owned, the income arising from this production accrues to the foreign shareholders rather than to Irish residents. Exports of goods produced abroad under licence ('contract manufacturing') also recorded solid growth last year, especially in the final quarter.

On the other hand, MDD, which excludes the (direct) impact of production in these sectors, fell by 5½ per cent. This is generally regarded as a better indicator of domestic trends and, on this basis, developments in Ireland were more in-sync with those in other advanced economies (figure 2a). Real GNI*, which adjusts for net profit outflows and globalisation-related distortions (such as depreciation on foreign-owned intellectual property assets located in Ireland), also provides a more relevant measure of underlying economic trends in Ireland. While the outturn figure for real modified-GNI (hereafter GNI*) will not be published until the summer, Department of Finance estimates suggest a contraction of around 4¼ per cent last year, more closely aligned with the fall in MDD.

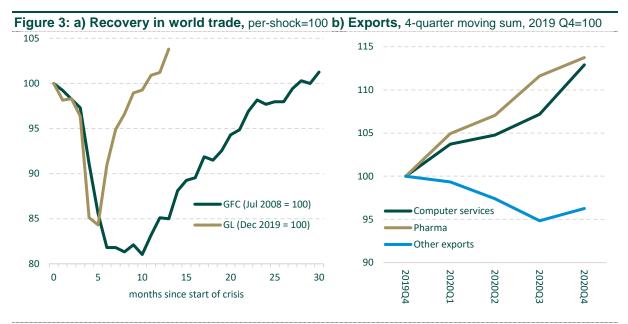


Note: figure 2b excludes the statistical discrepancy from GVA. Source: Eurostat, CSO.

Another way of looking at trends last year is through the prism of gross value added by nationality; this is an important complementary indicator produced by the CSO which breaks down domestic production according to whom (Irish- or foreign-owned firms) it is produced by (figure 2b). Gross value added of Irish-owned firms contracted by 9½ per cent last year, in line with the fall in GDP in peer economies, while value added from foreign-owned sectors expanded by 18 per cent. While these aggregates hide a multitude of differences across firms – within both the domestic and foreign-owned sectors – these

figures highlight that an important side-effect of the pandemic has been to widen further the gap between the indigenous and multinational sectors in Ireland.

On a quarterly basis, the pathway for MDD last year was defined by the severity of public health restrictions as the year progressed. In the second quarter, when restrictions were most stringent, MDD fell by 15 per cent relative to the previous quarter, on the back of 20 and 25 per cent declines in consumer and (modified) investment spending, respectively. While almost without historical precedent, the extent of these falls was in line with that recorded elsewhere. Activity subsequently bounced-back strongly following the easing of restrictions in the summer: MDD increased by 19 per cent in the third quarter, reaching a level that was just shy of its pre-pandemic peak. With the re-imposition of restrictions, domestic activity contracted once again in the fourth quarter; however, because of a shorter duration and somewhat less restrictive lockdown, the fall in MDD was more modest at 2¼ per cent. Greater resilience and adaptability on the part of the private sector also likely contributed to the less severe fall in activity during the second lockdown.²⁴





Personal consumer spending is, by far, the single largest component of MDD; it is also the component most affected by public health restrictions and so understanding the dynamics of spending patterns is crucial to analysing developments last year. With large parts of the average household consumption basket essentially closed-off for at least part of the year, and *aggregate* household incomes largely protected by government transfers,²⁵ the household savings ratio – the proportion of income that is not spent on goods and services – reached levels previously unheard of last year. In the second quarter, for instance, the average household saved 37 cents from every euro of income; this is over three times the normal amount that is saved (figure 6a in box 3). This was reflected in a substantial rise in household deposits at commercial banks, which increased by over \in 14 billion over the year (figure 6b

²⁴ It should also be pointed out that some contact-intensive sectors had remained closed since the second quarter, and so, in a purely mathematical manner, remaining closed could not contribute negatively to the contraction in the final quarter. To put it simply: if a firm was closed for the entirety of the third quarter, the fact that it remained closed in the final quarter does not contribute negatively to the quarter-on-quarter change.
²⁵ As always, the average (or aggregate) figure hides a multitude of differences.

in box 3), the bulk of which can be considered as 'excess savings'. To put this in context, the level of savings at end-year, above-and-beyond what would normally be expected, reached an estimated 10 per cent of personal consumer spending.

Notwithstanding the strong performance in a relatively small number of sectors, severe headwinds held back export sales in most areas. Public health restrictions in other jurisdictions, alongside a collapse in international trade (figure 3a), depressed exports of tourism and transport (down c.70 per cent) and operational leasing services (down c.10 per cent). The relative size of the pharma and ICT sectors, however, underpinned overall export growth of 6¼ per cent last year, (goods exports up 12 per cent and services broadly flat, figure 3b). The level of exports reached €124 billion in the fourth quarter (on a seasonally adjusted basis), the highest level on record.

The level of imports fell by 11 per cent last year, leading to a trade surplus of around 30 per cent of GDP. The sharp fall in imports was largely due to lower levels of intellectual property assets being onshored over the year; stripping these and purchases of leased aircraft from abroad out of the equation in order to get a clearer picture, imports were largely flat last year. Overall, a headline current account surplus on the balance of international payments of 4½ per cent of GDP was recorded, with a modified current account surplus (i.e. adjusting for globalisation-related distortions such as trade in leased aircraft and IP) estimated to be in the region of 7½ per cent of GNI*.

Measurement challenges complicate the assessment of labour market trends last year.²⁶ While the headline figure shows that employment fell by 2.3 per cent over the year, this significantly understates the scale of the labour market fallout from the pandemic. This is because around 60 per cent of those on the PUP are treated as being employed under the official *International Labour Office* statistical classification methodology.

These measurement challenges are not unique to Ireland, especially in Europe where there is a proliferation of short-term and other atypical working schemes. Economic assessment has, therefore, increasingly turned to 'hours worked' as a more representative measure of labour market trends. At end-year, the total number of hours worked in Ireland was almost 390 million hours lower than its pre-pandemic peak, a decline of 9½ per cent., while the unemployment rate stood at 18¾ per cent when those in receipt of the PUP included.

2.3 Macroeconomic Projections 2021 and 2022

2.3.1 External assumptions

The global economic outlook has improved in recent months, reflecting stronger-than-expected momentum in the latter half of last year, the deployment of vaccines, and additional fiscal measures in several countries. However, the near-term outlook remains extremely uncertain and heavily dependent upon the evolution of the virus and the pace at which vaccines are rolled out.

In relation to near-term prospects, diverging growth patterns are becoming increasingly evident in Ireland's main exporting markets. Vaccine coverage is already relatively high in both the UK and US, and this should allow for a more rapid easing of containment measures in both countries, with economic activity expected to rebound accordingly. Additionally, the \$1.9 trillion fiscal stimulus recently signed

²⁶ For a fuller description, see *Ireland's Unemployment Rate and Covid-19 Disruption*, Economic Insights, Department of Finance, January 2021.

into legislation in the US,²⁷ on top of other discretionary fiscal measures, will certainly boost demand in the US; moreover, given the size of the package – at around 9 per cent of US GDP and 2 per cent of world GDP – positive spill-overs to other countries can also be expected.²⁸ In contrast, supply and other logistical constraints mean that vaccination rates have lagged in continental Europe; indeed, by the end of the first quarter, many euro area countries had re-imposed severe restrictions in order to suppress rapidly rising infection rates. It stands to reason, therefore, that recovery in some of the key euro area Member States will be delayed until the second half of the year.

Table 2: external assumptions, per cent change (unless stated)								
	2020	2021	2022	2023	2024	2025		
External GDP growth								
United States	-3.5	6.4	3.5	1.4	1.5	1.6		
Euro area	-6.6	4.4	3.8	1.9	1.6	1.4		
United Kingdom	-9.9	5.3	5.1	2.0	1.8	1.5		
Technical assumptions								
Euro-sterling exchange rate (€1=)	0.89	0.86	0.86	0.86	0.86	0.86		
Euro-dollar exchange rate (€1=)	1.14	1.20	1.19	1.19	1.19	1.19		
Brent crude (dollars per barrel)	43.3	63.3	59.9	57.4	57.4	57.4		

Table 2: external assumptions, per cent change (unless stated)

Oil prices (futures) in 2021 – 2025 are calculated on the basis of futures markets as of end-March 2021. Exchange rate outturns as of end-March 2021 and unchanged thereafter. External growth forecasts sourced from IMF World Economic Outlook Database, April 2021 update.

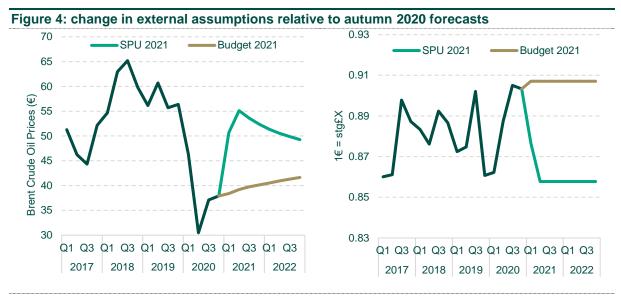
Oil prices have increased significantly in recent months, reflecting a combination of both demand-side trends (the pick-up – actual and projected – in global economic activity) and supply-side factors (curbs imposed by several oil-producing nations). Futures markets currently suggest oil prices averaging around \$63 (€53) per barrel this year and \$60 (€50) per barrel next year, significantly in excess of prices assumed in the Department's previous forecast round last autumn.

In terms of key bilateral exchange rates, agreement between the EU and UK on an orderly end to the transition period led market participants to re-evaluate their medium-term assessment for sterling-denominated assets, providing some support for sterling in the first quarter. The euro-sterling bilateral rate averaged around $\in 1 = stg \pm 0.86$ in the second half of March and, on the basis of the purely technical assumption of no further change over the remainder of the forecast horizon, this would imply a euro-sterling depreciation of around 3 per cent for this year relative to last year. A similar, purely technical methodology results in an implied euro-dollar appreciation of around 5 per cent for this year (the euro-dollar bilateral rate averaged $\in 1 = \$1.19$ in the second half of March).

2.3.2 The Irish economy in 2021

Compiling a set of macroeconomic forecasts in the midst of a pandemic is a challenging exercise *inter alia* because of uncertainty regarding the epidemiology of the virus. There is also uncertainty around the effectiveness of the vaccination programme, itself a function of supply and the efficacy against new variants of the virus. Possible behavioural responses of households and firms further complicate the picture.

²⁷ The initial proposal of the Biden Administration amounted \$1.9 trillion. Following amendments as the bill moved through the legislature, the US Congressional Budget Office has estimated the final fiscal package at \$1.84 trillion.
²⁸ OECD estimates using its global macro-model suggest the US fiscal package will boost global GDP by around 1 percentage point in its first year.



The Department's autumn forecasts were set out in the *Economic and Fiscal Outlook*, October 2020. 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 (oil prices) and Central Bank of Ireland (exchange rate data).

The projections set out below rest on the assumption of a very gradual easing of restrictions during the second quarter, consistent with the Government's roadmap for the gradual re-opening the economy. As vaccination coverage improves over the quarter, this will help break the link between any rise in infections and subsequent hospitalisation, intensive care and fatality rates. This, in turn, will allow for a further relaxation of restrictions in other sectors over the second half of the year. On this basis, economic recovery is set to progress gradually during the second quarter, accelerating from the summer onwards.

While a restrictions-induced decline in personal consumer spending was evident in the first quarter, it appears to have been less severe than in the spring of last year. Evidence, including retail sales and higher frequency data such as payments and mobility data, suggests that retailers and consumers have adapted to operating under lockdown conditions (see box 2), especially for consumption of durable goods. Repeating the pattern of last spring, 'social consumption' (spending on leisure, hospitality, etc.) likely recorded the sharpest fall, with consumption of 'staples' (spending on food, beverages, etc.) the least impacted.

A modest recovery in consumer spending is expected in the second quarter, in line with a very gradual lifting of some restrictions. A stronger rebound is projected for the second half of the year, as was evident following the re-opening last year. Increased spending will be supported by the release of pent-up demand, financed, in part, by an unwinding of the elevated level of household savings. The savings accumulated during lockdown will be another source of finance for spending; however, economic theory and previous experience suggest that households will spend only a fraction of this (the consumer spending forecasts for this year and next assume around of $\notin 21/4$ billion of the $\notin 111/2$ billion 'excess' savings is used to finance spending).²⁹ For this year as a whole, personal consumer spending is projected to grow by 31/2 per cent, as the rebound in the second half of the year more than offsets the loss in the first half.

²⁹ See *Will Household Savings Stimulate a Consumer-Led Recovery? Lessons from Special Savings Incentive Accounts*, Economic Insights: Economic Statistics during Covid 19, Department of Finance, January 2021.

	2020	2021	2022	2023	2024	2025
				er cent chan	<u> </u>	
Real GDP	3.4	4.5	5.0	3.5	3.2	3.1
Nominal GDP	2.9	5.0	6.9	5.0	4.9	4.8
Real GNI*^	-4.2	2.5	5.5	3.0	2.7	2.7
Real MDD	-5.4	2.6	7.4	3.8	3.4	3.4
components of GDP		ye	ar-on-year p	er cent chan	ige	
personal consumption	-9.0	3.5	10.4	3.2	2.8	2.9
government consumption	9.8	2.0	0.1	1.3	1.8	1.7
modified-investment	-8.5	0.9	6.7	7.6	6.4	5.9
stock changes^	1.0	-0.5	0.0	0.0	0.0	0.0
exports	6.2	6.0	5.9	5.0	4.7	4.5
modified imports	-0.3	6.5	7.9	6.1	5.5	5.3
contributions to GDP Growth		pe	ercentage po	int contributi	on	_
modified domestic demand	-3.1	1.3	3.6	1.9	1.7	1.7
modified net exports	7.2	3.7	1.4	1.5	1.5	1.4
stock changes	1.0	-0.5	0.0	0.0	0.0	0.0
statistical discrepancy	-1.7	0.0	0.0	0.0	0.0	0.0
current prices			€ mi	llions		
GDP (nearest €25m)	366,500	384,800	411,200	431,700	452,750	474,37
GNI* (nearest €25m)^^^	206,650	214,050	230,250	240,725	251,550	262,60

Table 3: macroeconomic prospects

Rounding can affect totals.

^ Real GNI* projections from 2021-2025 are broadly based on a methodology described in the IFAC Fiscal Assessment Report May 2020. This approach is based on forecasting an 'adjusted net exports series' (net exports excluding those of foreign dominated sectors) that represents the residual between real GNI* and modified domestic demand.

^ 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: 2020 = CSO; 2021-25 = Department of Finance.

Purchases of goods and services by Government has ramped-up during the pandemic, *inter alia* to expand the provision of healthcare services. The budget for this year provided for further increases in publically-provided goods and services, with public consumption anticipated to increase by [2] per cent this year.

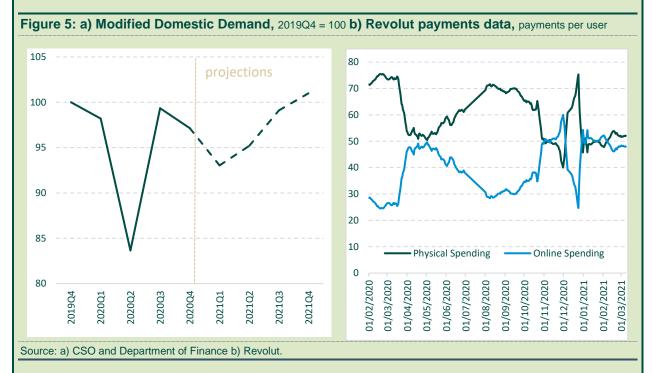
Exceptional levels of uncertainty over the past year have weighed on investment spending. The main conditioning assumption underpinning the Department's macro-forecasts is that vaccination rollout will allow for a gradual normalisation of economic activity over the next year or so and, on this basis, uncertainty should begin to wane. This should prompt firms to begin rebuilding their productive capacity and should support a gradual improvement in core machinery and equipment investment (i.e. excluding investment in aircraft) in the second half of this year. The expected recovery in global production and trade should also help to underpin an improvement in sentiment. Relatively favourable financing conditions should also support increased business spending although, in some cases, over-leveraged firms may prioritise debt reduction over spending on new fixed assets. Investment in building and construction has been negatively affected by restrictions during the first quarter, as well as a fall in new housing commencements last year. House completions of around 18,000 units are expected this year, down from around 21,000 units last year. Against this background, modest growth of just under 1 per

cent in modified investment (excluding investment in aircraft leasing and imported intellectual property) is expected this year.

