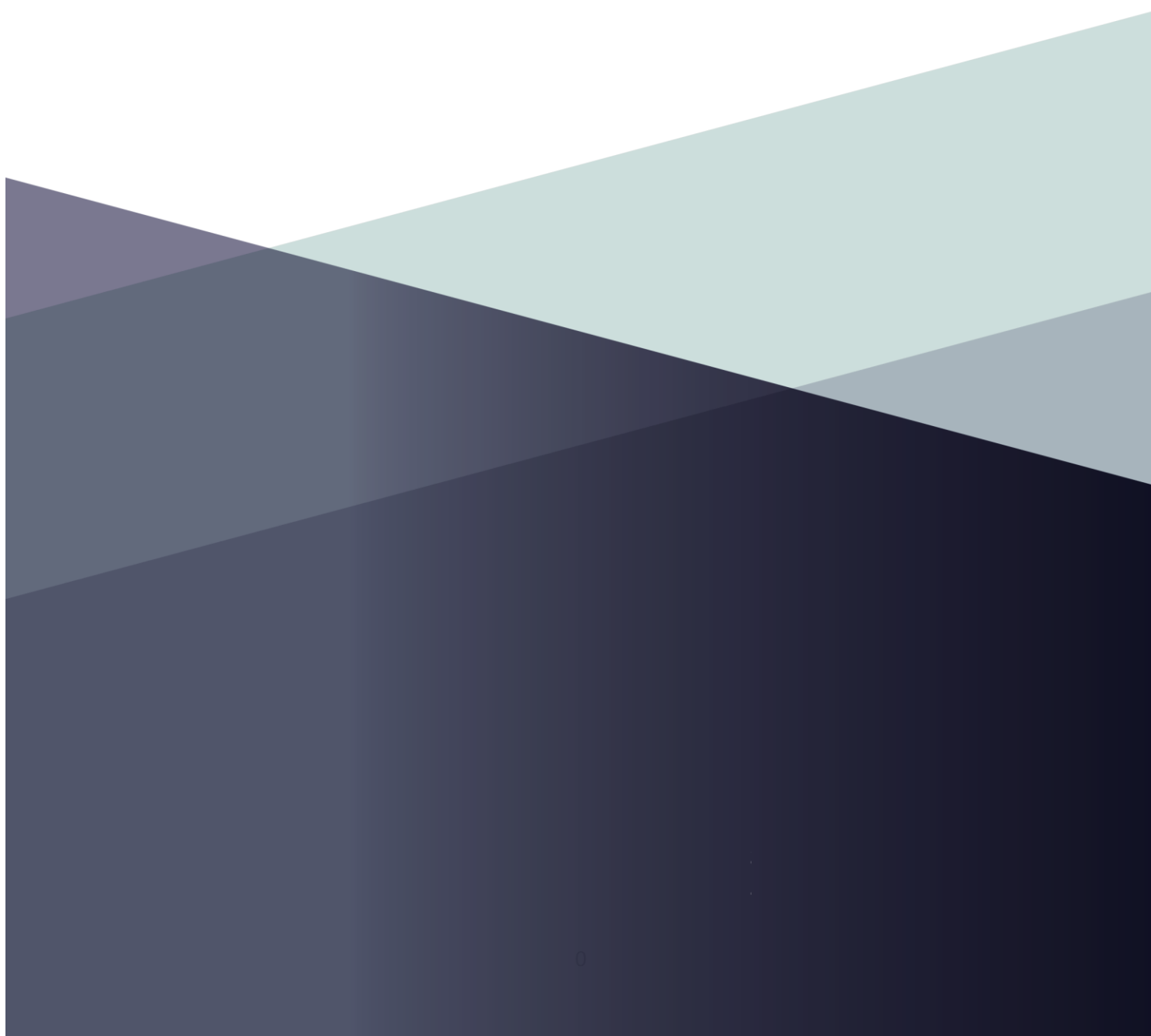**An Coimisiún Pinsean**
The Pensions Commission

