



Sustainability of the Public Finances

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For information

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Key Points

- The Irish economy has been transformed over the past three decades, but has also experienced considerable volatility and two deep crises. Maintaining strong public finances is both a pre-condition for growth and a necessary precaution to allow for counter-cyclical policy responses when required.
- While it is currently expected that the public finances will return to balance by 2025, there are significant threats to long-term fiscal sustainability
- Of these, demographic change is the most certain, with an aging population putting pressure on pension and health costs. However, the Irish economy also faces many other risks, inter alia, the sustainability of corporation tax receipts, the transition to a carbon neutral economy and the impacts of the move toward a digital economy.
- Ireland has the current capacity to absorb the increased short to medium term debt-burden associated with the Covid-19 Pandemic which is projected to peak at 112 per cent of GNI* in 2021.
- However, Ireland's public debt is now converging towards €250 billion and its debt per capita is amongst the highest in the developed world. For these reasons efforts must be taken to mitigate against unsustainable levels of expenditure and place debt on a downward trajectory, in a timely fashion.

Note: Whilst every effort is made to ensure the accuracy of the information contained in this document, this material is provided as a guide only and is not professional advice, including legal advice. It should not be assumed that the guidance is comprehensive and the authors cannot be held responsible for any errors or omissions.

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1. Introduction

Over the past three decades, the Irish economy has been transformed. Rapid economic growth has led to increased living standards, but the economy has also experienced significant volatility, a characteristic that is often associated with a small open economy. In the decade prior to the global financial crisis, the Irish economy saw an impressive period of sustained growth, with annual output growth of over 5 per cent and full employment. Over the same period, debt-to-GNI* fell to 28 per cent in 2007. The subsequent period witnessed the most devastating recession in the history of the State which was characterised by high unemployment, falls in wages and high private and public debt. Debt-to-GNI* increased dramatically to 166 per cent in 2012 and a period of high taxes and decreased public expenditure tied to conditionality of bailout programmes ensued. In the five years prior to the Covid-19 Pandemic, Ireland experienced a return to strong growth and reduced budget deficits, resulting in public debt falling below 100 per cent of GNI* for the first time in a decade.

The costs associated with the Covid-19 pandemic however have been enormous with c.€38 billion spent to date, and the debt burden is projected to increase to 112 per cent of GNI* by end 2021 (Department of Finance, 2021).¹

While exceptional monetary policy measures have kept servicing costs for this debt low, predicting the time and scale of the next downturn, is in essence, impossible. However, placing the debt burden on a downward trajectory in the wake of the Pandemic is one certain way of mitigating against likely future challenges. It is worth noting that Ireland's reduced debt burden in 2019 provided a relatively favourable base from which to accumulate the necessary debt that came with the Pandemic. Debt projections presented in this paper estimate the likely effects of an ageing population, as there is broad consensus on the relative inevitability of these changes. Other challenges, however, pose significant risks to debt sustainability. Risks associated with the sustainability of corporation tax receipts and transitions to carbon neutral and digital economies are not included in these projections, however, they are discussed in detail.

2. Executive summary

This paper provides context to Ireland's fiscal position as of May 2021, while giving an insight into likely future risks and challenges and their impact on public finances. The Covid-19 Pandemic has led to increased indebtedness from a high starting point with the debt burden increasing from 95.6 per

¹ This paper references monetary values as a percentage of national income (GNI*). This is common practice, and is done to scale nominal values by the size of the Irish economy for context. To give an idea of associated nominal values - based on Department of Finance forecasts, 1% of GNI* in 2021 is equivalent to c. €1.9 billion.

cent of GNI* in 2019 to 105.6 per cent in 2020, and a further increase expected in 2021. While it is believed that the underlying health of the Irish economy means that it is well placed to absorb this increased debt, it is likely that the fiscal consequences associated with emerging risks are now more pronounced as a result of the Pandemic (Department of Finance, 2021). Expenditure related to ageing pressures, is projected to increase by 3.3 percentage points of GNI* by 2030, before accelerating markedly thereafter. Similarly, the Irish Fiscal Advisory Council (IFAC) estimate that ageing-related pressures are to add significantly to the debt burden if left unfunded. By 2030, unfunded demographic changes are projected to account for 17 per cent of debt as a share of GNI*, rising to 37 per cent by 2040. The Irish economy faces many emerging risks, inter alia, the sustainability of corporation tax receipts, the transition to a carbon neutral economy and the impacts of the move toward a digital economy, which are all likely to place significant pressures on public finances in the coming years. While the phenomenon of population ageing is more readily quantifiable than these risks, they should not be taken any less seriously, and they are explored in this paper. Finally, future expenditure pressures are assessed in the context of an evolving situation around the Covid-19 Pandemic, as are related structural increases in expenditure and health expenditure commitments relating to Sláintecare, in particular. IFAC have recently expressed concern about the considerable and largely Sláintecare-related increase in permanent expenditure as part of Budget 2021, estimated to be as high as €8 billion. Permanent expenditure increases should not be left unfunded (IFAC, 2021).

The remainder of this paper is structured as follows. Section 3 gives an overview of the importance of debt sustainability for a small open economy, while Section 4 addresses some of the fiscal impacts relating to Covid-19. Section 5 outlines imminent and longer-term implications for the public finances relating to changing demographics. Section 6 addresses some of the risks associated with corporation tax receipts. Section 7 and 8 outline some of the risks associated with the transitions to carbon neutral and digital economies. Finally, Section 9 gives an overview of the medium and long-term debt outlook.

3. Importance of Fiscal Sustainability

Debt sustainability is important for a small exporting economy. Ireland's ability to service and repay debt is heavily reliant on global events and discretionary fiscal policy is confined to EU fiscal rules. Moreover, Ireland does not have the ability to utilise monetary policy. As such, maintaining a low and decreasing debt-to-income ratio is of critical importance to maintaining access to market priced funding in the event of future crises. Recent experience shows that debt dynamics matter. An increasing debt burden has the potential to increase risk and uncertainty for investors, making it both

more difficult and costly to access financing in the future, while simultaneously exacerbating an economic downturn.