Box 2: Calibrating the 2021 lockdown shock

Information gleaned from the impact of the pandemic over the course of last year was used to help calibrate the impact of level-5 restrictions on the quarterly profile for the economy this year. In particular, insights from the impact of lockdown during the second quarter of last year were used to calibrate the economic shock to the domestic economy in the first quarter of this year (a similar level of stringency to the first lockdown). The subsequent recovery in the third quarter of last year was used to estimate the likely scale of the recovery in subsequent quarters of this year.

These insights are supplemented with real-time indicators such as daily card payments from *Revolut* and the Central Bank of Ireland, as well as GPS-based mobility data. Judgements were also applied to account for differences in conditions between this year and last. These differences include, the duration of time likely to be spent under level-5 restrictions this year, the assumed pace of lifting restrictions and the associated impact on sectors such as the retail sector. What is also evident in the real time indicators is that both firms and consumers have partially adapted to lockdown, inter alia by shifting activities online (figure 5b).



Putting all of this together implies that MDD fell by around 4 per cent in the first quarter of this year (figure 5a) on a quarterly basis, about one-third of the respective fall during the second quarter of last year. On the assumption of only a modest easing of restrictions in the second quarter of this year, MDD is projected to increase by just over 2 per cent.

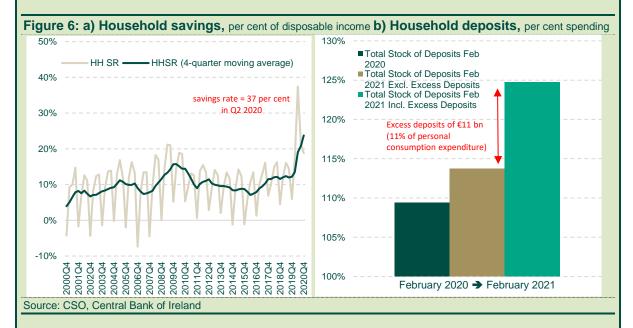
For the second half of the year, relatively low levels of restrictions are assumed, broadly resembling the situation that prevailed during the summer and early autumn last year. On this basis, MDD is projected to increase by 4 per cent in the third quarter and by 2 per cent in the final quarter.

Exports are set to expand further this year, in line with an improvement in the external situation. Exports from the largely foreign-owned sectors – including pharmaceuticals and ICT – are expected to lead the way, while exports associated with 'contract manufacturing' could also make a positive contribution (though these latter exports contribute little to domestic value-added). Exports from the indigenous sector should benefit from the global recovery, in particular the pick-up in the UK economy. However, notwithstanding the *Trade and Cooperation Agreement*, bilateral trade with the UK will likely be affected

by various non-tariff barriers.³⁰ Given restrictions on international travel, tourism exports are set to remain at very low levels. Overall, exports of goods and services are projected to increase by 6 per cent this year.

Box 3: Household savings and pent-up demand

The pandemic had a significant impact on consumer spending patterns, both in Ireland and elsewhere. With many retail, leisure and other outlets largely shut for a significant portion of last year, and with household incomes largely protected by government supports (at least in aggregate terms), the household savings ratio – the proportion of income that is not consumed – reached almost 24 per cent in 2020. This was a historically unprecedented level and around twice its average level over the past decade-or-so. Household deposits grew by almost 16 billion between February 2020 and February 2021. Based on the OECD approach,³¹ the average growth rate of 4 per cent over 2015-2019 (February to February) would suggest a normal increase of €4½ billion had the pandemic not happened. This suggests that 'excess household deposits' – the deposits accumulated above-and-beyond normal levels – amounted to around €11½ billion in the year to end-February. The obvious question arises as to the scale of the consumer rebound once restrictions are eventually removed.



In attempting to answer this question, a number of issues are relevant. Firstly, this exceptional increase in household savings was made up of both voluntary and involuntary elements: households responded to heightened economic uncertainty by voluntarily building up precautionary savings while, at the same time, the restrictions meant that households couldn't consume many goods and services as they were not for sale, thus generating 'involuntary' ('forced') savings. This accumulation of involuntary savings is significant, as it means there will likely be an unwinding of pent-up demand once restrictions are eased. This was the case last year as household savings were partially unwound due to pent-up demand for 'delayable' goods over the summer months. The result was a decline in the household savings rate from 37 per cent in the second quarter of 2020 to around 22 per cent in the third quarter.

This suggests that a large part of household savings will, once again, be unwound, as restrictions are gradually lifted from the second half of this year. It is likely that this consumption will focus on big-ticket items, durable goods as well as certain services that were 'foregone' during the pandemic. Given the prolonged nature of public health restrictions there will likely be a sharp increase in 'social consumption', as consumers make up for

³⁰ Unlike for the *Single European Market*, full customs and other border checks have not yet been put in place by the UK authorities; the necessary infrastructure to apply full checks is currently expected to be in place at the beginning of next year.

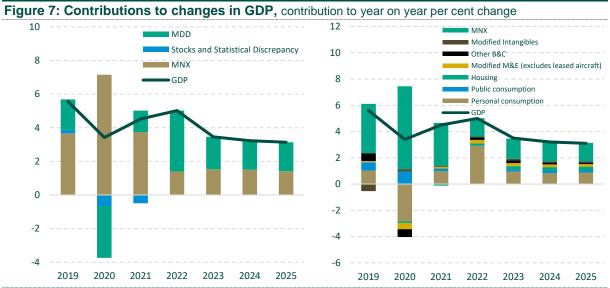
³¹ See OECD (2020), Economic Outlook Volume 2020 Issue 2.

experiences missed out on during the pandemic. Hospitality, leisure and entertainment sectors should benefit from the unwinding of these savings, with increased levels of consumption (albeit from exceptionally low levels).

Nonetheless, it is unlikely that all of these accumulated savings will flow into consumption. First, economic theory suggests that households adjust their consumption in response to *permanent* rather than *transitory* income shocks. The view that much of these 'excess savings' will not be used to finance increased consumer spending is also supported by the fact that these savings have likely been built up by higher-income earners who tend to have lower marginal propensities to consume.³² For these reasons, it is assumed that households will unwind about 60 per cent of the total €11½ bn excess deposits, spread between consumption and housing investment (including improvements), with the remainder 're-saved'.

The acceleration in (modified) final demand – the sum of consumption (public and private), modified investment and exports – will lead to a significant increase in modified imports (excluding intellectual property assets and aircraft for leasing), softening the boost from net trade this year. Overall, an increase in modified imports of 6½ per cent is expected for the year.

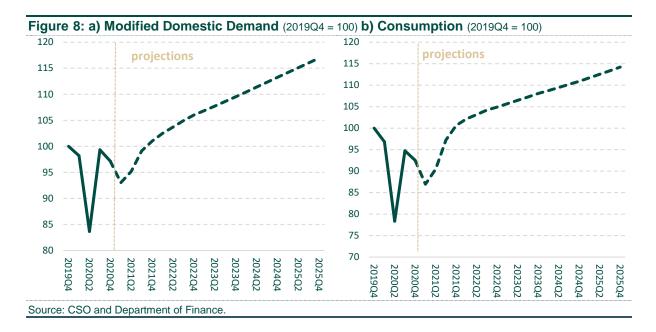
Overall, MDD is expected to expand by 2½ per cent this year. The assumed quarterly profile would see MDD pass its pre-pandemic level in the fourth quarter this year (see figure 8 for quarterly profiles). Real GNI* is also forecast to increase by 2½ per cent this year. GDP is expected to grow by 4½ per cent, with modified net exports contributing roughly 3¾ percentage points and MDD contributing around 1¼ percentage points. A negative contribution from de-stocking is assumed, as the pre-Brexit stock-building evident in the final quarter of last year is unwound.



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.

³² See Department of Finance, January 2021, op cit.



2.3.3 The Irish economy in 2022

The projected recovery in the second half of this year is expected to gain momentum over the course of next year. This rests on the assumption that the economy is fully open and free from public health restrictions, with vaccine roll-out providing society-wide protection at that stage. Limits may apply to foreign travel and inbound tourism, depending on progress with respect to vaccination and possible variants in other jurisdictions.

Unusually for a small and open economy, recovery is expected to be consumer-driven. Personal consumption is expected increase by around 10½ per cent next year, with the comparatively high annual rate a function of the downturn in the first half of this year ('base effects'). Households are assumed to consume around one-quarter of the excess savings accumulated during the pandemic, with the majority used to finance spending next year (see box 3).

Relative to the past year-or-so, the typical consumption basket is expected to shift towards big-ticket, durable goods, as well as certain services that were 'foregone' during the pandemic. Given the prolonged duration of lockdown, the forecasts assume a steep pick-up in demand for 'social consumption': spending on entertainment, leisure, etc. With supply at least partly constrained (through continued social distancing for example), this rapid recovery in spending could potentially lead to some margin re-building in sectors. On this basis, consumer spending in nominal terms expected to increase by around 13 per cent implying a price deflator of 2³/₄ per cent.

Under the purely technical no-policy change assumption underpinning these forecasts, public consumption is expected to rise modestly relative to last year, as some of the temporary exceptional supports are gradually unwound in the face of a recovering economy and labour market. Public sector pay is also expected to rise on foot of the new public sector pay agreement and rising numbers to covers existing and committed service levels and policy priorities, with consumption of other goods and services expected to fall.

Within (modified) investment, a recovery in building and construction activity is expected to be constrained by an anticipated low level of new housing commencements in 2021 due to the lockdown in the first quarter. Investment in core machinery and equipment is projected to accelerate next year,

on foot of improving business sentiment following the completion of the vaccine rollout programmes both domestically and in key trading partners. Building and construction investment should also pick up, including in new house building albeit from a low base. Modified investment is, therefore, expected to increase by 6³/₄ per cent next year.

On the external side, exports are expected to grow by almost 6 per cent again next year, broadly in line with external demand. Tourism exports could make a strong contribution, albeit from an exceptionally low base. Modified imports are projected to accelerate in response to the pick-up in (modified) final demand although not as sharply as would normally be expected given the lower import content of services consumption.

Overall, GDP growth of 5 per cent is projected with MDD growth of just under 7½ per cent. MDD is projected to contribute around 3½ percentage points to GDP growth on the back of private consumption with modified net exports contributing 1½ percentage points. Real GNI* growth is projected at 5½ per cent.

2.4 Balance of payments and flow-of-funds

The internationalisation of the Irish economy complicates assessment of the external position. In headline terms, a large turnaround in the current account – from deficit a year earlier to surplus – was recorded last year. This reversal, however, largely reflected a substantial decline in purchases of intellectual property assets from abroad, mainly due to significant on-shoring of these assets in 2019. Leaving aside these imports, the modified current account position recorded a solid surplus, where the modified trade surplus exceeded the incomes – primary and secondary – deficit by an estimated $7\frac{1}{2}$ per cent of modified GNI.

The modified current account surplus is projected to increase to 8 per cent of modified GNI this year reflecting the rebound in external demand and the continued weakness of imports due to the delayed recovery in modified domestic demand.

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.

A large flow of funds from the government to the household and corporate sectors has occurred since the outbreak of the pandemic (PUP, wage subsidy schemes, etc.) and is set to continue in the first half of this year as pandemic-related government employment and welfare supports remain in place. These supports have led to substantial dis-saving in the government sector (and the significant fiscal deficit) and broadly offsetting increases in saving in the other sectors.

This is expected to unwind next year with a significant improvement in the government savingsinvestment balance more than offset by a reduction in savings from the corporate and, in particular, the household sector, reflecting an unwinding of pent-up demand and 'excess savings'. Over the mediumterm, the modified current account surplus is projected to decline but still remain elevated at almost 4 per cent of modified GNI by the end of the forecast period. This reflects *inter alia* supply-side constraints in the residential sector which could constrain household investment.

	0000	0004	0000	0000	0004	0005
	2020	2021	2022	2023	2024	2025
Gross Savings (per cent of GDP)	35.9	35.9	34.5	34.3	34.0	33.7
Modified Gross Savings (per cent of GNI*)	29.3	28.6	27.1	27.1	27.0	26.9
of which:						
- households	14.6	11.9	6.4	5.7	5.4	5.1
- modified corporate	20.4	21.8	19.8	18.5	17.0	16.2
- government	-5.7	-5.2	0.9	2.9	4.6	5.6
Investment [^] (per cent of GDP)	31.3	20.9	21.5	22.5	23.4	23.9
Modified investment (per cent of GNI*)	21.8	20.6	20.7	21.6	22.4	23.1
of which:						
- households	3.3	3.0	3.2	3.6	4.0	4.4
- modified corporate	13.4	12.5	12.3	12.9	13.2	13.7
- government	5.1	5.1	5.2	5.1	5.1	4.9
Current account (per cent of GDP)	4.6	15.1	13.1	11.8	10.7	9.8
of which:						
- trade balance	30.0	40.5	38.7	37.9	37.1	36.6
- income balance	-25.3	-25.4	-25.7	-26.1	-26.4	-26.8
Modified current account (per cent GNI*)	7.6	8.1	6.4	5.5	4.7	3.9

Table 4: savings, investment and the balance of payments, per cent of GDP (unless stated)

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.

Source: 2020 = CSO; 2021-25 = Department of Finance.

2.5 The Labour Market

The labour market has borne the brunt of the pandemic, with public health containment measures primarily affecting labour-intensive sectors that are largely dependent on close contact. In the immediate aftermath of the first wave, employment fell rapidly. The total number of hours worked – as set out in the labour force survey – at the end of last year was 8 ½ per cent lower than its pre-pandemic peak, with hospitality and leisure, as well as construction, contributing most to the decline (box 4). The Covid-adjusted measure of unemployment rose to a high of 28 per cent in the second quarter of 2020.³³ While this subsequently declined, it remained above 24 per cent in the early months of this year.

The government responded rapidly to cushion the incomes of those laid-off as a result of public health measures (through the PUP scheme), while also maintaining the link between employees and employers by subsidising employment in firms whose turnover had fallen significantly (through TWSS/EWSS). This is in addition to the standard jobseekers supports. All in, by mid-April this year, around 910,000 (roughly two-fifths of the labour force) were receiving some form of income support from the State (figure 9).

³³ The Department's projections are based on the CSO Covid-adjusted measure, which treats all PUP recipients as unemployed, rather than the standard ILO measure which classifies only around 12 per cent of PUP recipients as unemployed. In reality, both measures are imperfect, and should be considered as the upper and lower bounds as to the 'true' rate. For further details, see Economic Insights, January 2021 *op cit*.

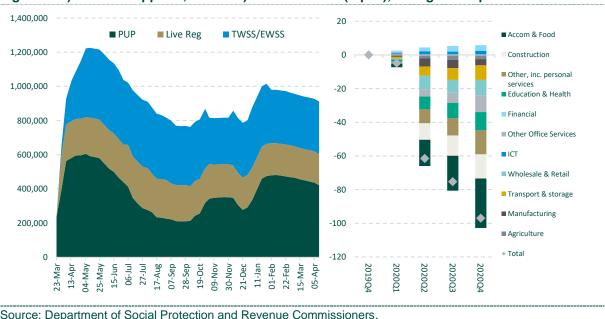
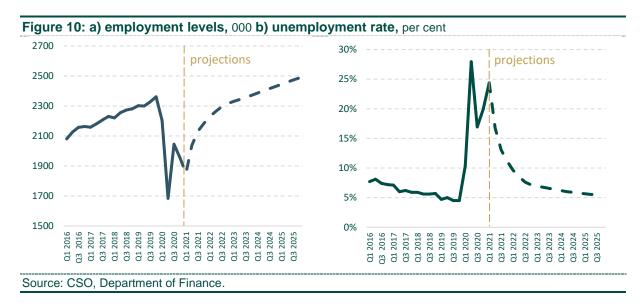


Figure 9: a) Income supports, number b) Hours worked (4qma), change from peak millions

Source: Department of Social Protection and Revenue Commissioners. Overall totals include overlaps between schemes. Income support schemes data as of 12th April 2021.

Stringent public health restrictions have weighed on employment in the first quarter, although the gradual re-opening of the labour-intensive construction and retail sectors during the second quarter should underpin a recovery in employment growth. The jobs market should benefit from the removal of restrictions over the summer, with rising employment helping to reduce the pool of unemployed. Employment growth is projected at 79,000 (4 per cent) for 2021, a figure which is dampened by the weak performance of the economy over the first half of year due to public health restrictions in place to reduce the spread of the virus. A much stronger recovery is projected for next year with the addition of 226,000 jobs (11 per cent growth) – on the assumption that public health containment measures have been almost eliminated – and this should help to bring the unemployment rate back into (still-high) single digits by end-year.

