Public consultation to help inform the Pensions Commission Guidelines and information for submissions

Nevin Economic Research Institute (NERI) submission to the Pensions Commission

09 March 2021

Introduction

The Nevin Economic Research Institute (NERI) welcomes the opportunity to make a submission to the Pensions Commission.

Our submission focuses on the core issue of fiscal sustainability. The specific context is the claim that future pension costs will compromise that sustainability. We therefore make some proposals for managing fiscal sustainability into the future.

The projected demographic shifts imply, all else equal, that pension costs will rise in nominal terms and that this will happen alongside a declining working age ratio. The fundamental issue is whether new fiscal or other policy measures will need to be taken in the future in order to accommodate these additional spending pressures.

The evolution of pension expenditure as a percentage of economic output depends on a number of influences. These include demographic changes, policy changes in beneficiaries and entitlements and of course changes to the benefit rate. However, its evolution also depends on the factors that influence the path of economic development and long-run growth. These factors range from trading partner growth, to domestic investments in physical and human capital, to migration policy, to direct and indirect employment policies, particularly those that affect barriers to employment, and to a plethora of other policies. The declining working age ratio means that future growth will increasingly have to be

based on labour productivity, which in turn will depend on the rate of innovation within and outside of the Republic of Ireland (Ireland).

The issue of pension affordability, and indeed the wider issue of public spending sustainability, cannot be detached from the issue of the broadness of the revenue base. Public spending and government revenue (which is mainly taxes and social contributions) must ultimately be closely aligned in value over the longer-term. In this context we compare per capita public spending and government revenue in Ireland with the levels prevailing in other high-income European countries. This helps establish whether there is scope to broaden the revenue base.

Our conclusion is that the most prudent way to manage the rise in age related spending in the future is to: (A) pursue a suite of growth friendly policies that will support higher employment rates and faster labour productivity growth and (B) undertake a root and branch reform of fiscal policy in order to address the narrowness of the revenue base and to bring per capita revenue into line with the other high-income high-employment economies of Western Europe. This root and branch reform would necessarily entail a wider debate about future needs in public spending.

Such an approach would not preclude reforms to the pension system itself. For example, Ireland's system of pension related tax expenditures is highly regressive. Reallocating this hidden public spending to the basic pension or even returning it to the exchequer would be more equitable and would increase scope to further reduce pensioner poverty in the future.

Fiscal Sustainability

Fiscal sustainability depends on the capacity of the tax or revenue base to support a chosen level of public expenditure. It is impossible to meaningfully consider the sustainability of public spending in isolation from the revenue base, or indeed the sufficiency of a particular revenue base in isolation from the desired level of public spending.

(A) The sustainability of actual expenditure policy is a function of existing revenue raising policy (i.e. the broadness of the tax and social contribution base) as well as the sustainability of those revenue raising policies (e.g. it is uncertain as to whether existing levels of corporation tax receipts are sustainable).

(B) The sustainability of potential or future expenditure policy is a function of potential revenue capacity in the future (e.g. the strength of the underlying economy) as well as future revenue raising policies.

The ratio of public spending to output ranges from 20 per cent to 50 per cent amongst different OECD countries. There are high performing countries in terms of GDP per capita and employment operating at both ends of the spectrum, from low spending countries to high spending countries. The implication is that Ireland could viably choose any level of spending within this range without impairing its long-run economic growth potential conditional on revenue being sufficient to accommodate the chosen level of spending. Of course, the composition of revenue raising and public spending will have differential impacts on growth and will have differential distribution impacts.

Individual items of expenditure can therefore only be assessed for their sustainability within the context of the entire system of government income and expenditure, as well as within the context of wider economic growth policies and future growth assumptions. Even so, these facts do not in any way mean we are precluded from assessing the efficiency or opportunity cost of any particular item of public expenditure in achieving its intended public policy goal.

Revenue Sufficiency

The debate about pension sustainability must examine the sufficiency of income into the social insurance fund and/or into the exchequer. This causes us to examine the fiscal choices that we have made and how they have contributed to the current situation. NERI research shows that Ireland has a very narrow revenue base when compared to similar European economies with a low level of per capita

receipts.[1] On the other hand, Ireland (GNI*) is well below the EU average (GDP) in terms of public spending as a proportion of economic output. The NERI[2] estimate per person spending was less than 85 per cent of spending in the peer group of high income EU countries in 2018. Ireland and the UK were outliers amongst these countries, with their comparatively low levels of public spending.