Box 1: Debt dynamics equation

The most common barometer of debt sustainability is the debt burden, or the debt-to-income ratio, and it is expressed below:

$$\text{debt to income ratio} = \frac{\text{gross public debt}}{\text{national income}} * 100$$

The debt burden is a function of both outstanding gross public debt at the end of a given year and national income - the most appropriate measure of which in the case of Ireland, is GNI*. The determinants of the numerator and denominator in the above equation are of importance for understanding what drives debt burden dynamics. The equation below expresses the *change* in the debt-to-income ratio (adapted from Department of Finance, 2021):

$$\Delta D = \left(\frac{r - g}{1 + g} \right) * D_{t-1} + PB_t + SFA_t$$

ΔD change in the debt-to-income ratio

$\left(\frac{r - g}{1 + g} \right)$... r represents the effective interest rate and g represents economic growth

D_{t-1} ... debt-to-income ratio of the previous year

PB_t ... this year's primary balance.

SFA_t ... the stock-flow adjustment in the current year.

The identity highlighted in blue is the 'interest-growth' differential multiplied by the previous year's debt burden. If this identity is negative, it will result in a fall in the debt-to-income ratio and vis-versa. This identity becomes negative when $r < g$ i.e. the interest rate on debt is less than the growth rate of the economy. When the economy is growing faster than the interest rate on debt, the debt-to-income ratio, all else equal, falls. This is due to the fact that the economy is generating more than enough government revenues to service debt.

The variable highlighted in green is the primary balance, which is the difference between government revenues and expenditures (excluding interest payments). The debt-to-income ratio will increase, all else equal, if the primary balance is in deficit.

The Stock-flow adjustment (SFA) represents, primarily, ‘below the line’ operations that do not affect the deficit but do affect debt.

The European Commission’s Stability and Growth Pact (SGP) is a formal recognition of the EU fiscal rules. These rules have been an integral part to Ireland’s fiscal framework since 1997 and were strengthened by referendum in 2012 following the financial crisis. Ireland, along with other Member States, is subject to debt and deficit targets as part of the SGP. The debt threshold set out in the SGP is 60 per cent of GDP and a deficit target of annual government deficits equivalent to 3 percent of GDP is also set out. Where a country’s debt burden exceeds this, the European Commission recommends fiscal policies that should be implemented to bring the debt burden below this threshold.

Adherence to the European Union’s fiscal rules was temporarily suspended following the Covid-19 Pandemic with the activation by the European Commission of the ‘general escape clause’. This clause gives room for deviation from the SGP fiscal rules in the event of a severe economic downturn, which is outside the control of Member States. The re-imposition of the fiscal rules in the wake of the Pandemic remains a live issue. It is likely that the rules will be reactivated on a phased basis as output returns to pre-pandemic levels, however, there is no consensus among Member States as to what form they will take and when they will be introduced at this time.

Box 2: Different methods of measuring debt sustainability

While this paper uses the debt-to-GNI* ratio, public debt is traditionally expressed as a percentage of GDP. This, however, risks understating the extent of the debt burden. For example, Irish debt-to-GDP fell by 25 percentage points between 2014 and 2015. Taken out of context, it might appear that Ireland made considerable strides to reducing its debt burden in one year. However, in reality, it was completely unrelated to reduced debt or an increased capacity of Irish tax payers to repay this debt, and more to do with a significant relocation of intellectual property by multinational enterprises into Ireland. (See ‘GDP and ‘Modified GNI’ – Explanatory Note’, Department of Finance for more)

While traditional measures of the debt burden rely on ratios of debt to income, it may not be appropriate to focus solely on this stock-versus-flow comparison when assessing sustainability. The Department of Finance’s *Annual Report on Public Debt in Ireland 2020*, makes use of a range of other metrics. A flow-versus-flow measurement is, in many ways, more appropriate as it compares the debt-related call on government revenues (annual interest payments) and the ability for current revenues to service this debt (annual exchequer returns). This is called the interest-to-

revenue ratio. The National Treasury Management Agency note the importance of using alternative metrics in assessing the debt burden against other countries. While Ireland had a below EU-average debt-to-income ratio in 2020, the debt-to-revenue and interest-to-revenue ratios were both slightly above the average EU country's ratios.

Another metric used to measure the debt burden is debt per person. In 2021, debt per capita is

4. Permanent Impact of Covid-19

Prior to the Pandemic, the Irish debt burden had been on a downward path, falling from a peak of 166 per cent of GNI* in 2012 to 95.6 per cent (or €204 billion) in 2019 (Department of Finance, 2021). In 2020, the introduction of a suite of Covid-19 related supports resulted in a sudden and significant reversal of this trend and at year-end 2020, public indebtedness stood at 105.6 per cent of GNI* (or €218.2 billion). Budget 2021 was the largest budget in the history of the State and included €8.5 billion in Covid-19 related expenditure. It also included a *Recovery Fund* of €3.4 billion, the purpose of which is to provide flexible funding allowing the Government to respond decisively to the evolving situations around Covid-19 and Brexit. The Department of Finance has projected that debt-to-GNI* will increase again in 2021 to 112 per cent (€239.3 billion) before beginning to decline in subsequent years (Department of Finance, 2021).

It should be noted that income and corporation taxes performed remarkably well over 2020. While unemployment reached over 30 per cent in April 2020 (remaining elevated for much of the intervening period) income taxes fell by just 0.8 per cent. This reflects the fact that workers in sectors worst affected by Covid-19 restrictions tend not to have large taxable earnings. Similarly, corporation tax receipts continued on an upward trend (increasing by 8 per cent), despite the Pandemic. There are, however, risks associated with the sustainability of corporation tax receipts and the bulk of increased receipts in 2020 came from ICT and pharmaceuticals; sectors that saw profits increase during the Pandemic. Similarly, the impacts of the Covid-19 Pandemic downturn on the labour market were unique.