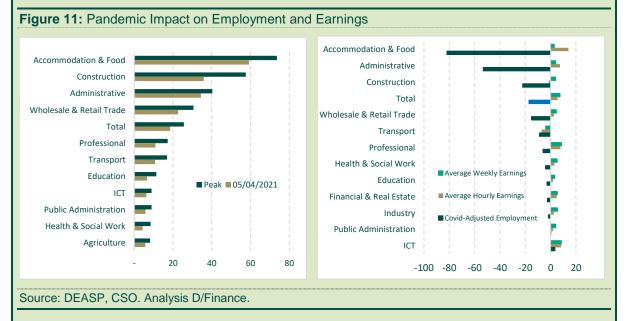


Box 4: the labour market impact - a sectoral analysis

While the pandemic has had an unprecedented effect on the domestic labour market, the impact across sectors has not been uniform. Broadly speaking, sectors where transactions between producers and consumers require face-to-face contact have been more adversely affected.

As shown in the chart below (based on the number of people availing of the PUP in each sector, expressed as a share of pre-pandemic employment in that sector), the *Accommodation and Food Services* sector has been the sector most impacted by the pandemic, with over 74 per cent of employees availing of the PUP at the peak in May 2020. While this has subsequently fallen, it remains elevated at nearly 60 per cent of workers in that sector as at the start of April this year. In the *Construction* sector, over half of workers were in receipt of a PUP payment at the peak, a figure which had fallen to just under 40 per cent of workers at the start of April. Other sectors significantly impacted by the pandemic include the *Administrative and Support Services* sector and *Wholesale and Retail Trade* sector.

At the other end of the spectrum, the labour market fall-out in sectors more amenable to home-working, or where activity is deemed 'essential', has been less severe. In the *ICT* sector for example, 9 per cent of employees were in receipt of a PUP payment during the peak of the first wave, a figure which is now closer to 6 per cent. Similarly, in the *Healthcare* sector, where most workers are deemed essential, just over 8 per cent of workers were in receipt of PUP payments during the peak, a figure which has subsequently fallen to just over 4 per cent.



The disparity in the impact of Covid is also evident in figures for the national wage bill. Overall, the total wage bill declined only marginally last year (-0.1 per cent), which, on the face of it, might seem surprising given the scale of the shock to the labour market. Compositional effects however were at play at a sectoral level, which supported the total wage bill last year. These compositional effects included the income supports policy response (i.e. the TWSS / EWSS that provided support to labour incomes) and the strong demand for labour – relative to available supply – in sectors such as ICT and health. Importantly, the relatively large increase in per capita income also played a role. This latter development mainly reflects a statistical quirk resulting from the compositional shift in employment, with those losing their jobs last year largely at the lower end of the pay spectrum. This is evident from the earning chart (above on the right), which shows relatively large average pay increases in some of the sectors suffering the largest employment shocks.

These compositional effects are expected however to work in the opposite direction as the labour market recovers. The re-opening of the economy and the recovery of jobs in labour-intensive sectors, particularly in 'social consumption', will mean a shift in the composition of employment, with most job gains likely to be in relatively lower paid sectors (relative to the average). Indeed, the compositional shift is then likely to depress the average wage in a similar, purely in a statistical manner.

Notwithstanding the unprecedented shock to employment last year, the national wage bill was virtually flat, declining by only -0.1 per cent. Part of this reflects Government-provided support involving the subsidisation of wages of firms where turnover had fallen significantly, as well as actual wage increase in some high-tech sectors. A flat wage bill in combination with employment losses led to a statistical quirk, whereby the average per capita wage increased simply due to employment losses being mainly concentrated in lower paid jobs. With employment levels expected to increase in the second half of this year – in line with the assumed relaxation of restrictions – the economy-wide wage bill is projected to rise by around 4.1 per cent, followed by an increase of around 4 per cent in 2022. These projections assume broad symmetry with the picture over the last year or so: employment gains will predominantly arise in relatively lower paid jobs and sectors, which will weigh on the growth of average pay per capita.

	2020	2021	2022	2023	2024	2025
Employment	-15.1	4.0	11.0	3.3	2.3	2.2
Unemployment rate (per cent)	18.7	16.3	8.2	6.7	6.0	5.5
Labour productivity^	21.8	0.5	-5.4	0.2	0.9	0.9
Compensation of employees*	-0.1	4.1	4.0	5.4	5.5	5.6
Compensation per employee*	17.4	-0.1	-6.5	1.9	2.9	3.1

^ Per person employed.

*Non-agricultural sector.

Note: Employment and unemployment outturns and projections are on the basis of the CSO Covid-adjusted series which treats all recipients of the PUP as unemployed.

Source: 2020 = CSO: 2021-25 = Department of Finance.

2.6 **Price Developments**

At a global level, the pandemic has, in the first instance, exerted a dis-inflationary impulse, with the fall in aggregate demand exceeding the contraction in aggregate supply. In Ireland, this is reflected in a moderation in services sector prices over last year (goods price inflation in Ireland is, by-and-large, determined externally and so less well correlated with domestic demand and supply conditions). For the year as a whole, consumer price inflation averaged -0.5 per cent; 'core' inflation, which excludes the volatile components of unprocessed food and energy, averaged -0.1 per cent. Irish consumer price inflation was not particularly out of kilter with developments elsewhere in the euro area, where price dynamics were broadly flat last year.

While consumer price inflation (headline and 'core') remained relatively subdued in the opening months of this year, the annual rate of change is expected to pick up as the year progresses. This expectation is framed by number of temporary and one-off factors, including higher oil prices, a reversal of the temporary VAT cut, and a pick-up in demand as the economy re-opens. In terms of the latter, the pace at which supply responds will have a key bearing on services (non-traded) prices, with the possibility of some margin building. For the year as a whole, headline HICP inflation of 1.1 per cent and core inflation of 0.7 per cent is forecast.

Inflation is expected to continue to rise next year as the economy continues to recover from the pandemic, with services inflation driving both headline and core HICP. Energy price growth, though still positive, will make a smaller contribution to headline inflation in 2022. Headline HICP inflation of 1.9 per cent is forecast for next year, with core inflation of 1.7 per cent.

The GDP deflator, a wider measure of price changes in the economy, is forecast to grow by 0.4 per cent this year and 1.8 per cent next year, with negative contributions from the terms of trade and positive contributions from the personal consumption deflator. A personal consumption deflator of 1.6 per cent is forecast for this year and 2.8 per cent next year.³⁴

	2020	2021	2022	2023	2024	2025
GDP deflator	-0.5	0.4	1.8	1.5	1.6	1.6
Personal consumption deflator	1.0	1.6	2.8	1.8	2.0	2.0
Harmonised index of consumer prices (HICP)	-0.5	1.1	1.9	1.5	1.6	1.9
Core HICP inflation^	-0.1	0.7	1.7	1.5	1.6	1.9
Export price deflator (goods and services)	-1.9	0.4	1.3	1.2	1.2	1.3
Import price deflator (goods and services)	-0.4	1.0	1.3	1.3	1.3	1.3
Terms-of-trade (good and services)	-1.5	-0.6	0.0	0.0	0.0	0.0

Table 6: price developments, per cent change

^ Core inflation is HICP inflation excluding the most volatile components, namely energy and unprocessed food. Source: 2020 = CSO; 2021-25 = Department of Finance.

2.7 Medium-Term Growth Prospects 2023 to 2025

Medium-term projections are typically anchored in estimates of the economy's supply capacity, this being determined by the availability of capital and labour, as well as the efficiency these are combined in the production process (i.e. productivity). Beyond the short-term, the difference between aggregate demand and the economy's supply capacity – the output gap – is assumed to close and the economy evolves in line with its trend thereafter.

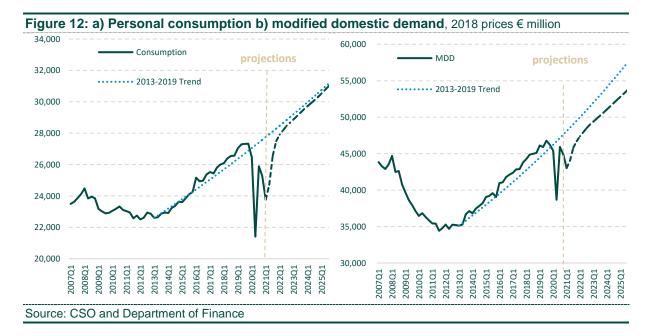
The pandemic, however, is not only a shock to demand, it is also a shock to the availability of capital and labour. While the eventual removal of restrictions will mean that most of this supply will come back on stream, there is a real possibility that some workers or firms will permanently exit the market, dampening the economy's productive capacity.

The experience of previous pandemics is not particularly insightful: the impact on potential output in countries affected by SARS, MERS, Ebola and Zika was relatively short-lived, tending to dissipate two years after the end of the epidemic (the duration of the current pandemic is considerably longer with almost all of the global economy affected). On the other hand, financial crises are associated with a significant and very persistent downward shift in potential output *inter alia* due to credit rationing associated with deleveraging. Whether the long-term impact of Covid-19 resembles that of epidemics and other exogenous shocks (i.e. no scarring effects) or that of financial crises (i.e. persistent scarring effects) remains to be seen and, until the pandemic subsides, any assessment of scarring is highly tentative; estimates are also time-sensitive and will be revised as additional information becomes available.

³⁴ The personal consumption deflator has been above headline HICP in recent years due to differences in the weights of rents and FISIM (financial intermediation services indirectly measured) between the personal consumption and HICP baskets. It is assumed however that the gap between the two narrows over the forecast horizon. More generally, the increase in the difference between HICP and the personal consumption deflator in 2022 is explained by strong services inflation, as services account for a greater share of the personal consumption basket.

The UK's exit from the European Union will also impact on the supply potential of the economy. This arises *inter alia* through the productivity channel, given that international trade is a key driver of productivity. The TCA is more limited in scope than the *Single European Market*, and non-tariff barriers – such as rules of origin and other regulatory checks – will likely reduce bilateral trade between Ireland and the UK over time. While normal 'gravitational pull' will still be an important factor,³⁵ higher input costs arising from non-tariff barriers will weigh on the quantity of trade *relative to a hypothetical no exit scenario*.

Taking these supply-side effects into account, GDP growth over the medium-term is tentatively projected at 3¼ per cent per annum, with broadly similar contributions from modified domestic demand and modified net exports. This 'catch-up' phase will see growth in excess of estimates of potential output with the output gap expected to close from a negative position (aggregate supply greater than aggregate demand) at the end of the forecast period. Real GNI* is also expected to increase by just under 3 per cent per annum over the medium-term. While the key domestic indicators of consumption and MDD broadly return to trend in late 2022 / early 2023, they remain below the level of the prepandemic trend at the end of the forecast horizon (figure 12). As more data become available over time, it may be necessary to adjust these estimates. The medium-term projections assumed some mismatches in the labour market: the skills needed by firms in expanding sectors of the economy being different to the skills of these in firms in declining sectors.



³⁵ So-called 'gravity models' of trade show that countries tend to trade more with geographically close countries.

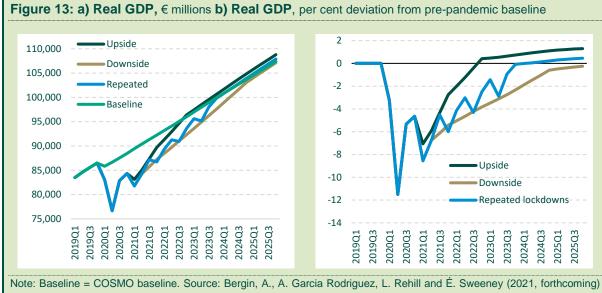
Box 5: Scenario analysis

Anticipating how, and when, the Irish economy might recover from the pandemic is extremely challenging, *inter alia* due to the uniqueness of the shock. Uncertainty surrounding variants of the virus (including possible vaccine-resistant variants), rollout of vaccinations and the unwinding of restrictions further complicate the picture.

This uncertainty underscores the importance of 'scenario analysis' and, in this box, a range of alternative scenarios for the economy is presented. These are based on joint research (forthcoming) carried out by the Department of Finance and ESRI using the structural macro-econometric model (COSMO).

Three main recovery scenarios are explored and, for each, the counterfactual is a no-pandemic baseline:

- **Upside scenario**: restrictions remain until June, the vaccine rollout is successful and reaches a significant share of population during 2021Q3, allowing economic activity to return to normal by 2021Q4.
- **Downside with scarring**: continued uncertainty, new variants and a slow vaccine rollout mean there is a slow recovery of the internal economy, with output and employment in the non-traded sector still 5 per cent below baseline by end of 2024;
- **Repeated lockdowns**: successive lockdowns needed in order to contain the virus every three quarters with reducing stringency across time, although there is some element of scarring, assumed to be half of the scarring seen in the downside scenario.



'Exploring the Impact of COVID-19 and Recovery Paths for the Economy'. ESRI Working Paper.

Figure 13 (LHS) shows the level of GDP in the no-pandemic baseline and the three scenarios, with the economy rebounding at different speeds in each. The recovery to levels close to the no-pandemic baseline is achieved by late-2022 in the *Upside* scenario, late-2023 in the *Repeated lockdowns* scenario and late-2024 in the *Downside* scenario.

In the *Downside* and *Repeated* Lockdown scenarios, the permanent loss of output in the non-traded sector means that, although output largely recovers, it remains below the no-pandemic baseline path over the medium term, i.e. there is a permanent scar on the economy.

3.1 Summary

The full suite of fiscal tools – discretionary tax and expenditure measures, contingent supports as well as the full operation of automatic stabilisers – has been deployed to cushion the impact of the pandemic. While the response has been both appropriate and necessary, the cost continues to be significant. After recording a deficit of \in 12.3 billion last year, a further deficit of \in 16.9 billion is in prospect for this year. Even with economic recovery, the Exchequer is projected to run another large deficit of \in 9.9 billion next year.

3.2 Fiscal Outturn 2020³⁶

Tax receipts amounted to \in 57.2 billion last year. While this was \in 2.1 billion (3.6 per cent) lower than a year earlier, the fall was not as large as initially expected, largely on foot of the resilience of income tax receipts. Notwithstanding the significant rise in unemployment, income taxes fell by just \in 0.2 billion (1 per cent) last year, a performance explained by the sectoral composition of the labour market shock (job losses predominantly in relatively low-paid sectors) juxtaposed with an income tax system that is one of the most progressive in the world.

Taken together, non-tax revenue and capital receipts of €7.9 billion were up 53.7 per cent in annual terms, due primarily to the drawdown of the Rainy Day Fund, as well as distribution of the first tranche of the National Asset Management Agency (NAMA) surplus.

Gross voted expenditure of €85.3 billion for 2020 was €17.9 billion (26.5 per cent) higher than a year earlier; current spending rose by €15.6 billion (26 per cent) while capital spending rose by €2.3 billion (31 per cent). These increases were dominated by Covid-related income and business supports provided by Government to shore-up household and firm income, and to limit 'scarring' effects of the pandemic.

Non-voted expenditure was, in net terms, €142 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 deficit of €12.3 billion was recorded last year, the largest Exchequer deficit since 2012.

3.3 Fiscal Outlook 2021

3.3.1 Tax forecast

At end-March, taxation receipts were 1 per cent (€134 million) higher than in the same period last year. The annual growth largely reflects strong growth in VAT which, in turn, is a result of 'base effects': forbearance/deferral of taxes began in March last year. Income tax receipts continued to hold up in the first quarter, increasing by 4 per cent (€226 million) year-on-year.

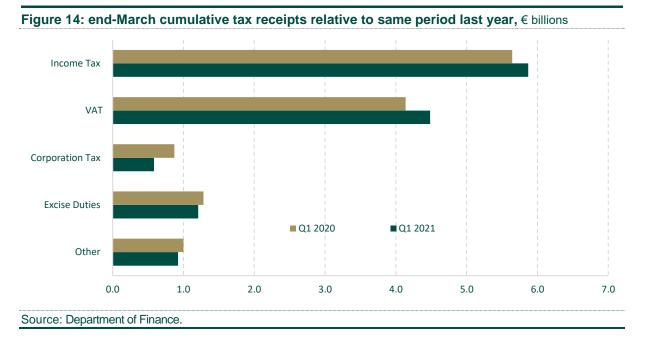
On the assumption that restrictions are gradually eased from the second quarter onwards, the tax yield should improve *in tandem* with the gradual economic recovery. Direct taxes – particularly those related

³⁶ Provisional outturn, final figures to be audited by Comptroller and Auditor General and published in *Finance & Appropriation Accounts*.

to personal income – should benefit from the assumed recovery in the labour market. The income tax projection of \in 24.3 billion (7.0 per cent higher than last year) takes account of the strong performance in the final quarter of 2020 and the first quarter of 2021. Corporation tax receipts are projected at \in 11.6 billion (a 1.6 per cent decrease), reflecting the impact of Covid Restrictions Support Scheme (CRSS) payments³⁷.