Ireland has an extremely centralised tax system relative to European norms (Table 1). The relative absence of locally based tax receipts makes tax policy less responsive to local contexts and preferences. Notable also is the significant role played by social security funds in much of continental Europe.

Table 1 Taxes by level of government as % of total taxation, 2018

	Central	State	Local	Social security fund	EU Institutions
EU-27	46.1	7.4	10.4	35.5	0.5
Ireland (Rep)	97.4	0	2.0	0	0.6

Source: European Commission Data on Taxation;

The most conventional way to compare the scale of the tax take in different countries is to use GDP as the denominator because of the assumption that GDP reflects fiscal capacity. However, GDP is a problematic comparator in the case of Ireland and GNI* is very likely to provide a more accurate (if flawed) reflection of fiscal or revenue capacity. Table 2 shows that total government revenue is lower than in the EU as a whole. Ireland had a revenue shortfall of 3.1 percentage points of output (GNI* basis) in 2018, or €6 billion. Table 2 also shows that the revenue-to-output shortfall is caused by shortfalls in revenues from taxes on labour, most notably payroll taxes and social contributions from employers. On the other hand, taxes on consumption generate yields that are similar to EU average, while the yields from capital taxes exceed EU averages.

[1] Goldrick-Kelly, P., Mac Flynn, P. and T. McDonnell (2020) Reforming Tax and Spend in the United Kingdom and in the Republic of Ireland, Working Paper No.67

[2] ibid

Table 2: Aggregate Taxes and Social Contributions as a % of national output, GDP

	2008	2013	2018	Rank (2018)
All				
EU-27	38.4	39.8	40.2	
Ireland	29.0	28.8	22.6	28
Ireland (GNI*)	34.7	37.8	37.1	15
All Consumption				
EU-27	10.6	11.1	11.2	
Ireland	10.5	9.8	7.0	28
Ireland (GNI*)	12.6	12.9	11.5	17
All Capital				
EU-27	8.0	7.9	8.2	
Ireland	7.2	6.1	6.0	18
Ireland (GNI*)	8.6	8.0	9.8	5
All Labour				
EU-27	19.7	20.8	20.8	
Ireland	11.3	12.9	9.7	28
Ireland (GNI*)	13.5	16.9	15.9	18
Labour (paid by employers)				
EU-27	8.2	8.5	8.3	
Ireland	3.4	3.1	2.6	25
Ireland (GNI*)	4.1	4.1	4.3	24

Source: European Commission Data on Taxation

Notes: 2018 aggregate revenue gap between the Republic of Ireland (GNI*) and EU27 is €6.1 billion; Rankings are out of 28 (the then EU28 with Ireland counted on a GNI* basis) where 1 = the highest revenue to output ratio and 28 is the lowest revenue to output ratio.

A more useful way to assess whether taxes are relatively high or relatively low is to compare the Implicit Tax Rates (ITRs). The ITR provides a good measure of the effective average tax yield from different types of income or economic activity as it expresses aggregate tax revenues as a percentage of the potential tax base. Table 3 shows that the Republic of Ireland has a relatively high ITR on consumption (which is mainly VAT and Excises). Clearly, Ireland is not a low tax regime when it comes to taxes on consumption. Ireland has a relatively low ITR on capital despite having a comparatively large capital tax yield relative to Ireland's economic output. This is explained by Ireland's very high capital share of national income (the potential tax base), which is in turn a function of the very large scale of multinational activity and associated capital assets in Ireland relative to the size of Ireland's domestic economy.

To the extent that we can consider Ireland 'low tax', it is in relation to the taxation of labour and

specifically the taxation of employers (payroll taxes and employer social contributions).[3] Ireland's ITR on labour income is 32.9 per cent and below the EU-27 average of 38.2. However, decomposing this figure shows that the ITR on employees in Ireland (24.1 per cent) is actually above the EU average (21.1 per cent). The shortfall is in relation to employer contributions, where the ITR on employers in Ireland (8.8 per cent) is just half of the EU-27 average (17.1 per cent).