While the debt burden has increased considerably in light of the Pandemic, it is anticipated that due to the long-maturity profile of Irish debt, favourable interest rates and the growth potential of the Irish economy, increased debt will be largely absorbed in the short to medium term. A recent economic letter from the Central Bank provides a similar outlook, with a number of key nuances. Covid-19 supports will have far greater impacts on the public debt if they last longer than is necessary. Similarly, funding permanent Pandemic-related expenditure via increased debt as opposed to

increased taxes would amplify effects of medium term risks (Central Bank of Ireland, 2021). IFAC have warned that a return to a balanced budget (as forecast in the SPU) by 2025 may be unrealistic. The Council cite unfunded permanent increases in expenditure (particularly across health, education and housing) and unrealistic income tax receipts forecasts as a key factor in explaining a forecasted deficit of over €3 billion in 2025 (IFAC, 2021).

The Stability Programme Update 2021 (SPU) published in April outlines expenditure projections for 2022 to 2025. It should be noted that these numbers are purely indicative.² These technical ceilings saw core spending (spending excluding exceptional supports) growing by about 3.5 per cent per annum over 2022 and 2023, with exceptional supports winding down as the pandemic abates and the economy and society recovers. The SPU assumes, on a purely indicative basis, a growth rate of 3.5% in core spending for 2024 and 2025 with a similar growth rate applied to both capital and current expenditure (Department of Finance, 2021).

Table 1: SPU technical assumptions on expenditure 2021-2025, € billion

	2021	2022	2023	2024	2025
Voted Expenditure	87.8	83.7	82.1	84.7	87.4
Including Covid	12.0	2.5			
National Recovery and Resilience Plan	0.2	0.2	0.2	0.2	0.2
Brexit Adjustment Reserve		1.1			
Core Expenditure	75.8	78.4	81.1	84.0	86.9

Source: Source: SPU 2021, Department of Finance

The Economic Recovery Plan was published on 1st June. It outlines the Governments ambition relating to stimulating the economy as it emerges from the Covid-19 Pandemic, with a focus on retraining and reskilling, alongside an extension of Covid-19 supports in their current form to September at the earliest. It includes an expenditure stimulus package of €3.6 billion and an extension of certain Covid-19 tax policies to September 2022 costing over €1 billion. The Plan will include €915 million in grants from the EU's Recovery and Resilience facility. The latter will be geared towards supporting the green

² The Government is required to agree, on a rolling basis, three year Government and Ministerial Expenditure Ceilings in accordance with the Ministers and Secretaries Amendment Act 2013. Accordingly the Government in December 2020 agreed expenditure ceilings for 2022 and 2023 with these ceilings being indicative and technical in nature and taking into account the commitments surrounding the Covid-19 Pandemic, Brexit, the National Development Plan (NDP) review, and the overall fiscal strategy.

and digital transitions as well as providing social and economic recovery and job creation in the aftermath of the Pandemic between now and 2026.

There is broad consensus that the public finances can absorb the extraordinary level of supports currently being provided to tackle Covid-19, however, absolute levels of indebtedness are materially higher as a result and it will be necessary to address resultant liabilities over the medium term. The following sections look at each of the main challenges facing the public finances in the near and long term.

5. Demographic change and implications for public expenditure

From the perspective of the public finances, the current demographic profile in Ireland is currently favourable when compared with other developed economies. The median age in Ireland is 37.7, while the EU equivalent is 43.7 years of age (Eurostat, 2019). The number of working-age adults for every retiree is high, resulting in sufficient tax and social contribution revenues from the former supporting the expenditure needs of the latter. However, current demographic trajectories suggest that Ireland's old-age dependency ratio will converge on the high ratios seen among its OECD peers, resulting in significant future pressures on the public finances. The following section will explore the likely fiscal implications of an ageing population in the near and far term.

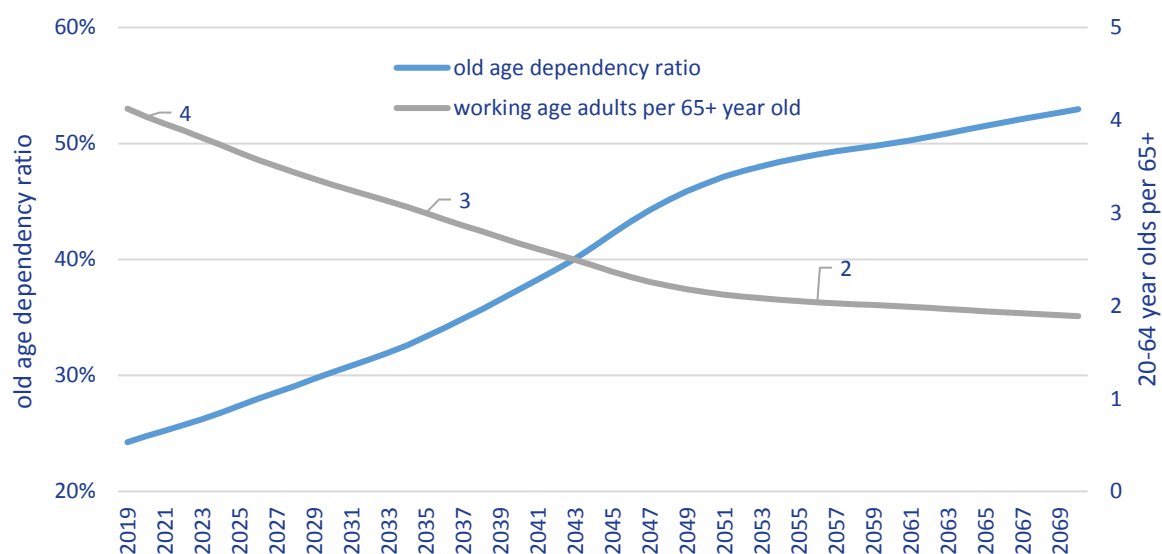
5.1 Demographic change

Two of the key contributing factors to Ireland's increasingly ageing population are the historically low fertility rates seen today combined with increased life expectancy. Not only is Ireland's population ageing, people are also living longer and therefore living an increasing proportion of their lives in retirement. Ireland is also experiencing a shift in age structure, which relates to legacy impacts of shifting migration patterns from as long ago as the 1950s.