Indirect taxes are assumed to benefit from increased spending over the remainder of the year, as well as the 'base effect' of heavily impacted receipts last year. The VAT yield is projected at \in 14.4 billion for the year, a 15.7 per cent increase. The yield from excise duties is projected at \in 5.8 billion, a 7.2 per cent increase.

Taking into account developments in other taxation headings, whose yield is typically much lower than those outlined above, total taxation revenue is projected at \in 60.4 billion this year, an increase of \in 3.2 billion (5.6 per cent) relative to last year. On this basis, the full-year taxation yield would be back above 2019 levels, with a rising trajectory in the second half of the year. The increase in taxation revenue will be broad-based, with a recovery across both direct and indirect taxes.



3.3.2 Non-tax revenue

Non-tax revenue this year is projected at \in 2.3 billion. Overall capital resources are estimated at \in 6.6 billion.³⁸

3.3.3 Expenditure

The Revised Estimates for Public Services (REV) 2021, published on 16th December 2020, set out an overall Government Expenditure Ceiling for 2021 of €87.8 billion. Nearly €82.4 billion of this has been allocated at departmental level, within which provision of some $€61/_2$ billion for expenditure on Covid-19 related measures and supports is included, providing substantial funding across a number of departments to meet the ongoing challenges posed by the virus.

³⁷ Payments made under the CRSS are paid from income and corporation tax receipts.

³⁸ The large increase in non-voted capital expenditure and capital resources in 2021 is due to a monthly Exchequer cash flow loan to the SIF. This transaction has no impact on the Exchequer deficit.

Almost €2 billion is to be provided to support the health service response to Covid-19 during 2021. Some €3.2 billion has been allocated to the Department of Social Protection for additional expenditure on employment and income supports, including €0.6 billion for the Pandemic Unemployment Payment (PUP) and €1.2 billion for the Employment Wage Subsidy Scheme (EWSS). Substantial additional funding has also been provided for the education sector, for the operation of public transport and to other sectors.

In addition, a further \in 3.4 billion was set aside in the *Recovery Fund* and almost \in 2 billion in a *Contingency Reserve* within the overall \in 87.8 billion expenditure ceiling, which allows for a flexible response to the evolving Covid-19 situation during 2021. These reserve funds bring the funding provision for measures to respond to Covid-19 to almost \in 12 billion. The fiscal forecasts contained in this document have been compiled on a no-policy-change basis, in other words no additional funding has been allocated for the extension of Covid supports beyond June. However, the central assumption underpinning the forecast is that the expenditure ceiling is fully utilised in 2021. The extent of the demand for further funding in respect of Covid-19 measures will depend on the public health situation, the level of restrictions in place and further policy decisions regarding provision of supports reflecting the Government's commitment to support society and the economy recover from Covid.

The remaining \in 75³/₄ billion (ex-Covid) allocated to departments is for core expenditure programmes. This is a core current expenditure increase of \in 3.8 billion, or just over 6 per cent next year, driven by an increase of almost \in 1.9 billion, or 10.7 per cent in Health, with a core capital increase by roughly \in 1.6 billion, or nearly 20 per cent.

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 2.7 per cent (\in 511 million) above profile. This higher than anticipated drawdown of funds primarily reflects the impact of Level 5 restrictions in place throughout the country on the demand for income supports directly related to the Covid-19. In annual terms, gross voted expenditure was up 14.5 per cent (\in 2,469 million) at end-March. Gross voted current spending was 17.3 per cent (\in 2,733 million) higher year-on-year and gross voted capital expenditure was 21.9 per cent (- \in 264 million) lower in annual terms, reflecting the knock-on impacts for infrastructure delivery and capital spending plans of departments arising from level 5 restrictions.

3.3.4 Summary

Putting all of these parts together implies an Exchequer deficit of €16.9 billion for this year. As previously highlighted, this projection is based on the assumption that public health containment measures are gradually relaxed over the second quarter, with a concomitant economic recovery. Any delay to the Government's roadmap would worsen the Exchequer deficit.

3.4 Fiscal Outlook 2022-2025

3.4.1 Tax forecasts

The assumed economic recovery will boost taxation receipts over the course of next year and, by end-2022, tax revenue is estimated to be around the level that was expected in 2020 immediately prior to the pandemic. Indirect taxes are assumed to be the main drivers, as consumer spending rebounds strongly next year. In contrast, the direct taxation yield is projected to increase more modestly, reflecting the sectoral composition of employment growth (concentrated in less tax-rich sectors) and the impact of international tax reform (though it is unclear when implementation of any reforms will begin). Over the remainder of the forecast horizon, the aggregate tax yield is forecast to increase at an annual average rate of 5.5 per cent, broadly in line with the assumption for nominal GDP growth over the same period. While the outcome of the Base Erosion and Profit Shifting process remains unclear, the impact of international tax reform is built into corporation tax forecasts. Quantifying the cost – in terms of revenue forgone – is challenging; the numbers assume a \in 2 billion loss relative to baseline by 2025. These figures will be revised as additional information becomes available over time.

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 than in recent years. The Exchequer will also benefit from the distribution of the NAMA surplus: in addition to the ≤ 1 billion to be transferred in 2021, ≤ 0.7 billion is expected to be paid to the Exchequer in 2022, with the potential for further transfers beyond 2022. Forecasts for surplus payments in 2022 and beyond are subject to favourable market conditions and the ability for NAMA to realise its remaining assets at current carrying values.

3.4.3 Expenditure

Given the current unprecedented level of economic uncertainty, expenditure projections for 2022 to 2025 in this document are technical in nature and in particular are not inclusive of any additional policy measures in respect of Covid-19 expenditure. The Ministers and Secretaries Amendment Act 2013 sets out the requirement for the Government to agree, on a rolling basis, three year Government and Ministerial Expenditure Ceilings and to lay these ceilings before Dáil Éireann. In line with this requirement, Government in December 2020 agreed expenditure ceilings for 2022 and 2023 with these ceilings being technical and indicative in nature and falling to be reset taking into account the situation with Brexit, Covid-19, the *National Development Plan (NDP)* review, and the overall fiscal strategy. These technical ceilings saw core spending (spending excluding exceptional supports) growing by c. 3½ per cent per annum over 2022 and 2023 with the exceptional supports unwinding as the public health situation improves and the economy and society recover from the impact of the pandemic. On a technical basis, this growth rate of 3½ per cent in core spending is assumed for 2024 and 2025 with a similar growth rate applied to both capital and current expenditure.

In relation to capital expenditure, the *Programme for Government* committed to bringing forward the planned review of the NDP from 2022 and to using it to set out an updated NDP for the period to 2030. This review is underway and will inform the appropriate level of overall capital expenditure for 2022 and subsequent years.

On the technical basis outlined above, the almost \in 12 billion in additional expenditure in respect of Covid-19 provided for in *Budget 2021* are fully unwound by 2023, apart from certain additional expenditure related to the operation of the automatic stabilisers. In 2022, an indicative amount of \notin 2½ billion is retained to meet pressures that may arise in certain sectors. In addition, there will be a requirement to meet the expenditure related to automatic stabilisers (mainly job-seekers payments), estimated in the region of \notin 1½ billion.

Work is ongoing in relation to finalising agreement in respect of the *Brexit Adjustment Reserve* (BAR). Ireland has already expended a considerable amount on preparing for Brexit, with successive budgets since 2016 providing significant supports for business and the agri-food sectors, as well as infrastructure required at the ports and airport. Based on the EU Commission's proposed allocations, an amount of over €1 billion is included as a capital receipt over 2021 and 2022. It is assumed in the expenditure projections that an equivalent amount will be expended by the end of 2022, and that this is additional

to core spending. The detail in relation to relevant areas of support including for enterprise; agri-food; fisheries; reskilling and retraining; and infrastructure, will be agreed and implemented taking into account the final agreement on the BAR. The *Recovery and Resilience Facility* lies at the heart of the EU's response to Covid-19. Work is ongoing in finalising a *National Recovery and Resilience Plan* (NRRP) setting out reforms and investments to be supported by the facility. As projected receipts from the *Recovery and Resilience Facility* are included on a technical basis, amounts equivalent to those projected receipts are incorporated as expenditure in addition to core spending.

Ultimately, the level of resources to be allocated each year, and in particular in 2022, will be decided taking into account the public health situation, the NDP Review, Programme for Government priorities, the Government's commitment to support the return to employment, and the recovery of society and the economy from the challenges of Covid and Brexit.

For the purposes of table 7 below, the following technical assumptions apply in relation to expenditure:

- Both current and capital core spending grows by c. 3¹/₂ per cent per annum from 2022;
- Exceptional Covid-19 supports are included as current spending;
- Expenditure funded by BAR and for the NRRP are included in capital expenditure amounts.

Table 7: technical assumptions on expenditure, € billion

	2021	2022	2023	2024	2025
Voted Expenditure	87.8	83.7	82.1	84.7	87.4
incl. Covid	12.0	2.5			
provision for Covid automatic stabilisers		1.5	0.8	0.5	0.3
Brexit Adjustment Reserve		1.1			
National Recovery and Resilience Plan		0.2	0.2	0.2	0.2
Core Expenditure	75.8	78.4	81.1	84.0	86.9
core – year-on-year increase		2.6	2.7	2.8	2.9
core - year-on-year increase, per cent		3.4	3.4	3.5	3.5

Source: Department of Finance, Department of Public Expenditure and Reform.

3.4.4 Summary

Taking all of the above together, 2022 will see an improvement in the Exchequer position with a deficit of \in 9.9 billion in prospect. The Exchequer deficit is forecast to continue to reduce over the forecast horizon, reaching \in 1.6 billion by 2025.

	2020	2021	2022	2023	2024	2025
CURRENT BUDGET						
Expenditure						
Gross voted current expenditure	75,635	77,635	72,315	71,405	73,630	75,940
Non-voted current expenditure*	7,585	7,530	7,790	8,000	8,160	8,360
Gross current expenditure	83,220	85,165	80,105	79,405	81,790	84,300
less expenditure receipts and balances	17,400	14,780	14,875	15,560	16,015	16,41
Net current expenditure	65,820	70,385	65,230	63,845	65,775	67,88
Receipts						
Tax revenue	57,165	60,395	64,625	69,020	72,410	75,91
Non-tax revenue	4,650	2,345	1,695	1,525	1,460	1,445
Net current revenue	61,815	62,740	66,320	70,545	73,870	77,35
CURRENT BUDGET BALANCE	-4,005	-7,645	1,085	6,695	8,095	9,470
CORRENT BUDGET BALANCE	-4,005	-7,645	1,085	6,695	8,095	9,470
	-4,005	-7,645	1,085	6,695	8,095	9,47(
CAPITAL BUDGET Expenditure Gross voted capital expenditure**	-4,005 9,650	-7,645 10,165	11,395	6,695	11,055	
CAPITAL BUDGET Expenditure Gross voted capital expenditure**						11,43
CAPITAL BUDGET	9,650	10,165	11,395	10,690	11,055	11,43 1,060
CAPITAL BUDGET Expenditure Gross voted capital expenditure** Non-voted capital expenditure* Gross capital expenditure	9,650 1,910	10,165 5,755	11,395 1,215	10,690 1,255	11,055 1,265	11,43 1,060
CAPITAL BUDGET Expenditure Gross voted capital expenditure** Non-voted capital expenditure*	9,650 1,910 11,560	10,165 5,755 15,920	11,395 1,215 12,610	10,690 1,255 11,945	11,055 1,265 12,320	11,43 1,060 12,49 50
CAPITAL BUDGET Expenditure Gross voted capital expenditure** Non-voted capital expenditure* Gross capital expenditure Less capital receipts	9,650 1,910 11,560 35	10,165 5,755 15,920 50	11,395 1,215 12,610 50	10,690 1,255 11,945 50	11,055 1,265 12,320 50	11,43 1,060 12,49 50 12,45
CAPITAL BUDGET Expenditure Gross voted capital expenditure** Non-voted capital expenditure* Gross capital expenditure Less capital receipts Net capital expenditure	9,650 1,910 11,560 35 11,525	10,165 5,755 15,920 50 15,875	11,395 1,215 12,610 50 12,560	10,690 1,255 11,945 50 11,895	11,055 1,265 12,320 50 12,275	11,43 1,060 12,49
CAPITAL BUDGET Expenditure Gross voted capital expenditure** Non-voted capital expenditure* Gross capital expenditure Less capital receipts Net capital expenditure Capital resources CAPITAL BUDGET BALANCE	9,650 1,910 11,560 35 11,525 3,215 -8,310	10,165 5,755 15,920 50 15,875 6,615 -9,260	11,395 1,215 12,610 50 12,560 1,615 -10,945	10,690 1,255 11,945 50 11,895 1,575 -10,320	11,055 1,265 12,320 50 12,275 1,760 -10,515	11,43 1,060 12,49 50 12,45 1,420 -11,03
CAPITAL BUDGET Expenditure Gross voted capital expenditure** Non-voted capital expenditure* Gross capital expenditure Less capital receipts Net capital expenditure Capital resources	9,650 1,910 11,560 35 11,525 3,215	10,165 5,755 15,920 50 15,875 6,615	11,395 1,215 12,610 50 12,560 1,615	10,690 1,255 11,945 50 11,895 1,575	11,055 1,265 12,320 50 12,275 1,760	11,43 1,060 12,49 50 12,45 1,420

* Central Fund. ** Capital ceilings are purely technical in nature. They are currently being revised in the context of the review of the National Development Plan, to be published in the coming months.

*** 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.

4.1 Summary

Activist fiscal policy means that general government expenditure will reach ≤ 108.6 billion this year. Financing this involves general government revenue of ≤ 90.5 billion, with the shortfall – the general government deficit of ≤ 18.1 billion – bridged through borrowing. For next year, a general government deficit of ≤ 11.6 billion – the equivalent of -2.8 per cent of GDP – is currently projected. These numbers are based on the assumption of existing Government policies.

4.2 General Government Balance in 2021

General government revenue is projected at €90.5 billion this year, the equivalent of 23.5 per cent of GDP. In compositional terms, taxes on income and wealth – mainly income and corporation taxes – are projected at €39.0 billion, an increase of 3.8 per cent relative to last year. Taxes on production and imports (mainly indirect taxes such as VAT, excise and customs duties) amounted to an estimated €25.3 billion, an annual increase of 5.3 per cent. Social security receipts are projected at €16.7 billion, an annual increase of 6.2 per cent. Other general government receipts are projected at €7.8 billion.

General government expenditure is projected at $\in 108.6$ billion this year, or 28.2 per cent of GDP. Primary expenditure – total expenditure excluding debt interest payments – is estimated at $\in 105.2$ billion, mainly due to increased outlays associated with income (PUP) and employment (EWSS) support. Interest expenditure is projected at $\in 3.4$ billion this year, a decline of just under 9 per cent relative to last year.

4.3 General Government Balance in 2022

For next year, general government revenue is projected at €94.2 billion. This would represent an annual increase of 4 per cent, and result in revenue-GDP ratio of 22.9 per cent (revenue-GNI* ratio of 40.9 per cent).

General government primary expenditure is projected at \in 102.1 billion for next year. With a projected interest expenditure amounting to \in 3.7 billion next year – an average (effective) interest rate of 1.5 per cent – this implies general government expenditure of \in 105.8 billion; this would result in an expenditure-GDP ratio of 25.7 per cent (expenditure-GNI* ratio of 45.9 per cent).

Against this backdrop, a general government deficit of €11.6 billion – the equivalent of –2.8 per cent of GDP – is in prospect for 2022.