Expenditure Projections

Technical Sub-Committee – Working Paper 2
July 2021

Introduction

The Pensions Commission established a Technical Sub-Committee. The Terms of Reference for the Sub-Committee, agreed by the Commission, set out that the "*objective of the sub-committee, drawing on relevant material made available to it, is to inform the Commission to enable it to form a view on issues around sustainability and adequacy of the pension system over time (next 30/50 years). It is important that this view is transparent, evidence based and stated in a straightforward manner.*"

The Terms of Reference stated that "*Ideally, advised by the sub-committee, the Commission should reach an agreed view on the data, definitions, analyses, and projections (with sensitivity analysis as appropriate)*". The specific areas identified by the Commission related to population and labour force projections, expenditure projections, the role of the State pension in preventing pensioner poverty, and the proposed approach to benchmarking and indexation of State pension rates of payment.

The Sub-Committee examined the material made available to the Commission through the Secretariat. This included presentations made by a range of external organisations, and submissions made through the public consultation process. It also sought additional material from the Department of Finance (DFIN), the Department of Social Protection (DSP), the Central Statistics Office (CSO) and the Irish Fiscal Advisory Council (IFAC). Four Working Papers were produced for agreement by the Commission. Any conclusions in these papers relate to the Terms of Reference of the Sub-Committee and should not be construed as recommendations of either the Sub-Committee or the Pensions Commission.

The four Working Papers are:

Working Paper 1 – Population and Labour Force Projections

Working Paper 2 – Expenditure Projections

Working Paper 3 – Poverty Prevention and State Pensions

Working Paper 4 – Benchmarking and Indexation

Membership of the Technical Sub-Committee

Roma Burke	Chairperson of Sub-Committee
	Actuary and Partner with Lane Clark and Peacock Ireland Ltd
Seamus Coffey	Economist and Lecturer in University College Cork
Dr. Aedín Doris	Labour Economist, Lecturer in Maynooth University, and Managing Editor of the Economic and Social Review.

Purpose

A Technical Sub-Committee was set up to review relevant data to enable the Commission to form a view on issues around sustainability and adequacy of the pension system over time (next 30/50 years). Ideally, advised by the Sub-Committee, the Commission should reach an agreed view on the data, definitions, analyses, and projections. The Sub-Committee's Terms of Reference includes pension expenditure.

The purpose of this note is to summarise the expenditure projections provided to the sub-committee and the conclusions arising from their consideration of same.

Summary

1. Department of Finance (DFIN) and IFAC projections are broadly similar. IFAC's projections cover the sustainability of the public finances in Ireland to 2050, while the DFIN projections cover period 2019 to 2070.

2. Both use a broad definition of pensions that includes public sector pensions and a range of working age payments as well as the State Pension. The Sub-Committee focussed mainly on State Pension expenditure.

3. The Committee agreed that GNI* is a better measure of the size of the economy than GDP.

4. Expenditure related to State pensions is projected to significantly increase over time – more than doubling from 3.8% of GNI* in 2019 to 7.9% in 2050, and increasing further to 9.2% by 2070 according to DFIN.

5. Increasing the State pension age would reduce State pensions expenditure.

6. Analyses by DFIN and IFAC suggest that had the repealed increases in pension age taken place (to 67 in 2021, and to 68 in 2028), this would have reduced overall Government expenditure by 0.6 percentage points of GNI* by 2030 (from 9.6% to 9.0% according to DFIN), and by 0.8 percentage points of GNI* by 2050 (from 12.7% to 11.9% according to IFAC). This takes account of the knock-on potential impacts on public service pensions and working age payments.

7. The Sub-Committee considered evidence on other potential sources of savings. While increasing the State pension age has the greatest impact on reducing expenditure, a substantial increase in the employment rate of older workers (of 10 percentage points by 2070) would also reduce future expenditure.