Between 2020 and 2050, the projected fertility rate is due to remain largely unchanged at 1.8. In contrast, over the period from 1960 to 1990, the equivalent number was 3.3 (Department of Finance, 2018; European Commission 2018). Conversely, life expectancy at birth has increased in recent decades. In 1961, life expectancy at birth was 68.1 for males and 71.9 for females. Males and females born in 2019 can expect to live to 81.1 years and 84.8 years respectively. It is worth noting that life expectancy among males aged 65, in particular, has increased significantly. Males aged 65 in 2016 can expect to live 5.7 years longer than they would have only 30 years ago, while females can expect to live 4.8 years longer (Central Statistics Office). Another contributing factor to the age distribution is

migration, which tends to be more difficult to estimate with accuracy. The Irish Fiscal Advisory Council (IFAC) estimate that net migration will contribute to population growth by around one quarter over the next 20 years. While this is likely to reduce the burden placed on the working-age population due to the typically younger age of immigrants, these impacts will be offset by lower fertility rates and higher life expectancy in the population.

Figure 1: Projected old age dependency ratio



Source: Eurostat

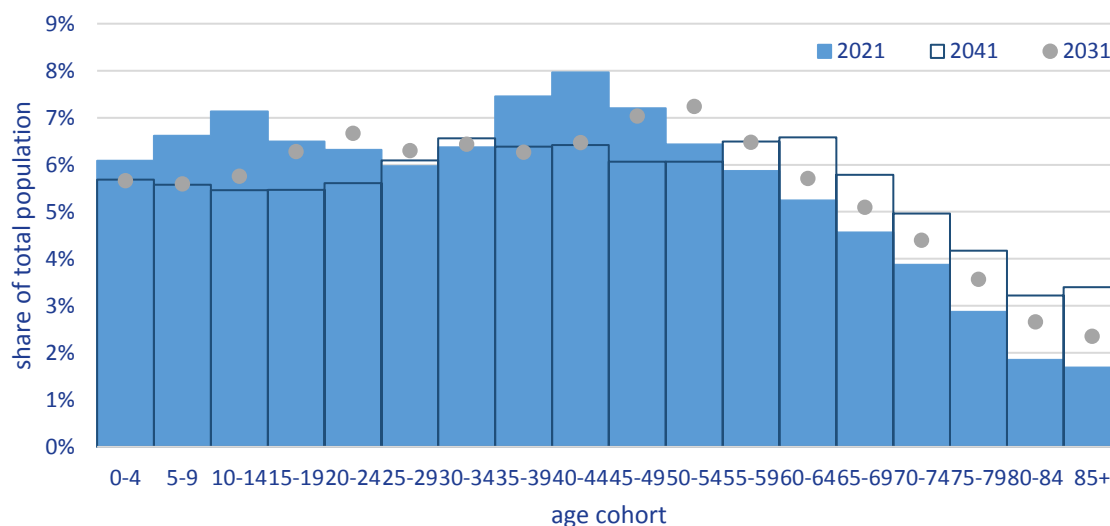
Note: The old age dependency ratio is the 65+ age cohort as a proportion of the 20-64 cohort

There is broad consensus on the magnitude of the scale of these changes in the near and longer term. It is estimated that the old-age dependency ratio, or the share of over 65 year olds as a proportion of the 20 to 64 age cohort, is to increase rapidly over the next ten to twenty years. In 2019, the ratio stood at 24.8 per cent and in 2030, this will be 30.3 per cent before rising to 37.4 per cent by 2040. In other words, there are currently four persons of working age for every one person aged over 65; by 2030, the equivalent will be closer to three and in 2040 it will be just over two and a half. In an international context, Ireland's old-age dependency ratio is projected to converge on the EU-27 average. (Department of Finance, forthcoming).

Figure 2 presents the projected age distributions of today vis-a-vis 2031 and 2041. There will be significant increases in age cohorts above 60 years of age, and this trend is set to increase dramatically past 2041. The share of people aged over 85 is set to double between now and 2041 (an increase from 65,000 to 165,000). While the increase in over 65 year olds is likely to place pressures on pensions expenditure, increases in shares among the top two and three age cohorts, in particular, are likely to

place increased pressures on the health system and long-term care. Essentially all of the younger cohorts are to see a decrease in their share of the population by 2041. The near and long-term impacts are discussed in the following sections.

Figure 2: Age cohorts – projections in 2021, 2031, 2041 (% of total population)



Source: Eurostat

5.2 Total expenditure impacts

The economic and fiscal implications associated with future demographic shifts are considerable. An ageing population is linked to increased future expenditure, primarily in the areas of healthcare and pensions, with non-trivial increases in education and long-term care expenditure. Increases in the over 65 age-cohort is likely to result in increased pressures relating to pension provisions, while increases in the oldest age cohorts affect health expenditure disproportionately (see Section 5.4). Similarly, a population with a higher proportion of retirees would have negative implications for income tax revenues. While the Commission on Pensions is currently examining all features of the pension system, at the time of writing there is no commitment to increasing the State Pension Age (SPA) from its current age. Prior to the passing of the *Social Welfare Bill 2020*, the SPA was to increase to 67 in 2021 and 68 in 2028. Estimates of future expenditure on pensions, while considerable in all cases, are sensitive to assumptions made about the trajectory of the SPA.