Table 3: Implicit Tax Rates (aggregate effective tax rates by type of activity)

	2008	2013	2018	2018
Consumption				
EU-27	16.3	16.6	17.3	
Ireland	19.2	19.3	19.6	
Capital				
EU (median, ex ROI & UK)	22.3	22.6	23.1	
Ireland	21.7	14.8	14.7	
Labour				
EU-27	37.3	38.0	38.2	
Employee				21.1
Employer				17.1
Ireland	25.6	32.1	32.9	
Employee				24.1
Employer				8.8

Source: European Commission Data on Taxation;
Note: ITR on capital is unavailable for Malta, Croatia is missing 2013 and 2018 data, Bulgaria is missing 2018 data; 2018 data on ITR capital is available for 25 countries; ITR on labour for employees is personal income tax plus employee social security contributions (SSC); ITR on labour for employers' is employer SSC plus payroll taxes.

Table 4 shows the total tax wedge for a single individual on the average wage. The total tax wedge includes both employee and employer taxes and contributions. Taxes and social contributions paid by the employee are close to the OECD average, albeit significantly lower than in a number of other high-income European countries. On the other hand, employer contributions are significantly lower than the OECD average.

[3] The other significant area of relative 'under-taxation' in Ireland is the taxation of property, albeit the gap in this case is just 0.3% of GNI.

Table 4: Total tax wedge, % of labour costs, 2019, single individual, no children, 100% average wage

Country	Total Tax Wedge	Income Tax	Employee SSC	Employee Total	Employer SSC
Germany	49.4	16.1	16.8	32.9	16.5
France	46.7	11.7	8.3	20.0	26.6
Ireland	**33.2**	**19.7**	**3.6**	**23.3**	**9.9**
UK	30.9	12.5	8.5	21.0	9.8
US	29.8	15.1	7.1	22.2	7.6
OECD	**36.0**	**13.7**	**8.5**	**22.2**	**13.8**

Source: OECD Taxing Wages 2020
Note: Employer SSC includes payroll taxes

Demographics and the Working Age Ratio

Pension sustainability is also tied to population developments. All else equal, Ireland is expected to follow other states in their trend towards relatively older populations, with larger cohorts of elderly individuals due to expectations that life expectancy will continue to rise and fertility rates will decline over time. Population models incorporating these trends generate higher dependency ratios including the Old Age Dependency ratio (the number of pension qualifying to prime working age individuals) with consequences for expected fiscal sustainability as less working people can support pension recipients.

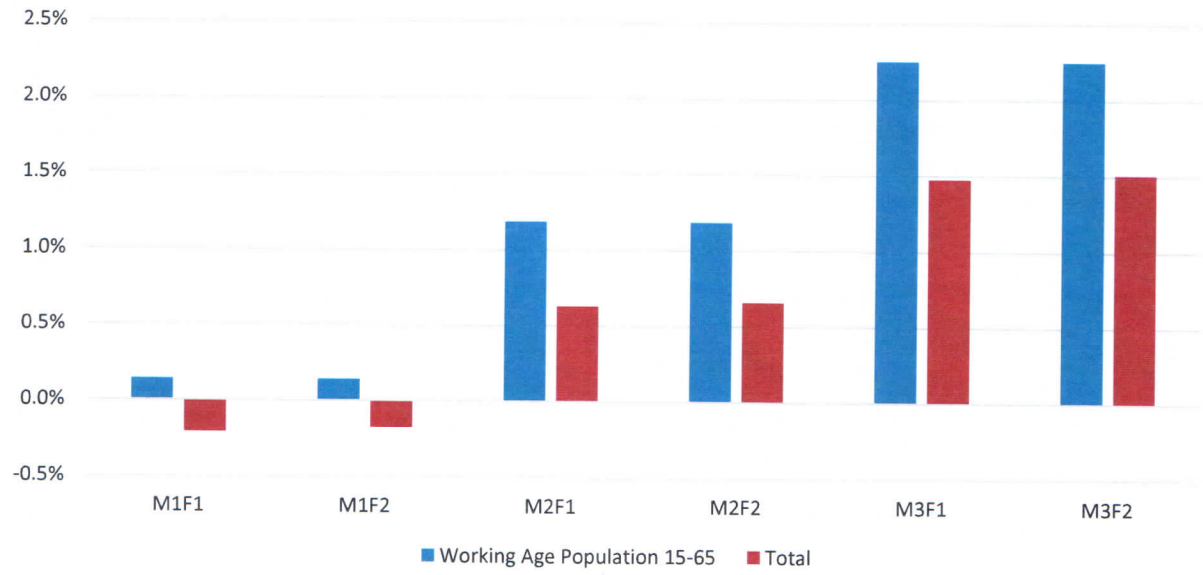
However, in Ireland's case, the most variable model component, with the largest implications for subsequent estimates of population size and composition is net migration, the difference between immigration and emigration. Migrants tend to be concentrated in working age cohorts, boosting the size of the working age population in comparison to the elderly population. Thus, net migration tends to improve dependency ratios, and, improve the fiscal position in relation to pension payments.