Table 9: exchequer balance to GGB 2020-2025, € million (unless stated)

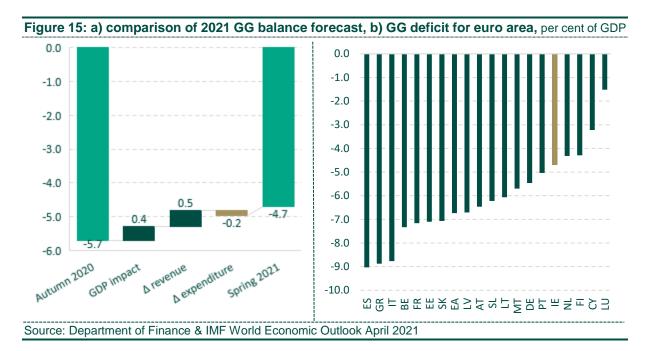
	2020	2021	2022	2023	2024	2025
Exchequer balance	-12,315	-16,905	-9,860	-3,620	-2,420	-1,560
Walk ¹	-6,100	-1,150	-1,755	-1,700	-710	760
General Government balance	-18,415	-18,060	-11,615	-5,320	-3,130	-805
of which:						
General Government revenue	85,780	90,515	94,150	99,470	103,700	108,120
Taxes on production and imports	24,050	25,325	27,050	28,455	30,205	31,540
Current taxes on income, wealth	37,565	39,005	40,920	43,370	46,010	48,215
Capital taxes	505	490	520	545	570	595
Social contributions	15,765	16,745	17,235	17,720	17,790	18,210
Property Income	1,160	1,120	755	1,175	990	1,040
Other	6,740	7,835	7,670	8,210	8,135	8,520
General Government expenditure	104,200	108,575	105,765	104,790	106,835	108,920
Compensation of employees	24,850	25,680	26,600	27,040	27,985	28,865
Intermediate consumption	14,660	15,775	16,165	16,580	16,835	17,315
Social payments	39,035	39,985	36,190	33,210	33,265	33,255
Interest expenditure	3,685	3,360	3,665	3,830	3,795	3,445
Subsidies	5,655	6,115	3,375	3,145	2,265	2,310
Gross fixed capital formation	9,795	11,105	12,295	13,355	14,350	14,840
Capital transfers	2,130	1,760	2,520	2,755	3,305	3,720
Other	4,390	4,795	4,950	4,875	5,035	5,175
Resources not allocated	0	0	0	0	0	0
memo items						
GGB per cent GDP	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2
GGB per cent GNI*	-8.9	-8.4	-5.0	-2.2	-1.2	-0.3
Total revenue per cent GDP	23.4	23.5	22.9	23.0	22.9	22.8
Total expenditure per cent GDP	28.4	28.2	25.7	24.3	23.6	23.0
Total revenue, per cent GNI*	41.5	42.3	40.9	41.3	41.2	41.2
Total expenditure, per cent GNI*	50.4	50.7	45.9	43.5	42.5	41.5

Figures rounded to the nearest €5 million, which 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* 2021 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

Figure 15a compares the Department's spring forecasts for the general government balance with its previous forecast, published in the *Economic and Fiscal Outlook* last autumn. The forecast for the general government balance has improved due to a decline in expenditure while benefiting from an upward revision of economic output. Figure 15b compares the projected deficit for this year with that for other euro area Member States; the key takeaway is that Ireland's deficit is in line with the norms elsewhere.



4.5 Structural Budget Balance

For completeness, estimates of the structural balance are presented in table 10, based on the Department of Finance preferred methodology.³⁹ It must be stressed, however, that these estimates are subject to even larger uncertainty than normal, given the scale of the shock to the economy. The numbers presented will be updated over time as more information becomes available. Box 6 sets out the approach taken by the Department in relation to calculating temporary measures.

Based on this approach, a structural deterioration of 1.2 pp is estimated to have occurred last year, with a structural deficit of 0.7 per cent recorded for 2020. A further deterioration of 0.3 pp in the structural balance this year suggests an underlying deficit of 1.0 per cent for 2021. While the headline deficit is expected to improve by 1.9 pp in 2022, the structural position is projected to worsen as 0.9 pp of the headline improvement is due to changes in the cycle and a further 1.8 pp is accounted for by a reduction in temporary measures next year. Significant structural improvements are expected from 2023 onwards. As such, Ireland's Medium-Term Objective (MTO) of a structural deficit of 0.5 per cent of GDP is expected to be achieved by the end of the forecast horizon.

³⁹ See Murphy et al. (2018) https://www.gov.ie/en/publication/65c119-estimating-irelands-output-gap/

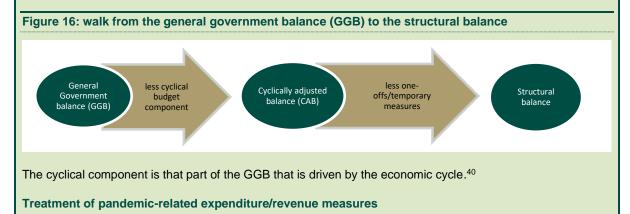
Table 10: structural budget balance, per cent of GDP (unless stated)

	2020	2021	2022	2023	2024	2025
Headline fiscal developments						
General government balance	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2
One-off / temporary measures	-2.9	-2.4	-0.6	0.0	0.0	0.0
Interest expenditure	1.0	0.9	0.9	0.9	0.8	0.7
General government primary balance	-4.0	-3.8	-1.9	-0.3	0.1	0.6
Economic cycle						
GDP growth rate	3.4	4.5	5.0	3.5	3.2	3.1
Potential GDP growth, per cent	5.1	4.1	3.4	2.9	2.7	3.0
Output gap	-2.4	-2.1	-0.6	-0.1	0.4	0.5
Structural fiscal developments						
Cyclical budgetary component	-1.4	-1.2	-0.3	-0.1	0.2	0.3
Cyclically adjusted balance	-3.6	-3.4	-2.5	-1.2	-0.9	-0.4
Structural budget balance	-0.7	-1.0	-1.9	-1.2	-0.9	-0.4
Structural primary balance	0.3	-0.2	-1.0	-0.3	-0.1	0.3

Estimates of output gap based on the Department's preferred methodology for calculating the potential output. Figures may not sum due to rounding. pp is percentage points. Source: Department of Finance

Box 6: Estimating the structural balance in the context of the Covid-19 pandemic

Figure 16 presents a graphical representation of the walk from the GGB to the structural balance. The structural balance aims to provide an estimate of the underlying budgetary position by correcting for the impact of the economic cycle and temporary or one-off events.



In addition to questions regarding the cyclical component of the decline in the headline deficit, the pandemic has added an additional layer of complexity to estimating the structural balance, relating to the classification of crisis support measures as temporary. Table 11 below sets out the items classified as temporary measures by the Department of Finance, and therefore removed from the structural balance.⁴¹ Specifically, €14.9 billion of

⁴⁰ The cyclical component can be denoted in algebraic terms as ε^*OG , where ε = the semi-elasticity of the budget balance to the cycle and OG = the output gap. The semi-elasticity of the budget balance to the cycle captures the relationship between the GGB and the economic cycle. Estimates of this relationship were made before the current pandemic. Given the nature of the pandemic and the expenditure measures taken this estimate may change as a result of the pandemic. For this piece of work, it is assumed that the semi-elasticity remains unchanged from precrisis times (at 0.588).

⁴¹ These estimates represent initial attempts to identify temporary measures.

pandemic-related expenditure in 2020 and a further €12.0 billion in 2021 have been identified. An additional €2.5 billion of pandemic-related is also expected next year.

As referenced above, the structural balance adjusts for the economic cycle, removing expenditures and revenues associated with changes in the cycle. Typically, the largest component of government spending that is cyclical in nature is unemployment expenditure. However, during the Covid-19 crisis, the increase in unemployment-related expenditure has largely been borne by crisis income supports such as the PUP and the Wage Subsidy schemes. Therefore, the classification of all crisis income supports as temporary measures would unduly improve the structural balance.

Under its preferred methodology, the Department's unemployment rate forecasts are used to estimate the output gap. These forecasts include estimates of recipients of PUP payments. As this is a direct input into the output gap calculation, meaning the associated expenditure contributes to the cyclical component, PUP expenditure is removed from Covid-19-related temporary expenditure, in order to avoid a double-count.

On the revenue side, the standard rate of VAT was temporarily reduced from 23 to 21 per cent between September 2020 and March 2021. Furthermore, the VAT rate in the hospitality and tourism sector has been temporarily reduced from 13.5 per cent to 9.5 per cent and a stay and spend tax credit initiative was introduced to encourage expenditure on holiday accommodation and dining in Ireland. These measures are classified as temporary or once off tax expenditures. In addition, unpaid VAT and PAYE debts arising as a result of the pandemic can be parked (warehoused) for 12 months. While the repayment of the 'warehoused' amount is included in general government revenue, there is a working assumption that 50 per cent of the 2020 'warehoused' figure and 25 per cent of the 2021 'warehoused' figure will not be repaid and will be written off. The assumed write-off of just over €1 billion between 2020 and 2021 is included as a once-off. On top of the above pandemic-related measures, a large one-off stamp duty receipt of €580 million was recorded in 2020. ⁴²

	2020	2021	2022	2023	2024	2025
Expenditure						
a)Covid-19 related expenditure	14,916	11,960	2,500	0	0	0
b)PUP expenditure	5,000	3,300	0	0	0	0
c) (=a-b) Expenditure one offs	9,916	8,660	2,500	0	0	0
Revenue						
d)Tax warehousing write off	950	88	0	0	0	0
e)Reduction in standard VAT rate	280	160	0	0	0	0
 f) Reduction in VAT rate in hospitality sector 	0	340	0	0	0	0
g)Stay and Spend Initiative	0	2	0	0	0	0
h)Stamp Duty	-580	0	0	0	0	0
i) (=d+e+f+g-h) Revenue measures	650	590	0	0	0	0
Sub Total	10,566	9,250	2,500	0	0	0

Table 11: one off and temporary measures, € millions (unless stated)

⁴² This improves the GGB but is omitted from the structural balance because of its temporary nature

5.1 Summary

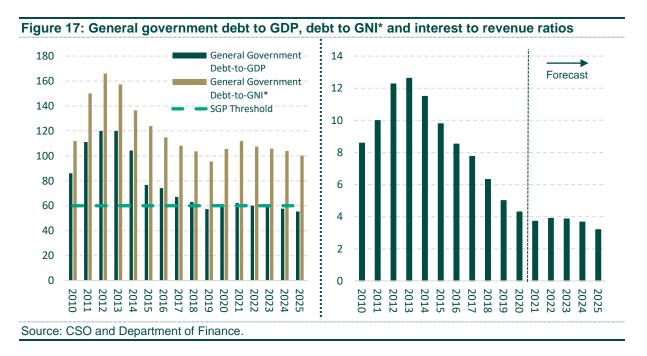
As outlined earlier, the Government has actively used its balance sheet to minimise the economic disruption from the pandemic. This has been the appropriate approach, given that the shock is exogenous, i.e. unrelated to economic imbalances or mismanagement of the economy. Public indebtedness has increased accordingly, from \in 204 billion immediately pre-pandemic to an estimated \notin 239.3 billion this year. A further increase to \notin 247.4 billion is in prospect for next year. The debt-to-modified gross national income ratio, which was nearly 96 per cent in 2019, is expected to peak at just under 112 per cent this year and decline thereafter.

Monetary policy, namely the ECB's asset purchase programme – the *Pandemic Emergency Purchase Programme* – under which national central banks of the euro area purchase large quantities of sovereign debt instruments in the secondary market, has helped to absorb much of the debt issuance over the past year. This has lowered sovereign borrowing costs in all euro area Member States, and means that in many of these – including Ireland – the national central bank is the largest single creditor to the Government.

5.2 Debt Developments

The mobilisation of large fiscal support to limit the economic disruption from the pandemic has resulted in an increase in public indebtedness. At end-2020, Ireland's outstanding general government gross debt stood at €218.2 billion, the equivalent of 105.6 per cent of GNI* (59.5 per cent of GDP), and an increase of 10 percentage points of GNI* relative to a year earlier.

Further public debt accumulation is in prospect for this year. The gap between revenue and expenditure projected for the coming year will be largely financed by issuing Irish sovereign debt instruments, thereby increasing general government liabilities. On the basis of current expectations for the headline deficit, the stock of outstanding public indebtedness is projected to increase to €239.3 billion by end-2021; this would result in a debt-GNI* ratio of just under 112 per cent (debt-GDP of 62.2 per cent).



Notwithstanding the rapid increase in public indebtedness, financing conditions remain favourable *inter alia* due to a supportive monetary policy backdrop in the euro area. Debt interest payments as a percentage of total revenue – an important indicator of repayment capacity as it sets out the share of revenue absorbed by debt interest payments – is set out in figure 17. The key takeaway from this is that the burden of servicing public debt has not deteriorated on foot of increased liabilities. Of course, once the exceptional monetary support is withdrawn, accumulated liabilities will need to be refinanced at potentially higher rates (albeit not immediately, given the maturity profile of these instruments). It will be important to maintain a pathway that shows the debt-income ratio on a declining trajectory over the medium-term, in order to ensure roll-over of debt at reasonable rates into the future.

	2020	2021	2022	2023	2024	2025
	2020	2021	2022	2023	2024	2023
Gross debt (€ billions)	218.2	239.3	247.4	254.6	261.2	262.9
Gross debt ratio	59.5	62.2	60.2	59.0	57.7	55.4
Change in gross debt ratio(=1+2+3)	2.2	2.7	-2.0	-1.2	-1.3	-2.3
Contributions to change in gross debt ratio^:						
General Government deficit (1=1a+1b)	5.0	4.7	2.8	1.2	0.7	0.2
: interest expenditure (1a)	1.0	0.9	0.9	0.9	0.8	0.7
: primary deficit (1b)	4.0	3.8	1.9	0.3	-0.1	-0.6
SFA (2=2a+2b+2c+2d+2e+2f+2g)	-1.2	0.8	-0.9	0.4	0.8	0.2
: change in liquid assets (2a)	0.2	0.0	-1.3	0.2	0.4	-0.1
: interest adjustments (2b)	0.2	0.1	0.0	0.1	0.1	0.1
: equity transactions (2c)	-0.7	-0.1	-0.1	-0.1	-0.2	-0.2
: accrual adjustments (2d)	0.2	0.4	0.1	0.0	0.2	0.2
: impact of ISIF (2e)	0.0	0.0	0.0	0.0	0.0	0.0
: collateral held (2f)	0.0	0.0	0.0	0.0	0.0	0.0
: other (2g)	-1.2	0.3	0.4	0.3	0.3	0.1
Nominal GDP contribution (3)	-1.6	-2.8	-4.0	-2.9	-2.7	-2.6
Memorandum items:						
: average interest rate	1.8	1.5	1.5	1.5	1.5	1.3
: gross debt per cent of GNI*	105.6	111.8	107.4	105.8	103.9	100.1

Table 12: general government debt developments, per cent of GDP (unless stated)

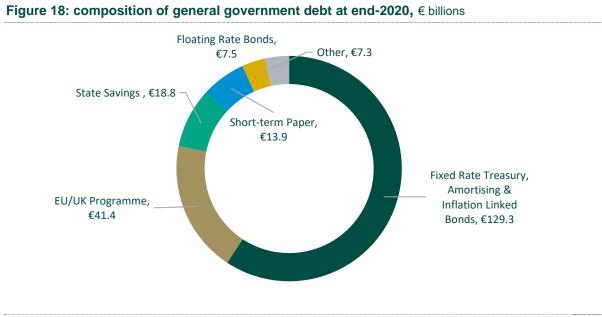
^ A positive sign indicates that a component is increasing the debt ratio and vice versa.

SFA = stock-flow adjustment

Source: CSO, Department of Finance and NTMA (National Debt data provider).

5.3 Structural Aspects of Irish Debt

Figure 18 shows the compositional breakdown of outstanding general government liabilities at end-2020. Of the total outstanding liabilities of \in 218.2 billion, over half of these were fixed rate treasury, amortising and inflation linked bonds. Obligations to the official sector – the EFSM and EFSF – were the next most important, accounting for around a fifth of liabilities. Of particular note has been the steady decline in recent years of the Floating Rate Notes (FRN's) issued in 2013 (to replace the IBRC promissory notes held by the Central Bank). Over the course of 2020, the NTMA purchased, and subsequently cancelled, \in 1 billion of FRN's from the Central Bank, replacing them with medium-to long –term fixed rate market funding.



Source: CSO and NTMA (National Debt data provider). 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 the financial assets corresponding to the categories of financial liabilities, which comprise gross debt) is reported in table 13. The financial assets deducted include:

- Liquid assets held by the exchequer;
- Ireland Strategic Investment Fund cash and non-equity investments; and,
- Other cash and assets held by general government.

	2020	2021	2022	2023	2024	2025
General government debt (gross)	59.5	62.2	60.2	59.0	57.7	55.4
EDP debt instrument assets	8.3	7.8	6.0	6.0	6.1	5.8
Net debt position	51.2	54.3	54.1	53.0	51.6	49.7

 Table 13: gross and net general government debt, per cent of GDP at end-year

Net public indebtedness is lower than the gross figure; taking account of financial assets held by the general government sector, net public indebtedness is estimated at around 54.3 per cent of GDP at end-2021.