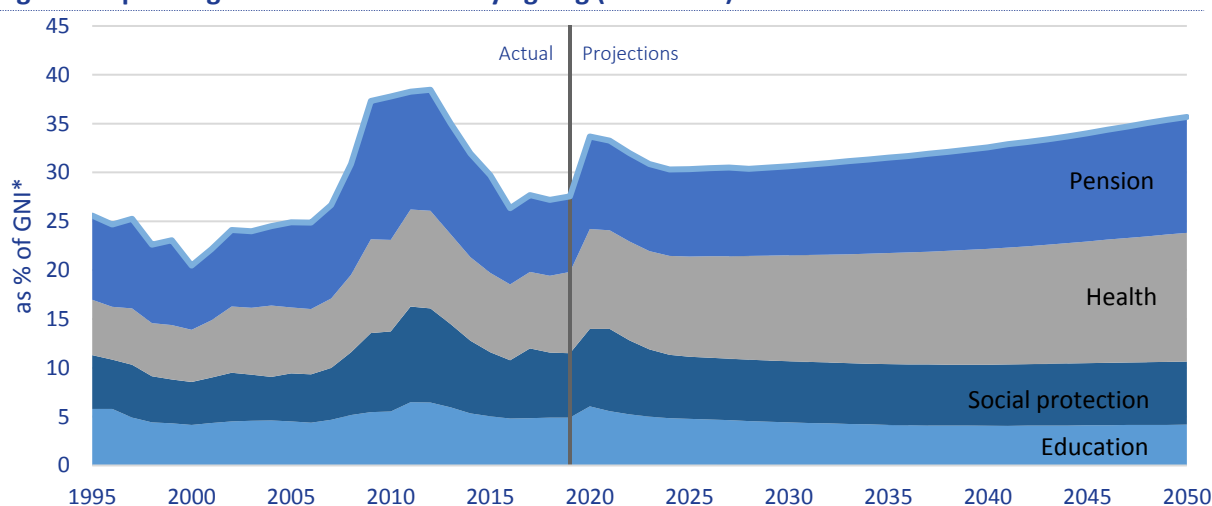
The Department of Finance estimates that, in the near term, total age-related expenditure will increase from 21.4 per cent of GNI* in 2019 to 24.7 per cent by 2030. This is equivalent to a nominal increase of €32 billion over the next decade. In the longer-term, expenditure is projected to increase

to 31.5 per cent in 2070. (Department of Finance, forthcoming). The Department of Finance baseline projection assumes that the SPA remains at its current level of 66 years³.

In a comparative context, while total age-related public expenditure remains largely below that of its peers, Ireland is due to see one of the largest increases in expenditure among EU Member States. Age-related expenditure in Ireland is projected to increase by 3.3 percentage points of GNI* between 2019 and 2030, while the EU-average is projected to increase by just 1.4 percentage points of GDP. Ireland is projected to see the third largest increase in age-related expenditure as a share of national income in the EU between 2019 and 2045.

The following section will explore the two key areas of public expenditure related to an ageing population – healthcare and pensions. Figure 3 presents expenditure as a share of GNI* by category of age-related expenditure. Pension and health expenditure represent the largest and a growing share of age-related expenditure to 2050.

Figure 3: Spending on areas influenced by ageing (% of GNI*)



Source: Eurostat

Note: Under the baseline assumption of the SPA increasing to 67 in 2021 and 68 in 2028.

5.3 Pensions

The pension age in Ireland has been relatively constant over time, while average life expectancy has risen considerably in recent decades. The pension age rose from 65 to 66 in 2014 and current

³ The Department of Finance estimate that a SPA linked to life expectancy would reduce annual expenditure by around 1 per cent of GNI* in 2050, compared to the State Pension Age remaining at 66 across the period. By 2070, this reduction is estimated to increase to 1.6 per cent of GNI*. Increasing the SPA in line with the previously legislated commitment, would lead to a similar reduction in annual expenditure by 2050 (0.7 per cent of GNI*), with slightly less reductions in expenditure by 2070, compared to life expectancy indexation.

legislation specifies an increase to 67 in 2021 and 68 in 2028, with no further increases anticipated to 2035. However, the Programme for Government has delayed this increase. IFAC projections estimate that, assuming increases in the State Pension Age in line with previous commitments, government spending on pensions would rise from 7.7 per cent of GNI* in 2019 to 9.1 per cent in 2030. Over the longer term, expenditure would reach 11.9 per cent of GNI* by 2050. Maintaining the State Pension Age at its current level (66) would imply higher spending. A constant State Pension Age would result in expenditure of 12.7 per cent of GNI* in 2050 (0.8 percentage points higher than was previously legislated for). The Government has established the Pensions Commission in accordance with the aforementioned Programme for Government commitment. The Commission is currently examining sustainability and eligibility issues surrounding the State Pension and the Social Insurance Fund. It is also considering the issue of retirement ages in employment contracts and is to consider how the pension system can further accommodate carers. The Commission is expected to report to the Minister for Social Protection by 30 June 2021.

5.4 Health and ageing

The cost of providing healthcare increases with age and an ageing population will lead to dramatic increases in healthcare expenditure. While the future old age dependency ratio is an indication of some of the pressures that will be placed on the health system, it misses nuance. In 2019, there were 65,000 people over the age of 85 in Ireland, by 2030, this figure will be over 100,000 and by 2040 it will be 165,000. Similarly, there are currently 100,000 people in the 80-85 cohort, in 2030 this is projected to increase to 165,000 (Eurostat). The *Health Service Capacity Review 2018* highlights the tendency for older age cohorts to use certain health services disproportionately. While representing only 13 per cent of the population in 2016, those over the age of 65 represented 40 per cent of people who had a day case procedure. Within older person services, those aged over 85 represented approximately half of those receiving care. The current capacity of the health service would be unfit to deal with the dramatic scale of increases the country is likely to see in the coming decades.