The sensitivity to model inputs, particularly in estimated migration, can be demonstrated by comparing projection estimates for commonly used models up to 2020. M2F2 refers to the CSO's central projection estimate based on declining fertility (F2) and migration (M2) annually based upon the 2016

census.[4] The Europop2015 estimates refer to the baseline projection conducted by Eurostat for a range of EU countries given derived estimates for fertility, life expectancy and modelled migration.[5] These projection estimates have been used to examine likely cost growth in assessments of fiscal sustainability.

Central forecasts based upon 2015/2016 data projected a relatively smaller working age population resulting in significantly higher Old age dependency ratios. This was largely the result in higher than expected net migration into Ireland. While the latest estimates for 2020 show some 27,700 net migrants into Ireland (itself a fall from the 30,000 seen the previous two years), the CSO's central scenario estimated some 20,000 per year, while Eurostat Europop2015 estimates generated an estimate of 9,877 net migrants in 2020.[6]

Figure 1 Percentage difference between real population and CSO projection estimate 2020



Source: CSO Population and Labour Force Projections 2017 – 2051and Population Estimates (Persons in April)

[4] Life expectancy estimates do not vary between scenarios.

[5] Population estimates have been updated in Eurostat's Europop2019 series. European projections based upon Europop2015 were used for the Population ageing and the public finances in Ireland: September 2018 report (Department of Finance,2018).

[6]From Summary methodology of the 2015-based population projections (Eurostat,2017) which formed the basis of The 2018 Ageing Report: Economic and Budgetary Projections for the EU Member States (2016-2070) (Eurostat,2017)

Figure 1 demonstrates the difference between the latest estimate of total and working age population relative to population projections for all of the CSO's scenarios. In all combinations of modest and low migration scenarios (M2 and M3), the aggregate population in 2020 exceeded projections by between 0.63 and 1.51 per cent. The latest estimate for population was between 0.17 and 0.21 per cent smaller for the two combinations of high migration scenario (lower and higher fertility respectively).

Differences were more pronounced concerning the working age population. In all cases, the working age population (between the ages of 15 and 65) according to the CSO's latest population estimate for 2020 was larger than projected under any of the CSO's scenarios.[7] This surplus ranges from 0.14 per cent under the highest migration scenarios (M1) to 2.25 per cent under the more pessimistic M3 assumptions. As a result, in all cases, projection scenarios overstated the Old Age dependency ratio in 2020.

As demonstrated, changes in assumptions feeding into demographic modelling can have significant impacts, even over relatively small periods of time. This is compounded over longer time frames.

Table 5: Projected Old Age Dependency Ratio (66+ to 15-65 years Cohort) by scenario

Projection	2030	2040	2050
M1F2	25.02%	30.85%	38.12%
M2F2	25.70%	32.35%	40.76%
EUROPOP2019 Baseline	24.92%	31.17%	39.10%
EUROPOP2019 High Migration	24.51%	30.29%	37.46%

Source: CSO Population and Labour Force Projections 2017 - 2051; Eurostat EUROPOP2019 – Population Projections at national level (2019-2100)