Finally, Ireland's long-term credit rating is now firmly in the "A" category with all the main rating agencies as set out in table 14.

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

5.4 Funding Developments

The NTMA has so far this year issued \in 7 billion⁴³ of Government bonds from the funding range of \in 16 to \in 20 billion announced last December. This issuance was completed at a weighted average yield of -0.2 per cent and a weighted average maturity of just under 12 years.

Issuance included a new 10-year benchmark bond, which matures in October 2031. In a syndicated transaction in January, \in 5.5 billion of this bond was issued at a yield of -0.26 per cent. There was also a dual bond auction in March, with \in 1.05 billion of the new 10-year bond (0 per cent coupon, maturing in 2031) being sold at a yield of 0.01 per cent, and \in 450 million of the 30-year bond (1.5 per cent coupon, maturing in 2050) being sold at a yield of 0.67 per cent.

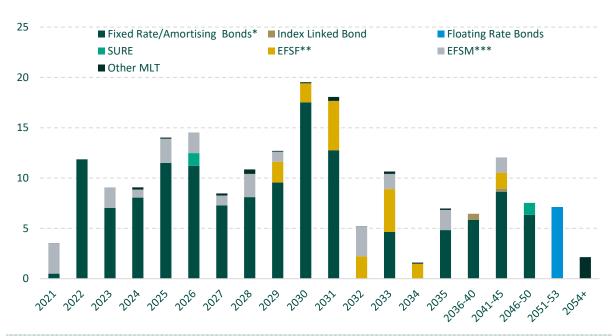


Figure 19: maturity profile of Ireland's medium and long-term debt, € billion at end-March 2021

*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. 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.

⁴³ Excludes non-competitive auctions

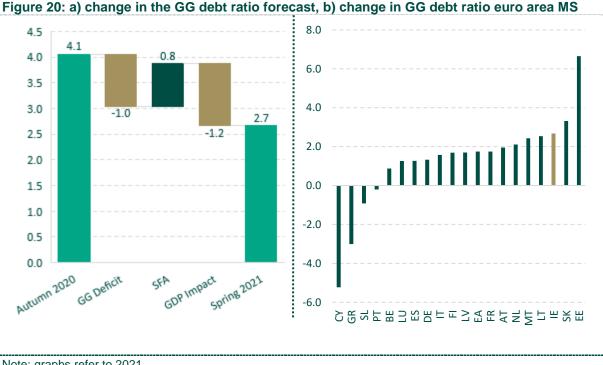
Ireland was also able to diversity its funding base through borrowing $\in 2.5$ bn from the EU SURE⁴⁴ Programme in the first quarter of 2021. This programme provides support to EU Member States to protect employment in the context of the pandemic. The loan comprises two individual tranches: a $\in 1.3$ billion zero-coupon tranche with a 5-year maturity, and a $\in 1.2$ billion tranche with 0.45 per cent coupon and a 25-year maturity.

Cash balances at end-March were a healthy €25.7 billion, up from €17.4 billion at end-2020. The Exchequer has minimal refinancing needs in 2021, as there are no benchmark bonds maturing this year. Notably, in March the £0.4 billion tranche of the £3.2 billion UK bilateral loan was repaid. An EFSM loan comes due in June 2021, but this will be extended as part of the 2013 agreement to extend the maturities of EFSF and EFSM loans.⁴⁵ Looking ahead to 2022, two bonds with an aggregate outstanding balance of just under €12 billion will mature (March, October).

5.5 Comparison of Forecasts

Figure 20a compares the Department's latest forecast for the change in the general government debt ratio for 2021 against the previous forecasts published in the *Economic and Fiscal Outlook* last autumn. This year, the debt ratio is projected at 62.2 per cent, a 4.4 percentage point decrease relative to the autumn forecasts.

The 2021 debt ratio is forecast to increase by 2.7 per cent of GDP in comparison to 2020, this is an improvement on the previous forecast of a 4.1 percentage point increase. The movement in the debt ratio is positively impacted by the revised forecasts for the general government deficit and GDP growth. Figure 20b compares the annual movement in the debt ratio for euro area Member States for 2021.



Note: graphs refer to 2021 Source: Department of Finance & IMF World Economic Outlook April 2021

⁴⁴ Support to mitigate Unemployment Risks in an Emergency

⁴⁵ EFSF (= European Financial Stability Facility), a bilateral loan facility arrangement among euro area Member States that has subsequently been replaced by the European Stability Mechanism (ESM); EFSM (= European Financial Stabilisation Mechanism), a loan facility arrangement operated by the European Commission.

6.1 Summary

While the outlook for the Irish economy has improved since autumn, there continues to be substantial uncertainty surrounding the baseline forecast. The evolution of the virus remains difficult to predict and, while mass vaccination programmes are now underway, downside risks dominate the outlook. In particular, vaccines could prove less effective than expected, *inter alia* due to the emergence of vaccine-resistant variants. In this context, the slow vaccine roll-out in other parts of the world increases the risk of vaccine-resistant strains, necessitating continued public health restrictions to contain the virus.

The analysis set out in this chapter considers the economic impact of a virus-induced extension of containment measures. Also set out is an overview of the 'contingent, financial liabilities of the State, as well as the Department's assessment of the main short- and medium-term risks (the 'risk matrix').

6.2 Scenario analysis

The baseline scenario, outlined earlier in this document, rests on the assumption that vaccination is scaled-up over the second quarter, with rising vaccine coverage allowing for a more significant easing of containment measures over the summer. Lower levels of public health restrictions are assumed in the second half of the year; with minimal restrictions on economic activity assumed in place next year, this will allow for a substantive, and sustained, economic recovery.

However, given the degree of uncertainty at present, it is important to 'stress-test' the potential economic impact of an alternative epidemiological scenario. The analysis set out below is based on a severe epidemiological scenario in which stringent restrictions need to remain in place for a prolonged period. The analysis does not assess the probability of such a scenario – an impossible undertaking – but simply aims to quantify the economic fall-out of enduring containment measures.

In the short-term, continuing public health restrictions would keep businesses in contact-intensive sectors shut, with employees reliant on government supports. An extended lockdown would adversely affect confidence, causing consumers to maintain their high rates of savings and businesses to postpone further investments. This would dampen the recovery in consumer spending and in investment relative to that projected in the Department's baseline projection.

In the longer-term, a slow exit from social restrictions raises the probability of deeper and wider 'scarring' effects. Some businesses would fail under the strain of a continuing lockdown, leading to more jobs being permanently lost. As insolvency rates pick up, higher (relative to baseline) levels of non-performing loans raise the risk of a feedback loop between the financial sector and the real economy, for instance through credit rationing. Unemployment could become entrenched due to hysteresis effects, with a higher risk of skills mismatches.⁴⁶

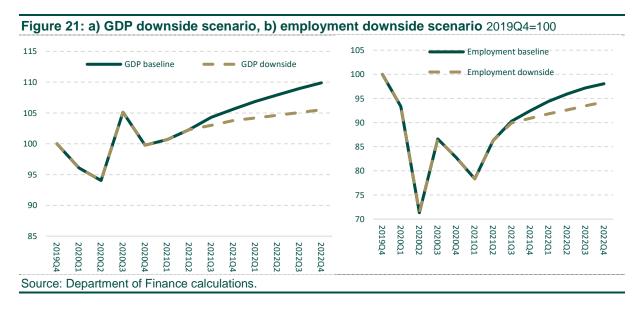
To calibrate the economic impact of such a severe epidemiological scenario, research undertaken jointly by the Department of Finance and the ESRI (forthcoming – see also box 6) is drawn upon. The modelling assumes that some element of restrictions remains in place over the medium-term, due to

⁴⁶ Though not explicitly modelled, a similar situation may play out on the external front, given that other countries could re-impose restrictions on foot of a new wave arising from a vaccine-resistant strain. This could result in prolonged weakness in the global economy, reducing the demand for Irish exports.

unforeseen circumstances, such new COVID variants rendering the vaccines ineffective; again, this is not a forecast, it is a scenario analysis.

This scenario is modelled as a shock to output and employment in the non-traded sector that is around three-quarters of the shock observed in the second quarter of last year, and slightly less so for consumption. The outcome of the shock is to delay the recovery in 2021 and 2022 due to the continuation of public health measures and increased uncertainty, resulting in a slower overall recovery. Importantly, there is a permanent loss or 'scar' (of 5 per cent) to non-traded employment and output (as some businesses do not survive repeated levels of restrictions).

Figure 21 shows the impact of this severe epidemiological scenario relative to the baseline scenario. The results of this analysis is then super-imposed on the Department's baseline projections to illustrate a possible severe scenario that captures a number of the main downside risks. Although firms and households have over the past year adapted to the new trading environment, they still have to grapple with Covid and social restrictions for the remainder of 2021 and some form of these beyond due to the potential threat of variants, leading to a slow recovery in the domestic economy.



Overall, GDP growth would be reduced (relative to baseline) by 0.8 percentage points (pp) this year and by 2.6 pp next year, resulting in reduced growth of 3.7 per cent and 2.4 per cent respectively (versus baseline projections of 4.5 and 5 per cent respectively). The lower impact for this year takes account of the fact that the assumptions for the first half of the year are broadly in line in both the baseline and downside scenarios. At the end of next year, the Irish economy would be approximately 4½ pp smaller relative to the baseline scenario.

An intermediate scenario is also modelled, involving some level of repeated restrictions, though each of a diminishing impact as vaccine programmes are implemented. This 'repeated waves' scenario would lead to an impact on GDP of roughly two-thirds that of the downside scenario.

Turning to the impact on the labour market, the downside scenario would lower employment growth by 1 pp this year and 3 pp next year. As a result, the unemployment rate would be 1 pp higher this year, bringing it to 17 per cent for the year, and around 3 pp higher in 2022, resulting in an unemployment rate of about 11 per cent.

Table 15: Baseline versus downside projections, per cent

	2021	2022
GDP baseline	4.5	5.0
GDP downside	3.7	2.4
Employment baseline	4.0	11.0
Employment downside	3.4	7.7
Unemployment baseline	16.3	8.2
Unemployment downside	17.0	11.0
Source: Department of Finance calculations.		

6.3 Contingent and other liabilities⁴⁷

Contingent liabilities are potential liabilities facing the government that have a potential to pose a future cost if the conditions upon they are contingent on occur.

The 2019 Appropriation Accounts for the year ended 31 December 2019⁴⁸, published last September, contain notes on contingent liabilities listed under the various votes. While the amounts are not quantifiable, they provide an insight on potential costs facing each vote.

The most common form of contingent liabilities are government guarantees, which are reported in table 16. Additional details on government guaranteed liabilities can be accessed in the Finance Accounts (Statement 1.11).⁴⁹

2019	2020
0.0	0.2
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.2
	0.0 0.0 0.0

 Table 16: contingent liabilities, per cent of GDP at end-year

Note: Rounding may affect totals.

2020 represents forecasted values, which are subject to future revisions. Source: Department of Finance, CSO.

Other liabilities

The State has certain other long-term future payment liabilities, which are contractually conditional on the continued availability to the State of public infrastructure provided under public private partnerships (PPPs). The calculation of the contractual capital value of all Irish PPPs as at December 2019 is ≤ 0.5

⁴⁷ Information on contingent and other off-balance sheet liabilities will be outlined in a forthcoming publication by the department.

⁴⁸https://www.audit.gov.ie/en/find-

report/publications/appropriation%20accounts/appropriation%20accounts%202019.html

⁴⁹ https://www.gov.ie/en/publication/89166-finance-accounts-2019/

billion on the government balance sheet, and almost €5 billion off-balance sheet amounting to an overall total of almost €5.5 billion.

The Department of Public Expenditure and Reform (DPER) measures the accrued liability of the occupational pension promises that the State has made to its serving and former employees. An actuarial review of the State's pension liabilities was completed in 2020, using 2018 data.⁵⁰ It concluded that the value of accrued public service pension obligations is estimated to be \in 149.6 billion as at 31st December 2018 (on the basis that future pension increases are in line with pay parity; the accrued liability figure falls to \in 126.6 billion if increases are in line with consumer price inflation).

The separate obligation for the contributory and non-contributory old age State pension is assessed as part of the actuarial reviews of the Social Insurance Fund (SIF) which are carried out at 5-yearly intervals. An actuarial review of the SIF, which is based on data for year ending 31^{st} December 2018, was completed by the Department of Social Protection last December. The value of the State's Accrued to-date Liability (ADL) in respect of social security pension schemes was estimated to be \in 359.2 billion as at 31st December 2018.⁵¹

Ireland also has a commitment to provide capital (either paid-in or callable capital) to the various international organisations of which it is a member. Ireland's potential liability relating to callable capital is approximately 3.6 per cent of GDP. The most significant of these contingent or potential liabilities is Ireland's callable commitment of approximately €9.87 billion to the European Stability Mechanism.

⁵⁰ https://www.gov.ie/en/publication/70acca-actuarial-review-of-public-service-pension-liabilities/

⁵¹ https://www.gov.ie/en/publication/e1233-accrued-to-date-liability-social-security-pension-schemes/

Table 17: macroeconomic risk assessment matrix

Risk	Likelihood	Origin	Impact and main transmission channel
Downside			
Vaccine resistant variants	n.q.	External	High – emergence of new variants resistant to current vaccines could lead to further infection waves and a re- imposition of 'lockdown'
Delayed vaccine rollout	n.q.	External	High – A delay in the global roll-out of vaccines, or a reduction in their efficacy (e.g. due to 'side-effects') would lengthen the duration of public health containment measures, with direct spill-overs to the economy
Financial sector amplification	Medium	External/ domestic	High – a prolonged downturn could lead to spill-overs to the financial sector, potentially giving rise to a negative feedback loop between the financial sector and the 'real' economy
De-globalisation	Low	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
Premature policy withdrawal	Medium	External	High – premature fiscal tightening in main trading partners and/or a premature withdrawal of monetary stimulus due to an 'inflation shock' would lead to a weaker-than-expected recovery in external demand
Brexit 'after-effects'	Medium	External	Medium – the UK will impose full customs checks only from the beginning of next year
Inflation shock	Low	External	High – a sustained rise in inflation could trigger higher (market / policy) interest rates
Larger-than-expected scarring	Medium	Domestic	Medium – the pandemic may result in larger permanent effects on the domestic economy than anticipated
Upside			
Less scarring effects	Low	Domestic	Medium – less permanent scarring effects causing a quicker bounce back and shorter recovery period
Early vaccination / treatment	Low	Domestic	High - early vaccination will allow individuals to return to work and businesses to re-open earlier than expected
Stronger output from MNCs	Medium	External	Medium – stronger production (and exports) numbers in virus-resistant sectors (ICT, pharma, medical devices, contract manufacturing etc.) could boost headline GDP numbers
Larger spending rebound	Medium	Domestic	High – a stronger unwinding of 'excess' savings would boost consumer spending in labour-intensive sectors
n.q. = non-quantifiable. Source: Department of Finance.			

able 18: 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 ever more significant			
Ageing population	Medium	Medium – Ireland's population is ageing rapidly with significant additional outlays required annually simply to maintain existing levels of service			
Corporation tax	High	High – revenue from this source is expected to fall on foot of international tax policy changes, with the concentration in a small number of payers a further revenue risk			
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			
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 16 provides more detail)			
External					
Borrowing costs	Low	Medium – government financing has benefitted from supportive bond market conditions and any change could result in higher debt service costs			
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 – while Ireland's 2030 climate change and renewable energy targets are to be determined they are likely to be very ambitious and failure to comply will have financial costs			
Litigation Risk	Medium	Medium – an adverse or unexpected outcome of litigation against the State which resulted in additional expenditure could pose a risk to the achievement of budgetary targets			

Source: Department of Finance.

additional expenditure could pose a risk to the achievement of budgetary targets

7.1 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 joint youngest median age in the EU, with the highest share of the population aged less than 19 years (27 per cent) and the lowest share of the population aged 65 years or over (14 per cent). Additionally, Ireland has one of the highest fertility rates in the EU.⁵²

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 has been implemented in recent years in order to mitigate the future impact on the public finances.

7.2 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.⁵³ The main results from the forthcoming *2021 Ageing Report* are summarised in table 19. The ageing costs rely partly on long-term demographic projections produced by *Eurostat*.⁵⁴ 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 2018.⁵⁵ An update of this analysis will be published over the summer.