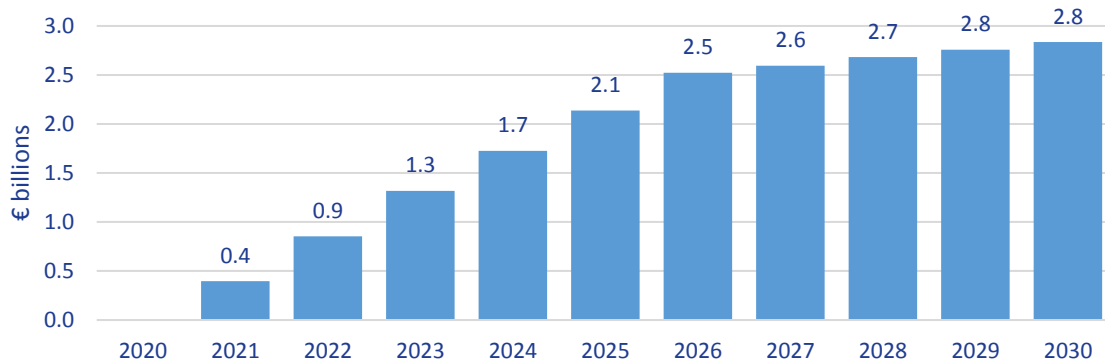
The Irish Fiscal Advisory Council project the potential expenditure impacts of these changes. For instance, long-term care, while only a relatively small part of total health expenditure, is expected to triple over the period 2019 to 2050 (from 0.5 per cent of GNI* to 1.5 per cent by 2050) (IFAC, 2020). The Department of Finance estimates that expenditure on healthcare, excluding long-term care, is to increase with considerable impacts, even in the short term. Expenditure is projected to increase from 6.6 per cent in 2019 to 7.2 per cent of GNI* by 2030, and 7.8 per cent by 2040 (Department of Finance, forthcoming).

5.5 Sláintecare

Sláintecare is a ten-year programme to transform Ireland's health and social care services. The Sláintecare roadmap involves reducing private payments for healthcare services in favour of a more universal system of care, including universal General Practitioner and primary care. This roadmap for health and social care services is expected to lead to higher government health spending. The Programme for Government reaffirmed the commitment to the implementation of Sláintecare and pledged to accelerate the process, underpinned by the allocation in Budget 2021 of more than €1.2 billion to advance the implementation of Sláintecare (Department of Health, 2021)⁴. Estimates of the cost of implementation of the Sláintecare programme suggest an additional rise in annual public spending on health for the first 10 years that will accumulate to €2.8 billion per annum (Committee on the Future of Healthcare, 2017 and IFAC 2020).

While Sláintecare could lead to cost-savings and reduce healthcare costs to households, full implementation would be expected to add a further 1.1 percentage points of GNI* to government spending in 2030, rising to 1.2 percentage points by 2050 against the backdrop of rising costs in healthcare (IFAC, 2020).

Figure 4: Assumed additional costs of Sláintecare relative to baseline in each of the first 10 years (€ billion)



Source: IFAC

6. Corporation Tax

Ireland faces significant levels of risk associated with the sustainability of corporation tax receipts. In recent years, corporation tax has represented a growing share of total revenues and in 2020, corporate tax receipts account for 21 per cent of total revenues, or approximately 5.7 per cent of GNI* (€11.8 billion). Within the tax head itself, these revenues are increasingly concentrated in the top ten

⁴ [Sláintecare Implementation Strategy & Action Plan 2021 — 2023](#)

largest tax-paying companies, with 51 per cent of receipts coming from these companies in 2020. Furthermore, approximately 82 per cent of net receipts derive from foreign-owned multinationals. From an income tax perspective, foreign multinational enterprises support employments that contribute towards 49 per cent of total income taxes (Revenue Commissioners).

Currently, there are on-going efforts firmly focused on re-structuring international corporate tax architecture. Ireland has fully engaged in international tax discussions for many years and has to date proactively reformed and modernised the Irish tax code in line with international developments and to adapt to emerging pressures.

The global corporate tax regime is deemed not fit for purpose in an economic environment where value is increasingly derived from digital business models, which often rely on highly mobile intangible assets. The OECD Inclusive Framework is working toward achieving a consensus on the OECD's digital tax proposals by mid-year, which crucially involves both the reallocation of a proportion of taxing rights to market jurisdictions and an imposition of a global minimum effective corporate tax rate. The Joe Biden administration has prioritised reaching a consensus at the OECD, in contrast to his predecessor, and has recently introduced the 'Made in America Tax Plan', the ultimate aim of which is to make American multinational enterprises pay more tax in the US. US domestic legislative tax reform proposals whilst far-reaching, are the subject of ongoing intense scrutiny and extensive debate in the United States. The Plan includes (among other elements) a proposed increase in the statutory US corporation tax rate, an increased tax rate on global intangible low-taxes income (GILTI) and a tightening of existing GILTI rules.

While a consensus is yet to be reached at the OECD, the Department of Finance has made a tentative assumption that corporation tax revenues may fall by €2 billion by 2025, as a result of changes to the international tax environment, although the annual profile of these impacts remains subject to considerable uncertainty given implementation-related challenges (Department of Finance, 2020). A recent meeting of G7 countries has seen members supporting a 15 per cent minimum global effective corporate tax rate. Minister Pascal Donohue has signalled that Ireland could potentially lose up to €2.2 billion annually if this minimum tax rate is adopted. However, significant uncertainty remains around the timing and scale of likely impacts. Furthermore, this estimate does not include the impact of potential EU digital services taxes (the substance of which has yet to be discussed by Member States), nor the more far reaching longer-term impacts of the recent EU Communication proposal *Business Taxation in the 21st Century*. It also does not fully capture potential company-specific decisions in response to the wider set of proposals which are extremely difficult to quantify. Further clarity on the likely future direction of these discussions is expected in the coming months.

7. Carbon Neutrality

Ireland is committed to various international and national Climate targets. Most recently, the Government published the *Climate Action and Low Carbon Development (Amendment) Bill 2021*, which sets out on a statutory basis various structures and processes for achieving a (net) carbon neutral economy by 2050. This involves the introduction of binding 5-year carbon budgets, with the first two budgets targeting a 51 per cent reduction in emissions by 2030, consistent with the Programme for Government commitment. The Government have also committed to increasing the Carbon Tax gradually to €100 per tonne by 2030.