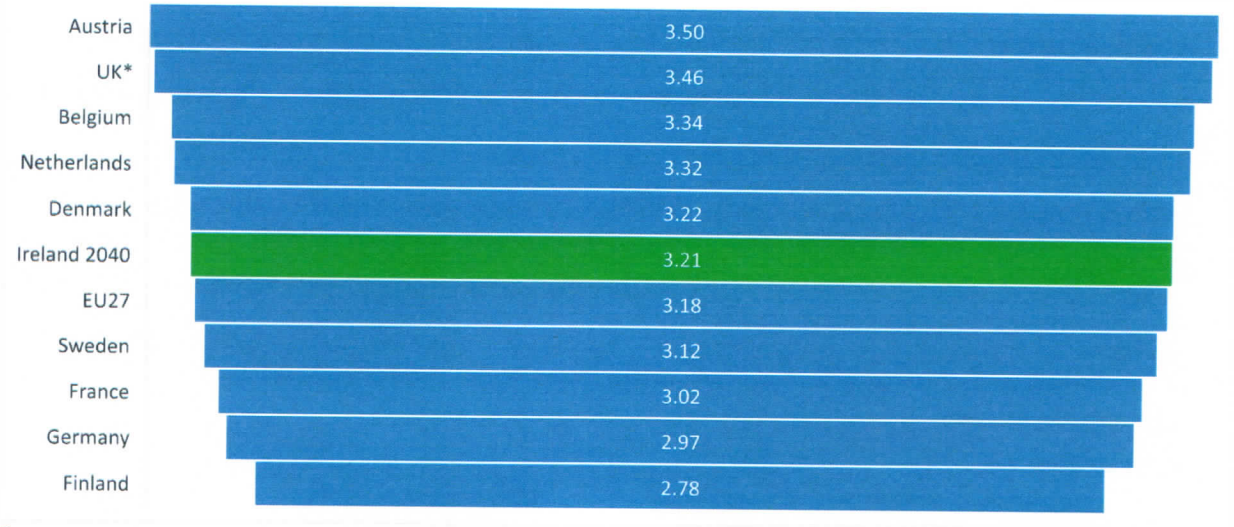
Table 5 displays estimates of Ireland's forecast old age dependency ratio by model specification. While similar for all projections in 2030, estimates begin to diverge significantly as time progresses. The gap grows to over 3 percentage points by 2050 between the projection extremes encompassing CSO's

[7] This reflects the current pension age of 66.

M2F2 and Eurostat's High Migration scenario.[8] The projection model that matched real developments to 2020, M2F1, tends towards the lower end of the dependency ratio estimate range.

In all forecast scenarios, Ireland's Old Age Dependency Ratio (66+ to 15-65 years Cohort) significantly increases by 2030 from approximately 20.34 per cent in 2020 to between 24.51 and 25.02 per cent. Further growth in the ratio is observed in the following decades as the ratio goes to between 37.46 and 40.76 per cent in 2050. This amounts to a decline of approximately 4.92 working age persons per pension aged individual in 2020 to between 2.45 and 2.67 by 2050. This is significantly more sanguine than the Fiscal Council's estimate of 47.3 per cent by 2050 (65+ to 15-64 cohort) or 2.11 individuals over 15 and under 65 per person over 65.[9]

Figure 2: Working Age persons per old age dependent in 2020 for comparators to Ireland 2040 EUROPOP2019 Baseline



Source: Eurostat EUROPOP2019 – Population Projections at national level (2019-2100)
Note: UK data refer to 2019. Irish data utilise the current pension age threshold of 66 to for the working age and pension age groups. Other data refer to ratios assuming a pensionable age of 65 – this is currently the case for all comparators except the Netherlands.

Despite the projected fall in the Irish ratio over time, the Irish position remains relatively favourable in

[8] Eurostat's "High migration" scenario amounts to average net migration of 23,195 between 2030 and 2039, and 20,494 between 2040 and 2049.
[9] Fiscal council (2020) Long-term Sustainability Report: Fiscal challenges and Risks

relation to other EU states. While Eurostat's central projection sees Ireland's standard old age dependency ratio climb to 41.9 per cent in 2050 (adjusted 39.1 per cent), this is second lowest in Ireland's comparator group, second only to Sweden at 39.0 per cent.[10]

As displayed above, Ireland's expected adjusted working age to pensioner population in 2040 (3.21) is similar to current rates in comparable EU states and close to the value for the EU27. Austria, Belgium, Netherlands, Denmark and the United Kingdom have higher proportions of elderly individuals than Ireland is expected to have in 2040.

Despite population ageing representing a challenge to the Irish state, available evidence suggests that risks can be overstated. The latest available data suggest that recent populations understated growth in the working age population, largely due to pessimistic assumptions around net migration, and subsequently overestimated compositional changes in the period up to 2020. Ireland also possesses significant relative advantages in demographic terms, and can consequently address challenges in the coming decades that already affect comparable European countries.