In March, the Department of Finance made a submission to the *Commission on Pensions*.⁵⁶ The purpose of this submission was to highlight the likely economic and budgetary impacts of demographic change in Ireland. This builds on work undertaken by the Department in conjunction with other Finance Ministries in the European Union, together with the European Commission, through the Ageing Working Group (AWG), a sub-group of the EPC, and attempts *inter alia* to quantify the likely budgetary costs of population ageing in order to inform the appropriate policy response.⁵⁷

Ireland's demographic profile is set to change significantly over the coming decades.⁵⁸ The population aged 65 and over is projected to grow significantly faster than the population aged 20 to 64, i.e. the

⁵⁵ https://www.gov.ie/en/publication/2e8463-population-ageing-and-the-public-finances/

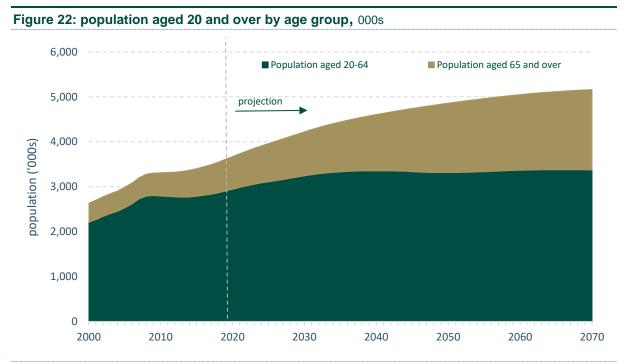
⁵² 2019 Eurostat Population data. https://ec.europa.eu/eurostat/web/population/overview

⁵³ 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.
⁵⁴ The macro-economic assumptions and the methodologies used in the European Commission (EC)-EPC 2021 Ageing Report are published in the 2021 Ageing Report: Underlying Assumptions and Projection Methodologies. https://ec.europa.eu/info/sites/info/files/economy-finance/ip142_en.pdf

⁵⁶ In November 2020, and consistent with the Programme for Government, the Government established the Commission on Pensions. The remit of the Commission is to examine sustainability and eligibility issues with the State Pension and the Social Insurance Fund. The Commission will also consider the issue of retirement ages in employment contracts and consider how the pension system can further accommodate carers.

 ⁵⁷ https://www.gov.ie/en/publication/c199e-department-of-finance-submission-to-the-commission-on-pensions/
 ⁵⁸ Projection period 2019-2070.

working age population over the projection period.⁵⁹ Reflecting these changes, the old age dependency ratio is set to increase from approximately 24 per cent in 2019 to 47 per cent by 2050.⁶⁰ Put another way, while there are currently around 4 persons of working age for each person aged 65 and over; by 2050, the equivalent figure will be just over 2.



* 2000-2013 population data from the CSO. Population estimates from 2014 onwards are based on *Eurostat* estimates/projections.

Source: CSO Population and Migration estimates, Eurostat EUROPOP 2019 and Eurostat demography and migration database.

7.3 Long-Term Budgetary Prospects

Total age-related public expenditure is projected to increase by more than 6 percentage points of GDP over the projection period, reaching 19.5 per cent of GDP in 2070.⁶¹ When seen through the prism of GDP, age-related public expenditure in Ireland is projected to remain below the EU average over the forecast horizon (EU-27 average total age-related expenditure is projected to be 26 cent of GDP in 2070). However, these metrics are heavily affected by denominator effects as GDP overstates the size of the Irish economy.⁶² As set out in Department of Finance (2018, *op cit*), the metrics can be scaled by GNI*, and these are also presented in table 20 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 10.2 percentage points by 2070, to 31.6 per cent of GNI*, above the projected EU and euro area average for the same point in time.

⁵⁹ While the State Pension Age in Ireland is currently 66 years of age, the working age population is defined here as 20-64 to allow for cross-country comparison.

⁶⁰ The Old-Age Dependency Ratio (OADR), a key metric in demographic analysis, is defined here as the population aged 65 and above divided by the population aged 20-64. The OADR is often used internationally as a proxy indicator of the ratio of the non-working to the working population.

⁶¹ Expenditure developments are in reference to the base year, 2019. The exercise to project age-related expenditure is carried out on a 3-year cycle. The 2021 Ageing Report will be published in Q2 2021.

⁶² 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/

Pension-related expenditure, the biggest component of age-related expenditure, is projected to increase by 4.9 percentage points by 2070, while expenditure on healthcare and long-term care is projected to increase by 2.3 and 3.2 percentage points of GNI*, respectively. Operating in the other direction, the projected expenditure on education is expected to decrease by 0.2 percentage points over the projection period.

	2019	2030	2040	2050	2060	2070
Total age-related expenditure	13.2	15.2	16.7	18.1	18.9	19.5
- Total pension expenditure	4.6	5.9	6.9	7.5	7.5	7.6
: State (Social Welfare) pension	3.5	4.4	5.2	6.1	6.6	6.9
: Public Sector pension	1.0	1.5	1.6	1.4	0.9	0.7
- Health care	4.1	4.4	4.8	5.1	5.4	5.5
- Long-term care	1.3	1.6	2.0	2.4	2.8	3.2
- Education	3.3	3.2	3.1	3.2	3.2	3.2
Main Demographic Developments	2019	2030	2040	2050	2060	2070
Labour input (growth rate)	2.1	0.3	0.2	0.1	0.1	-0.1
: Employment (growth rate)^	2.1	0.3	0.1	0.1	0.1	-0.1
: Hours worked per employee (growth rate)	0.1	0.0	0.0	0.0	0.0	0.0
Labour productivity (growth rate)	3.4	1.2	1.5	1.5	1.5	1.5
: Total Factor Productivity (growth rate)	1.6	0.9	1.0	1.0	1.0	1.0
: Capital deepening (growth rate)	1.8	0.3	0.5	0.5	0.5	0.5
Potential GDP (growth rate)	5.6	1.4	1.7	1.6	1.7	1.5
population aged >= 65 ('000s)	704	981	1,254	1,543	1,683	1,787
Population aged 20-64 ('000s)	2,904	3,241	3,353	3,315	3,366	3,374
Old-age dependency ratio (per cent)	24.2	30.3	37.4	46.5	50.0	53.0

Table 19: long-term spending projections, per cent of GDP unless otherwise stated⁶³

^ 15-74 basis. Rounding may affect totals.

Source: Ageing Report 2021 and Department of Finance calculations.

⁶³ Under the Ageing Report framework, total age-related expenditure is made up of total pension expenditure, health care, long-term care and education expenditure. Total pension expenditure in Ireland includes State (Social Welfare) pension and the Public Sector pension. State (Social Welfare) Pension expenditure is made up of the following components: Old Age (including flat component and minimum, i.e. State Contributory and Non-Contributory Pension), Survivors' (including Widows'/Widowers'/Surviving Civil Partners' Pension), Disability (including Invalidity Pension, Disability Pension, Blind Pension) and Other (including Illness Benefit, Deserted Wife's Allowance and Benefit).

	2019	2030	2040	2050	2060	2070
Total age-related expenditure	21.4	24.7	27.2	29.5	30.7	31.6
- Total pension expenditure	7.4	9.6	11.2	12.1	12.2	12.3
: State (Social Welfare) pension	5.8	7.2	8.5	9.9	10.7	11.3
: Public sector pension	1.6	2.4	2.7	2.3	1.5	1.1
- Health care	6.6	7.2	7.8	8.3	8.7	8.9
- Long-term care	2.0	2.7	3.2	3.9	4.6	5.2
- Education	5.3	5.3	5.0	5.2	5.2	5.1

Source: Ageing Report 2021 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 AWG.⁶⁴ The sensitivity scenarios are applied to the State (Social Welfare) pension expenditure projections and shown in figure 23 below.

Reflecting weaker growth in the working-age population relative to those aged 65 and over, a scenario with a fertility rate 20 percentage points lower than the baseline rate would suggest an increase in annual pension expenditure of 1.4 percentage points of GNI* by 2070 compared to the baseline. Similarly, a scenario with higher life expectancy (by two years) results in an increase in annual pension expenditure of 0.6 percentage points of GNI* by 2070, as, ceteris paribus, recipients spend longer in retirement.

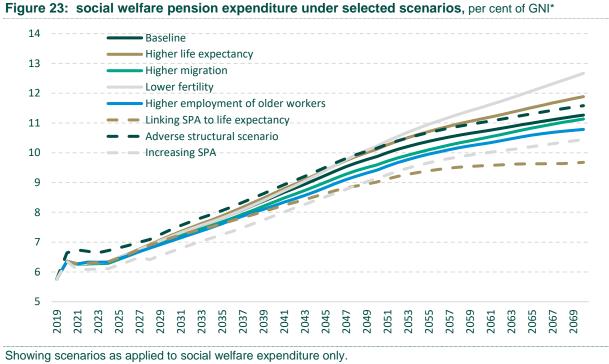
Moving in the other direction, a scenario that envisages an employment rate of older workers (aged 55-74) 10 percentage points higher than the rate in the baseline, projects annual pension expenditure to be 0.5 percentage points of GNI* lower than the baseline by 2070.

It is important to note that detailed analysis of the impact of the Covid-19 pandemic is not included in the baseline projections. The demographic projections underpinning the projections, published in early 2020, do not take account of the impact of the pandemic on demographic indicators, while the macroeconomic projections assume a V-shaped recovery entailing a sharp decline in output in 2020 followed by a return to strong economic growth in 2021, with no long-term structural impact. A scenario that assumes a permanent impact on the growth capacity of the economy as a result of the pandemic is also included in the sensitivity scenarios. This adverse structural scenario assumes the growth capacity of the economy would be lower over the next decade as a result of the pandemic and potential output growth will therefore be permanently lower than in the baseline. Under this scenario annual pension expenditure is expected to 0.3 percentage points of GNI* higher than the baseline by 2070.

⁶⁴ 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). The linking SPA to life expectancy scenario assumes the SPA increases to 67 in 2021 and 68 in 2028, after this, for every year of an increase in life expectancy, the SPA increases by ³/₄ of a year. The adverse structural scenario additionally assumes that the growth potential would be lower over the next decade as a result of the pandemic and potential output growth will thus be permanently lower than in the baseline. It is assumed labour productivity growth would recover to a lower trend growth, through lower investment and/or TFP growth stemming from reduced business activity for a long period of time, with the crisis contributing to the historical downward trend. Second, the larger fall in output and slower recovery would lead to unemployment becoming permanently higher due to lower business activity, leading to a hysteresis effect and permanently higher unemployment.

As well as possible changes in the demographic picture and impacts from the pandemic, potential policy changes were also considered in these sensitivity tests. Up until late 2020, and the passing of the *Social Welfare Bill 2020*, the state pension age (SPA) was legislated to increase to 67 in 2021 and 68 in 2028. This Bill repealed those increases in the SPA. As such, there are no longer any legislated changes in the SPA planned. Reflecting this, the baseline pension projections assume the SPA stays at 66 over the entire projection period. Additional analysis by the Department considered the impact on pension expenditure of this change in legislation by including projections where the SPA increases in 2021 and 2028 as previously planned. The analysis suggests keeping the SPA unchanged will result in significant increases in annual expenditure on pensions. The increasing SPA scenario suggests annual pension expenditure would be 0.9 percentage points of GNI* lower in 2070 than the baseline with an unchanged SPA.⁶⁵

The impact of a policy linking the SPA to life expectancy was also considered. Recognising that an increase of one year in life expectancy may not result in one additional healthy year of life, this framework assumes that for every additional year in life expectancy, the SPA increases by ³/₄ of a year.⁶⁶ Such a policy is projected to reduce annual pension expenditure by 1.6 percentage points of GNI* by 2070.



Source: Department of Finance calculations.

7.4 Policy Strategy

State Pension Age

As discussed above, under previous legislation, introduced in 2011, the SPA was to increase to 67 in 2021 and 68 in 2028. The *Programme for Government* (PfG) agreed in June 2020, committed to

⁶⁵ This compares total pension expenditure (i.e. social welfare pension expenditure and public sector pension expenditure) in the baseline (where the SPA is kept constant at 66 years of age) against total pension expenditure when the SPA increases to 67 in 2021 and 68 in 2020. If social welfare pension expenditure alone is compared, the difference in annual expenditure would amount to 0.8 percentage points of GNI* in 2070.

⁶⁶ This scenario assumes the SPA increases in 2021 and 2028 as previously legislated for and is linked to life expectancy from 2029.

deferring the legislated increase in the SPA in 2021, keeping the SPA at 66, pending a review on sustainability and eligibility issues by a newly established Commission on Pensions. The Social Welfare Bill 2020, enacted in December 2020, removed the previously planned increases in the SPA from legislation.

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

The Single Public Service Pension Scheme (Single Scheme) is the default pension scheme for all new entrants to the public service since 1 January 2013. Under this scheme, pension benefits are based on career average earnings rather than final salary. The Single Scheme minimum pension age is the same as the age of eligibility for the State Pension (Contributory), currently 66. 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 compared to the alternative of maintaining the pre-existing pension arrangements. 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. The majority of these savings are expected to materialise after 2050, when significant volumes of Single Scheme members would become eligible to retire.

Other savings/reduction in costs acquired

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* increased to 70 the compulsory retirement of public servants recruited prior to 1 April 2004. Since the enactment of that legislation in December 2018, no public servant, other than a member of the uniformed pension fast accrual group, has a compulsory retirement age of less than 70.

State pensions

The *Roadmap for Pensions Reform 2018-2023* includes measures designed to address the long-term sustainability of the State Pension system. Among other things, It proposes the introduction of a 'total contributions approach' (TCA) to replace the current 'yearly average' contributions test for the State Pension (Contributory). This commitment was reiterated in the PfG. 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.

In line with a further commitment in the Roadmap, the Department of 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.

As referenced above, the *Commission on Pensions* was established by Government in November 2020 to examine sustainability and eligibility issues with the State Pension and the Social Insurance Fund, in fulfilment of a PfG commitment. These issues are being considered from a perspective of fiscal and social sustainability, and intergenerational fairness. It is due to report on its findings by the end of June 2021, and the Government intends to take action having regard to the recommendations of the Commission within 6 months.

7.5 Conclusion

Ireland faces a number of challenges arising from population ageing. In summary, ageing costs are expected to increase by 10.2 per cent of GNI* by 2070. Ireland also faces a challenge from a moderating pace of growth as additional labour supply becomes scarcer, as the growth rate of the working age population slows, with labour productivity becoming the main source of improved living standards.

The previously legislated increases in the State Pension Age to 67 and then 68 years of age, set to take place in 2021 and 2028, have been stopped. Analysis by the Department of Finance suggests that keeping the State Pension Age at 66 will add significantly to the cost burden. Policy reforms such as linking the State Pension Age to life expectancy could reduce this burden. 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.

Annexes

Department of Finance | Ireland's Stability Programme, April 2021 Update

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

	2020	2021	2022	2023	2024	2025
Exchequer balance	-12,315	-16,905	-9,860	-3,620	-2,420	-1,560
Exclude equity and loan transactions	-2,415	-280	-310	-635	-2,420	-710
Adjust for interest accrual	755	300	190	250	305	630
Adjust for tax accruals	765	745	0	-475	490	505
Adjust for other accruals	105	900	375	355	365	370
Net lending/borrowing of NCSSBs^	-1,910	-1,110	-1,075	-730	-965	-445
Impact of ISIF	-65	85	85	90	90	95
Net lending/borrowing of Social Insurance Fund	-3,455	-575	-105	-105	160	530
Net lending/borrowing of other EBFs*	480	110	-40	-10	-15	-15
Net lending/borrowing of Local Government	-360	-1,325	-875	-440	-260	-200
General government balance (GGB)	-18,415	-18,060	-11,615	-5,320	-3,130	-805
GGB, per cent of GDP	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2
Nominal GDP	366,500	384,800	411,200	431,700	452,750	474,375

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.