The adaptation and mitigation measures necessary to achieving these targets, as well as the environmental consequences associated with a failure to meet them pose risks for the economy.

Some of the economic costs associated with a failure to reduce emissions span from increased land scarcity and poorer health among workers to damaged capital as a result of extreme weather events, and declines in productivity. Fiscal policy aimed at both mitigation and adaptation will be required if Ireland is to achieve its climate targets and failure will result in an obligation for Ireland to purchase compliance from other Member States. Mitigation measures such as environmental taxes, while likely leading to increased revenues in the short term, will not be a sustainable source of revenues as demand for carbon-intensive goods and services reduces. For example, it is estimated that an electric vehicle fleet consistent with the Climate Action Plan 2019 target is likely to reduce annual exchequer returns from motor tax, fuel excise and VAT by €1.5 billion between 2019 and 2030, and €500 million annually from 2030 (Department of Public Expenditure, 2019). This, however, may understate associated costs - research is ongoing in this space. Furthermore, current revenue hypothecation associated with additional carbon tax revenues will need to be replaced with non-carbon tax revenues if revenues are to fall in line with changed behaviour.

Adaptation measures aimed at retrofitting, investment in Electric Vehicle infrastructure and energy efficient public transport fleets as well as flood defences, for example, will lead to increased expenditure. Expenditure of approximately 1.5 per cent of GNI* per annum is apportioned to climate-related expenditure in the *National Development Plan 2018-2027* (NDP) (IFAC, 2020). This understates the likely future level of expenditure, however, as there has been a significant increase in ambition around climate action since the publication of the NDP. *Climate Action Plan 2021* is due to be published in the summer.

8. Digital economy and automation

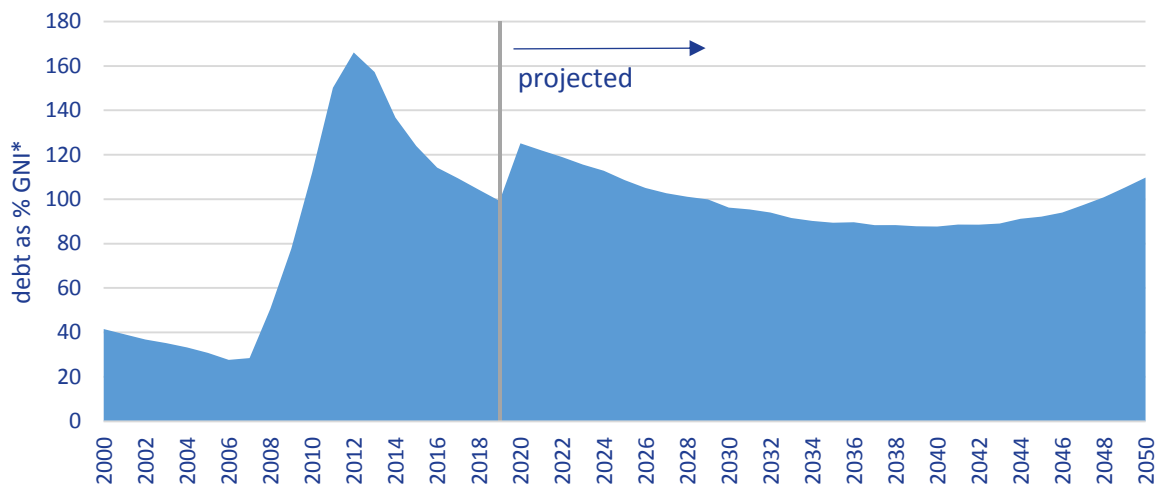
Another global transition that will have economic and fiscal implications is the transition toward a more digitalised economy. Workers in an increasing number of sectors are at risk of job loss in the face of automation. Solas estimate that 370,000 workers are considered to be in the high-risk category of job loss (Solas, 2020). While it is anticipated that the digital transition will ultimately lead to increased employment in the long-term, the intervening period will require significant expenditure increases to assist employees and employers who are considered to be at risk in upskilling and retraining. The Disruptive Technologies Innovation Fund is a €500 million fund established as part of Project Ireland 2040. However, as an increasing number of jobs face automation risks, the extent of future public investment in training and re-skilling programmes is likely to increase. The labour market effects of the Covid-19 pandemic have likely exacerbated disruptive effects, and significant re-skilling will be needed in light of the challenges faced by younger workers in particular (ESRI, 2021). It should be noted that Budget 2021 includes a provision for a €3.4 billion *Recovery Fund*, which will focus on three main areas, one of which is the area of reskilling and retraining. The Economic Recovery Plan places retraining and reskilling at the centre of its stimulus plan.

9. Debt sustainability outlook

The following section will explore the implications of an ageing population on the debt burden. While other risks have been outlined, they are not included in these debt projections. This reflects uncertainty surrounding the potential impacts of these risks.

9.1 The debt burden in the medium and long term

While many uncertainties remain, it is estimated that Ireland will return to economic growth in 2021, with forecasted GNI* growth of 5.5 per cent in 2022, following the successful rollout of the vaccination programme (Department of Finance, 2021). However, widely recognised structural challenges remain. Irish productivity growth is estimated to converge on the European average, leading to a slowing in potential long run economic output growth, and the aforementioned demographic changes are to lead to increases in public expenditure. Moreover, risks associated with the digitalisation of the economy, the move to a carbon neutral economy and the sustainability of corporation tax receipts pose threats to fiscal sustainability.

Figure 5: Debt as a percentage of GNI* outturns (2000-2019) and projections (2020-2050)

Source: IFAC projections; CSO; FitzGerald and Kenny (2018); Department of Finance.

Note: IFAC baseline assumption assumes the SPA will increase to 67 in 2021 and 68 in 2028.

While the most significant impacts of ageing on public indebtedness will be seen in the coming 30 to 50 years, the impacts over the next decade remain substantial. Furthermore, dealing with the fiscal impacts of ageing in a timely manner would ultimately cost less, relieve pressure and provide flexibility to respond to future challenges (IFAC, 2020).