Equally, population projections covering the next few decades are sensitive to assumptions and slight adjustments can significantly alter our forecast position. It is worth noting that these inputs themselves aren't simply externally given. Migration in particular, is believed to be influenced by output and productivity performance which, as we relate in the next section, can be promoted by policy choices.

Productivity and Economic Growth

Any assessment of fiscal sustainability must consider the size and evolution of the denominator i.e. future economic output. In particular, policies that influence future economic output are salient to the discussion on sustainability and we must consider the potential impact of different fiscal policy measures on the economy's long-run productivity growth and output growth.

[10] The comparator group refer to all current and former EU states with a population above 1 million and GDP per capita above €30,000.

Long-run economic growth is endogenously linked to fiscal policy decisions. It is true that productivity has been on a declining trend in many advanced economies in recent years. However, this development is itself connected to fiscal policy. In particular, there was a decline in public investment and public R&D in many countries, especially in the wake of the great financial crash. It is not inevitable that the current period of lower productivity growth internationally will continue and there is a robust debate in the economics community about future growth potential. Ultimately, future productivity growth will depend on technological change and the diffusion of new knowledge and innovations through the economy.

We know that long-run per capita output is determined by:

(A) The proportion of the working-age population as a percent of the total population,

(B) The percentage of the working age population working for pay or profit,

(C) The average number of hours worked per person working and,

(D) The average output per unit hour worked (i.e. labour productivity).

The ageing demographic profile will put downward pressure on the working-age population as a percentage of the total population. This component of output will therefore decline in the absence of very high levels of net inward migration.

The employment rate and average hours worked can be influenced in a number of ways via fiscal policy. For example, income tax policy is an important policy lever in this regard, particularly for low income workers, as are policies that remove barriers to employment. A much more activist role for the state in the provision of childcare infrastructure, or at the very least generous subsidies for childcare services is an obvious area for reform given that Ireland has amongst the highest costs of childcare in the world. Reduced costs for childcare will increase employment rates for second earners and lone parents. The slow tapering down of housing and welfare supports along with increases in market income, instead of removing these supports completely along with employment, would constitute another potential reform. If properly designed, such a change would remove potential disincentives to

work and increase the employment rate.

In the long-run it is only productivity that can drive growth. Analysis from the NERI (2015)[11] makes clear that best way to sustain productivity growth is to

(1) Increase per capita/pupil levels of investment in education and skills, particularly early years learning;

(2) Increase investment as a percentage of output in the production, diffusion and use of new ideas, for example through supports for public and private R&D and through the development of a coherent national innovation system, and

(3) Increase investment in productivity enhancing infrastructure as a percentage of output.

These are all aspects of fiscal policy.

In particular, careful attention should be paid to the investment/output ratio, the fraction of labour allocated to R&D, barriers to technology diffusion, and the fraction of output spent on education, particularly spending on disadvantaged groups and on early years learning. Insufficient investment in skills, infrastructure, applied and basic research and technology diffusion will constrain future economic growth. Underlying all of this is the need for supportive institutions to enable and incentivise innovation and to discourage rent-seeking activities.

Finally, the early years are the most important for human capital development, and external factors, like poverty, can have extremely damaging and lasting effects on human capital. This means that even social transfers, to the extent that they reduce poverty, can influence long-run productivity and economic growth.

It is notable in this context that NERI research[12] shows education expenditure per pupil in Ireland was just 80.6 per cent of the population weighted average for other high-income EU countries in 2018.

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[11] McDonnell, T. (2015) Cultivating Long-Run Economic Growth in the Republic of Ireland, NERI Working Paper No. 31.

[12] Goldrick-Kelly, P., Mac Flynn, P. and T. McDonnell (2020) Reforming Tax and Spend in the United Kingdom and in the Republic of Ireland, Working Paper No.67

This amounted to a relative under-spend in excess of €2 billion per annum. Ireland's per capita spending on R&D is just half that of the average for other high income European countries. In other words, not only will Ireland need to continue funding existing rates of spending but it will need to make additional catch-up commitments in underfunded areas like education.