	2020	2021	2022	2023	2024	2025
Revenue	76,055	77,285	80,625	85,840	89,540	93,460
: tax revenue	57,165	60,395	64,625	69,020	72,410	75,915
- Income tax	22,710	24,305	26,130	28,470	30,385	32,305
- VAT	12,425	14,370	15,885	17,280	18,105	19,015
- Corporation tax	11,835	11,640	11,795	12,035	12,275	12,490
- Excise duties	5,450	5,840	6,410	6,630	6,825	7,040
- Stamp duties	2,090	1,525	1,470	1,570	1,690	1,820
- Motor tax	940	920	910	910	915	920
- Customs	275	410	445	470	500	525
- Capital gains tax	950	900	1,055	1,105	1,150	1,200
- Capital acquisitions tax	495	490	520	545	570	595
: A-in-As (inc. PRSI, NTF and balances)	17,435	14,830	14,920	15,610	16,065	16,46
: non-tax revenue	1,420	970	620	905	795	800
: capital resources	30	1,090	460	305	270	280
Expenditure	92,865	95,325	91,495	90,090	92,840	95,73
: gross voted current expenditure	75,635	77,635	72,315	71,405	73,630	75,94
: gross voted capital expenditure	9,650	10,165	11,395	10,690	11,055	11,43
: non-voted current expenditure	7,580	7,525	7,785	7,995	8,155	8,355
- debt servicing	4,675	3,890	4,025	4,211	4,230	4,225
Balance excl. transactions with no GG impact	-16,810	-18,040	-10,870	-4,250	-3,300	-2,270
Revenue transactions with no GG impact	6,410	6,900	2,225	1,890	2,155	1,780
: non-tax revenue	3,229	1,375	1,070	620	665	640
: capital resources	3,185	5,525	1,155	1,270	1,490	1,140
Expenditure transactions with no GG impact	1,915	5,760	1,220	1,255	1,270	1,065
: non-voted current expenditure	5	5	5	5	5	10
: non-voted capital expenditure	1,910	5,755	1,215	1,250	1,265	1,060
Balance of transactions with no GG impact	4,495	1,140	1,005	635	885	715

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

Table A3: general government balance, per cent of GDP (unless stated)

	2020 (€m)	2020	2021	2022	2023	2024	2025			
Net lending by sub-sector										
General government balance	-18,415	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2			
Central government	-18,055	-4.9	-4.3	-2.6	-1.1	-0.6	-0.1			
Local government	-360	-0.1	-0.3	-0.2	-0.1	-0.1	0.0			
General government										
Total Revenue	85,780	23.4	23.5	22.9	23.0	22.9	22.8			
Total Expenditure	104,200	28.4	28.2	25.7	24.3	23.6	23.0			
Net lending/borrowing	-18,415	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2			
Interest expenditure	3,685	1.0	0.9	0.9	0.9	0.8	0.7			
Primary balance	-14,730	-4.0	-3.8	-1.9	-0.3	0.1	0.6			
One-off / other temporary measures	-10,566	-2.9	-2.4	-0.6	0.0	0.0	0.0			
Μ	ain compo	nents of	revenue							
Total taxes	62,120	16.9	16.8	16.7	16.8	17.0	16.9			
Taxes on production and imports	24,050	6.6	6.6	6.6	6.6	6.7	6.6			
Current taxes on income, wealth etc.	37,565	10.2	10.1	10.0	10.0	10.2	10.2			
Capital taxes	505	0.1	0.1	0.1	0.1	0.1	0.1			
Social contributions	15,765	4.3	4.4	4.2	4.1	3.9	3.8			
Property Income	1,160	0.3	0.3	0.2	0.3	0.2	0.2			
Other	6,740	1.8	2.0	1.9	1.9	1.8	1.8			
Total revenue	85,780	23.4	23.5	22.9	23.0	22.9	22.8			
p.m.: Tax burden	78,430	21.4	21.4	21.0	21.0	21.1	21.0			
Mai	n compon	ents of ex	penditur	е						
Compensation of employees	24,850	6.8	6.7	6.5	6.3	6.2	6.1			
Intermediate consumption	14,660	4.0	4.1	3.9	3.8	3.7	3.6			
Social payments	39,035	10.7	10.4	8.8	7.7	7.3	7.0			
Social transfers in kind via mkt producers	7,635	2.1	2.1	1.7	1.5	1.4	1.4			
Social transfers other than in kind	31,400	8.6	8.3	7.1	6.2	5.9	5.6			
Interest expenditure	3,685	1.0	0.9	0.9	0.9	0.8	0.7			
Subsidies	5,655	1.5	1.6	0.8	0.7	0.5	0.5			
Gross fixed capital formation	9,795	2.7	2.9	3.0	3.1	3.2	3.1			
Capital Transfers	2,130	0.6	0.5	0.6	0.6	0.7	0.8			
Other	4,390	1.2	1.2	1.2	1.1	1.1	1.1			
Resources to be allocated	0	0.0	0.0	0.0	0.0	0.0	0.0			
Total expenditure	104,200	28.4	28.2	25.7	24.3	23.6	23.0			
p.m. : Government consumption	48,805	13.3	13.1	12.1	12.0	11.8	11.6			
GDP at current market prices	366,500	366,500	384,800	411,200	431,700	452,750	474,375			

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

Table A4: comparison of vintages of receipts and expenditures	for 2021, € million
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	Autumn 2020	Spring 2021	Total Δ	New Data	Notes
General Government Revenue					
Taxes on production and imports	25,705	25,325	-380	-380	1
Current taxes on income, wealth	38,305	39,005	700	700	1
Capital taxes	435	490	55	55	1
Social contributions	15,425	16,745	1,320	1,320	1
Property Income	365	1,120	755	755	1
Other	8,465	7,835	-630	-630	1
Total revenue	88,695	90,515	1,820	1,820	
General Government Expenditure					
Compensation of employees	25,805	25,680	-125	-125	1
Intermediate consumption	14,765	15,775	1,010	1,010	1
Social payments	38,380	39,985	1,605	1,605	1
Interest expenditure	3,555	3,360	-195	-195	1
Subsidies	4,765	6,115	1,350	1,350	1
Gross fixed capital formation	9,830	11,105	1,275	1,275	1
Capital transfers	2,155	1,760	-395	-395	1
Other	4,425	4,795	370	370	1
Unallocated expenditure	5,500	0	-5,500	-5,500	1
Total expenditure	109,180	108,575	-605	-605	1
General government balance	-20,485	-18,060	2,425		

Rounding may affect totals 1 Reflects more up to date data since Budget 2021 estimates. Source: Department of Finance.

Table A5: general government interest expenditure 2020-2025, € million

	2020	2021	2022	2023	2024	2025
National Debt Cash Interest	4,515	3,725	3,860	4,045	4,060	4,055
per cent tax revenue	7.9	6.2	6.0	5.9	5.6	5.3
per cent of GDP	1.2	1.0	0.9	0.9	0.9	0.9
National Debt Cash Interest Accruals	-695	-255	-185	-245	-305	-630
Consolidation and Grossing Adjustments	-125	-95	-40	-15	-20	-55
Accrued promissory note interest	0	0	0	0	0	0
Other	-10	-15	30	45	60	75
Total Interest on ESA2010 basis	3,685	3,360	3,665	3,830	3,795	3,445
per cent of total general government revenue	4.3	3.7	3.9	3.9	3.7	3.2
per cent of GDP	1.0	0.9	0.9	0.9	0.8	0.7
Rounding may affect totals						

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

Table A6: projected movement in general government debt 2020-2025, € billions

2020	2024	2022	2022	2024	2025
2020	2021	2022	2023	2024	2025
204.2	218.2	239.3	247.4	254.6	261.2
12.3	16.9	9.9	3.6	2.4	1.6
0.7	0.2	-5.5	1.0	1.9	-0.6
-0.7	0.7	1.2	0.7	1.0	0.5
0.2	1.3	0.9	0.4	0.3	0.2
1.5	2.0	1.7	1.5	1.1	0.0
218.2	239.3	247.4	254.6	261.2	262.9
59.5	62.2	60.2	59.0	57.7	55.4
	12.3 0.7 -0.7 0.2 1.5 218.2	204.2 218.2 12.3 16.9 0.7 0.2 -0.7 0.7 0.2 1.3 1.5 2.0 218.2 239.3	204.2 218.2 239.3 12.3 16.9 9.9 0.7 0.2 -5.5 -0.7 0.7 1.2 0.2 1.3 0.9 1.5 2.0 1.7 218.2 239.3 247.4	204.2 218.2 239.3 247.4 12.3 16.9 9.9 3.6 0.7 0.2 -5.5 1.0 -0.7 0.7 1.2 0.7 0.2 1.3 0.9 0.4 1.5 2.0 1.7 1.5 218.2 239.3 247.4 254.6	204.2 218.2 239.3 247.4 254.6 12.3 16.9 9.9 3.6 2.4 0.7 0.2 -5.5 1.0 1.9 -0.7 0.7 1.2 0.7 1.0 0.2 1.3 0.9 0.4 0.3 1.5 2.0 1.7 1.5 1.1

*NCSSBs = Non-commercial semi-state bodies Source: Department of Finance, CSO and NTMA.

Annex 2 Comparison of macroeconomic and fiscal forecasts

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2021	GDP	GNP	employment	HICP
Department of Finance	4.5	4.4	4.0	1.1
Central Bank of Ireland	5.9	10.9	-1.3	0.8
ESRI	4.4	3.6	2.9	0.7
IMF	4.2			1.6
European Commission	3.4			0.7
2022	GDP	GNP	employment	HICP
Department of Finance	5.0	4.5	11.0	1.9
Central Bank of Ireland	4.7	3.1	0.6	0.8
ESRI	5.2	4.9	13.3	1.2
IMF	4.8			1.9
European Commission	3.5			1.6

Note: OECD (December 2020) projections were published prior to the announcement of Level 5 restrictions at the end of December and as such are not included.

The ESRI and the Department of Finance use Covid adjusted employment figures, the Central Bank does not Source: latest forecasts from the institutions cited.

Table A8: comparison of forecasts, per cent of GDP

2021	GG debt	GG Balance	Structural Balance
Department of Finance	62.2	-4.7	-1.0
IMF	63.2	-5.5	-4.7
ESRI	61.3	-4.7	n.a
European Commission	66.0	-5.8	4.8^

2022	GG debt	GG Balance	Structural Balance
Department of Finance	60.2	-2.8	-1.9
IMF	63.2	-2.8	-2.5
ESRI	59.4	-1.9	n.a.
European Commission	66.0	-2.5	1.5^

GG = general government. ^ temporary measures taken in response to the Covid-19 pandemic are not treated as one-off/temporary estimates by the Commission in their latest forecasts and are therefore not excluded from the estimates of the structural balance.

Source: latest forecasts from the institutions cited.

Annex 3 Macroeconomic and fiscal aggregates

	2020	2021	2022	2023	2024	2025		
Economic activity	year-on-year per cent change (unless stated)							
Real GNP	0.6	4.4	4.5	2.8	2.6	2.5		
Real GDP	3.4	4.5	5.0	3.5	3.2	3.1		
Nominal GDP (nearest €25m)	366,500	384,800	411,200	431,700	452,750	474,375		
Nominal GNP (nearest €25m)	276,475	289,925	308,800	322,425	336,475	350,750		
Nominal GNI* (nearest €25m)	206,650	214,050	230,250	240,725	251,550	262,600		
Components of GDP	year-on-year per cent change							
Personal consumption	-9.0	3.5	10.4	3.2	2.8	2.9		
Government consumption	9.8	2.0	0.1	1.3	1.8	1.7		
Investment	-32.3	-30.5	8.9	8.4	7.4	5.6		
Modified investment	-8.5	0.9	6.7	7.6	6.4	5.9		
Modified domestic demand	-5.4	2.6	7.4	3.8	3.4	3.4		
Exports	6.2	6.0	5.9	5.0	4.7	4.5		
Contributions to real GDP growth	percentage point							
Domestic demand (excl. stocks)	-16.6	-7.9	4.7	2.8	2.6	2.3		
Stock changes	1.0	-0.5	0.0	0.0	0.0	0.0		
Net exports	20.7	13.0	0.3	0.6	0.6	0.8		
Price developments	year-on-year per cent change							
HICP	-0.5	1.1	1.9	1.5	1.6	1.9		
GDP deflator	-0.5	0.4	1.8	1.5	1.6	1.6		
Personal Consumption Deflator	1.0	1.6	2.8	1.8	2.0	2.0		
Labour market	year-on-year per cent change (unless stated)							
Employment	-15.1	4.0	11.0	3.3	2.3	2.2		
Unemployment (per cent of labour force)	18.7	16.3	8.2	6.7	6.0	5.5		
Labour Productivity	14.4	0.6	-0.9	1.8	0.9	0.9		
Compensation of Employees	-0.1	4.1	4.0	5.4	5.5	5.6		
Compensation per Employee	17.4	-0.1	-6.5	1.9	2.9	3.1		
External	per cent of GDP							
Trade balance	30.0	40.5	38.7	37.9	37.1	36.6		
Current Account	4.6	15.1	13.1	11.8	10.7	9.8		
Cyclical Developments	per cent of potential GDP							
Output Gap	-2.4	-2.1	-0.6	-0.1	0.4	0.5		

Table A10: exchequer & general government aggregates, 2020-2025

	2020	2021	2022	2023	2024	2025
Exchequer (€ millions)						
Exchequer Balance	-12,315	-16,905	-9,860	-3,620	-2,420	-1,560
Tax Revenue	57,165	59,102	63,992	67,199	70,660	74,550
General government (€ millions)						
Total Revenue	85,780	90,515	94,150	99,470	103,700	108,120
Total Expenditure	104,200	108,575	105,765	104,790	106,835	108,920
General government balance	-18,415	-18,060	-11,615	-5,320	-3,130	-805
General Government (per cent of GDP)						
Total Revenue	23.4	23.5	22.9	23.0	22.9	22.8
Total Expenditure	28.4	28.2	25.7	24.3	23.6	23.0
General government balance	-5.0	-4.7	-2.8	-1.2	-0.7	-0.2
Interest expenditure	1.0	0.9	0.9	0.9	0.8	0.7
Primary balance	-4.0	-3.8	-1.9	-0.3	0.1	0.6
Gross fixed capital formation	2.7	2.9	3.0	3.1	3.2	3.1
Gross debt	59.5	62.2	60.2	59.0	57.7	55.4
Net debt	51.2	54.3	54.1	53.0	51.6	49.7
General Government (per cent of GNI*)						
Gross debt	105.6	111.8	107.4	105.8	103.9	100.1
Net debt	90.8	97.7	96.7	95.0	92.8	89.7
Rounding may affect total						

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

Annex 4 Ireland's National Recovery and Resilience Plan

The aim of the European Union's *Recovery and Resilience Facility* (RRF) is to mitigate the economic and social impact of the pandemic, and to make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions.

Ireland is expected to receive around €900 million in grants under the RRF over the coming years.

In order to access this funding, Ireland is developing a National Recovery and Resilience Plan (the 'Plan') for approval by the European Union. The Plan will set out the reforms and investments to be supported by the Facility. The Department of Public Expenditure and Reform is responsible for preparation of the Plan, with input from other Departments as necessary.

The RRF is structured around six pillars:

- > green transition;
- > digital transformation;
- > economic cohesion, productivity and competitiveness;
- > social and territorial cohesion;
- > health, economic, social and institutional resilience;
- > policies for the next generation.

National plans must devote a minimum of 37 per cent of expenditure to climate and 20 per cent to digital investments and reforms. They must strike a balance between reforms and investments, and seek to address challenges identified in the relevant *Country Specific Recommendations* which arise as part of the European Semester process.

Ireland's Plan will have a particular focus on:

- > Advancing the Green Transition;
- > Accelerating and Expanding Digital Reforms and Transformation;
- > Social and Economic Recovery and Job Creation.

For 2021, Ireland's National Reform Programme will be integrated into the Plan.

Annex 5 Irish Fiscal Advisory Council's Endorsement of the Macroeconomic Forecasts



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7 April 2021

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 the Stability Programme Update 2021 will be based.³ The Council received the Department's forecasts on 26 March 2021 and discussed these forecasts with Department of Finance staff on 1 April 2021, ahead of the Council's endorsement meeting.

The Council's endorsement approach has three elements:

- comparing the Department's macroeconomic forecasts with the Council's Benchmark projections and with forecasts from other bodies;
- 2) considering the methodologies used to produce the forecasts; and
- 3) reviewing the Department's 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 SPU 2021 covering the years 2021 to 2025.

The Council is satisfied that the forecasts are within an endorsable range, taking into account the methodologies used and the plausibility of the judgements made.

The Department's forecasts extend to 2025, the first medium-term forecast since the beginning of the Covid-19 crisis. The Council looks forward to a return to the full 5-yearahead forecast horizon in Budget 2022.

This endorsement of the economic forecasts is conditioned on the Government's assumptions about the vaccination programme and the easing of restrictions.

The Council will discuss the endorsement process and assess the macroeconomic projections in its forthcoming Fiscal Assessment Report, due in May 2021.

Yours sincerely,

Sebastian Barnes, Chairperson.



An Roinn Airgeadais Department of Finance

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