Ageing pressures, if left unfunded, are set to account for over half of the debt burden by 2050. However, significant impacts can be seen in the next decade with ageing related costs accounting for 17 per cent and 37 per cent of the debt burden in 2030 and 2040⁵.

Figure 5 above represents IFAC debt burden projections to 2050, with debt-to-GNI* decreasing steadily to circa 90 per cent by 2040 before rising again relatively sharply, standing at 110 per cent in 2050⁶. In the absence of rising ageing and population growth costs, the projected debt burden would reach only 50 per cent of GNI* by 2050.

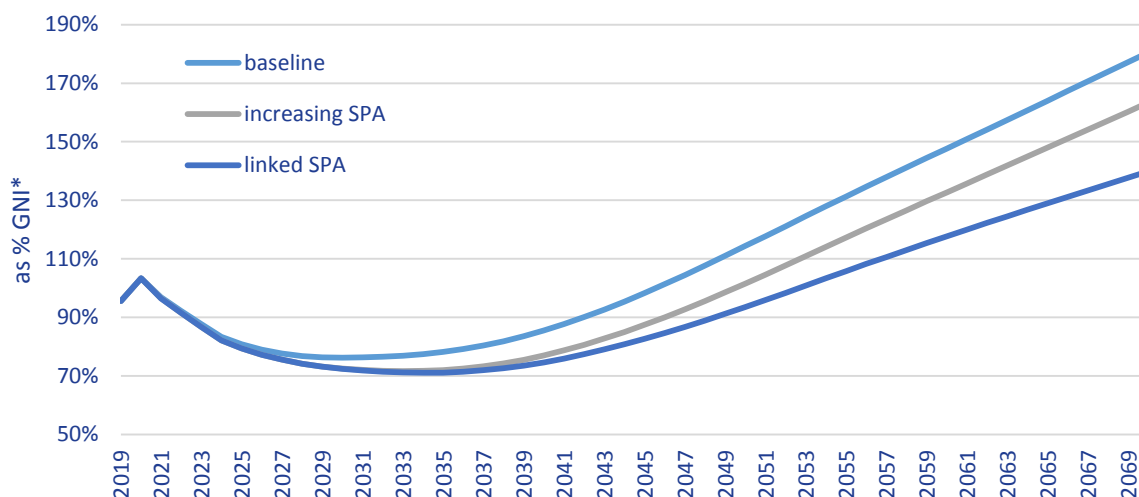
In its submission to the *Commission on Pensions*, the Department of Finance projections point to significant increases in the debt burden based on the current policy scenario of the State Pension Age remaining constant in the coming 50 years. It is projected that debt-to-GNI* will reach 180 per cent by 2070. This is equivalent to a deficit of 9.3 per cent of GNI* in 2070. Furthermore, even in the event of the SPA increasing in line with life expectancy, the debt burden is projected to stand at 140 per cent

⁵ The IFAC baseline projection assumes an increase in the SPA to 67 in 2021 and 68 in 2028.

⁶ The IFAC baseline projection assumes an increase in the SPA to 67 in 2021 and 68 in 2028. IFAC provide a sensitivity analysis of their debt projections. Each input in these projections entails uncertainties. As such, the debt burden could be as low as 83 per cent or as high as 158 per cent of GNI* by 2050.

of GNI* in fifty years. While the debt burden is to reduce in next decade, it will be at an elevated level. If the public finances are to respond to a future crises, the debt burden should be reduced further (Department of Finance, 2021).⁷

Figure 6: Debt burden under different pension age scenarios



Source: Department of Finance.

Note: The 'baseline' scenario assumes a fixed state pension age (66) across the projection horizon. The 'linked SPA' scenario assumes a state pension age increasing broadly in line with life expectancy. The 'increasing SPA' scenario assumes that the SPA increases in line with previous legislation (increase to 67 in 2021 and a further increase to 68 in 2028).

10. Conclusion

The public finances face many risks over the next 20 years. Among the most certain, but not necessarily the most impactful, are costs associated with an ageing population. Other risks exist relating to the sustainability of corporate tax receipts and the transitions to carbon neutral and digital economies. Over the next 50 years, the cost of ageing is projected to erode debt sustainability considerably if left unfunded. However, dealing with these pressures in a timely fashion will help to mitigate against these challenges while helping to prepare for some of the less predictable ones.

⁷ This is a 'no policy change scenario', where the share of non-age-related expenditure in GNI* is assumed to remain unchanged over the forecast horizon. Total revenues are assumed to follow the same trajectory as GNI*

Appendix 1 Additional reading material

Recommended reading

- Stability Programme Update 2021, *Department of Finance* (2021) - available [here](#)
- Long Term Sustainability Report, *IFAC* (2020) – available [here](#)
- Annual Debt Report 2020, *Department of Finance* (2021) – available [here](#)
- Submission to Commission on Pensions, *Department of Finance* (2021) – available [here](#)
- Fiscal Assessment Report – May 2021, *IFAC* (2021) - [here](#)

Additional reading

- Climate Action and Low Carbon Development (Amendment) Bill (2021) – available [here](#)
- Minister Donohoe updates Budget 2020 forecasts & makes provision for changes in corporate tax receipts (2020) – available [here](#)
- Sláintecare Implementation Strategy and Action Plan 2021-2023, *Department of Health* (2021) – available [here](#)
- Health Service Capacity Review 2018, *Department of Health* (2018) – available [here](#)
- Pay Related Social Insurance, *Tax Strategy Group, Department of Finance* (2019) – available [here](#)
- Incentives for personal Electric Vehicle purchase, *Department of Public Expenditure and Reform* (2019) – available [here](#)
- Future of Jobs in Ireland – Automation Risk, *Solas* (2020) - available [here](#)
- The Pandemic has hit younger workers hardest, *ESRI* (2021) – press release [here](#)