These are not just academic points. The long-run sustainability of the pension system and indeed broader fiscal sustainability are functions of the economy's long-run growth potential, which is, in turn, a function of all aspects of fiscal policy. As such, any attempt to assess the sustainability of the pension system without incorporating a full analysis of all aspects of actual and potential revenue raising and actual and potential government spending decisions is inherently flawed.

Growth Projections

Ireland is close to the technological frontier. This suggests Ireland has reduced potential for productivity growth in the future as the economy can no longer benefit from convergence based catch-up growth. It is instructive therefore to look at historical growth trends for the country at the technological frontier. The United States (US) has been the technological frontier economy since at least the end of the First World War. Per capita growth in the US averaged a little over 2 per cent per annum between 1913 and 2013. Labour productivity growth in the US averaged close to 1.5 per cent per annum between 1949 and 2020.

There are a range of growth projections available for the Republic of Ireland (e.g. European commission, Fiscal Council, ESRI) but a common assumption is that annual growth in output and annual growth in productivity will both decline over the coming decades. Notably the Fiscal Council[13] projects that labour productivity growth will deteriorate to an average of just 0.7 per cent per annum between 2031 and 2050. The decline in output growth is reasonable given the expected slowdown in growth for the working age population and the commensurately weak prospects for future employment growth over the longer-term. However, the projected decline in productivity growth is more

[13] Fiscal council (2020) Long-term Sustainability Report: Fiscal challenges and Risks, Table 2.1

speculative. Projections of average productivity growth beyond a relatively short timeframe must be considered highly tentative as we cannot foresee the path of future technological change and diffusion of innovations.

Seemingly small annual differences in labour productivity growth may not seem significant. However, if labour productivity was to grow by an average of 1.5 per cent annually between 2021 and 2050, instead of the 2 per cent (2021-25), 1.1 per cent (2026-30), and 0.7 per cent (2031-50) projected by the Fiscal council, then the Irish economy would be over 16 per cent larger in 2050.[14]

The Fiscal Council projects total demographics-related spending at 35.7 per cent of GNI* in 2050.[15] Under the more benign labour productivity scenario this would fall to 30.6 per cent (it was 27.6 per cent in 2019) on a straight-line basis. The equivalent decline in pension spending would be from 11.9 per cent to 10.2 per cent (it was 7.7 per cent in 2019).[16]

We can see that making the policy regime and the economic environment more conducive to sustainable productivity growth can meaningfully improve the fiscal outlook. Even so, it does not completely reverse the fiscal deterioration generated by the higher age related spending. An additional point is that higher labour productivity growth in Ireland will at least partially depend on other countries also shifting to policies more focused on long-run productivity growth. For this reason, amongst others, we cannot 'induce' particular productivity targets by assigning particular levels of R&D or other relevant inputs.

Finally, the general government finances ran a modest structural deficit of about 0.4 per cent of potential output in 2019. This suggests that the rise in age-related spending as a percentage of output

[14] A faster level of productivity growth and commensurately stronger economy is also likely to be more attractive to inward migration suggesting higher total employment and an improved working age ratio. A weaker than expected productivity performance will have the opposite effect on migration and employment.
[15] Fiscal council (2020) Long-term Sustainability Report: Fiscal challenges and Risks, Table 2.1 and Table 3.1
[16] On a straight-line basis the budget deficit improves from 5.8% of GNI* to 3.5% of GNI*. In practice the stronger economy would generate additional tax receipts so that the actual deficit would likely be smaller in both nominal terms and percentage of output terms.

will eventually need to be accommodated via some reforms to revenue raising policy and/or public spending policy. This is true even in a high productivity scenario although the financial scale of the reforms is significantly reduced in this instance.

Recommendations

1. Assessment of the future sustainability of public expenditure on pensions and indeed the future sustainability of overall public expenditure levels should only be conducted in conjunction with a full review of the sufficiency and composition of the Irish system of taxes and social contributions.

2. The review should assess the overall design of the system as well as the specific impact of particular spending and revenue raising policies in terms of growth, redistribution, poverty elimination and environmental sustainability.

3. The future sustainability of pensions will depend on the ability of the economy to maintain high levels of employment and ongoing productivity growth. Future growth can be influenced by fiscal policy. As such, assessment of the future sustainability of the pension system must also consider the potential impact of shifting fiscal policy in a more growth friendly direction.