8. Some submissions have suggested an alternative approach, pursuing economic and employment growth to manage sustainability.
   o Economic growth: the IFAC report notes that economic growth would translate to an increase in wages which would result in an increase in pensions payments and so no reduction in expenditure .
   o Employment growth of the working age population: the Sub-Committee noted that IFAC projections are based on an increase in the participation rate from 62% to 66.5% by 2050. This represents a significant increase over the time period and there may be limited scope for additional participation.

9. The Sub-Committee was asked to look at pensions expenditure from the SIF. KPMG estimates that if PRSI rates remain as they are today, and there are no changes to the pension age or pension calculation method, in the absence of Exchequer subventions, by 2045, all of the PRSI income received would be required to fund State Pension Contributory expenditure alone. SIF income would need to increase by 54% to maintain all SIF benefits.

Table of Contents

Expenditure Projections

This paper first presents pension expenditure projections, including the projected fiscal impacts of increasing the State pension age based on work carried out by the Department of Finance (DFIN) to feed into the European Commission's Ageing Reports[1], and the Irish Fiscal Advisory Council (IFAC) for their Long-Term Sustainability Report.[2] The paper also considers the 2021 update of the 2015 Actuarial Review of the Social Insurance Fund by KPMG.

Overall Pension Expenditure Projections

While both DFIN and IFAC present projections for pension related expenditure (out to 2070 and 2050 respectively), the definition of "Pensions" in Table 1 below must be clarified. The background assumptions underpinning these projections are set out in Appendices A and B. The key points to note are:

a. Firstly, in both cases "pensions" refers both to public sector and State pensions.

b. Secondly, "pensions" includes social welfare expenditure wider than State pensions alone - in both cases, it includes survivors and disability/carers payments, and some others. Accordingly, the figures do not relate solely to social welfare expenditure relating to those of "pension age".

c. Thirdly, the IFAC figures below assume that the pension age increases in line with legislation that has been repealed i.e. increase to 67 in 2021 and to 68 in 2028. The DFIN projections assume a constant pension age of 66 throughout the projection period.

d. IFAC primarily estimate changes in tax take through a growth model, where changes in the levels of workers in the population for example will affect output,

---

[1] DFIN prepared data for the 2021 EU Ageing Report (published in May 2021) and gave a presentation to Commission members on this work. The EU 2021 Ageing Report is available at: The 2021 Ageing Report: Economic and Budgetary Projections for the EU Member States (2019-2070) | European Commission (europa.eu)

[2] In terms of assumptions underpinning the IFAC's projections, the *Long-term Model: Methodology Report* provides details on its Long-Term Model (LTM):

   Irish Fiscal Advisory Council (2020) *Long-term Model: Methodology Report.*
   Irish Fiscal Advisory Council (2020) *Long-term Sustainability Report - Fiscal challenges and risks 2025-2050,* p. 20 & p. 38

and therefore tax revenues.[3] DFIN estimate that as the pace of growth of the working age population slows, the rate of economic growth will moderate, as additional labour supply becomes more scarce. Fiscal revenues will, accordingly, evolve at a slower rate.[4]

e. Both IFAC and DFIN incorporate estimated changes in tax take in their models, whereby Government revenues (tax receipts) are kept as a constant share of GNI*.Both IFAC and DFIN assume that pension payment rates increase in line with earnings. [5] [6]

Table 1: IFAC & DFIN – General Government Age Related Spending, as proportion of GNI*

	2019		2030		2050		2070
	IFAC	**DFIN**	**IFAC**	**DFIN**	**IFAC**	**DFIN**	**DFIN**
Pensions	7.7% (37%)	7.4% (35%)	9.1% (38%)	9.6% (39%)	11.9% (41%)	12.1% (41%)	12.3% (39%)
Heath & Long-Term Care	8.3% (40%)	8.6% (40%)	10.8% (44%)	9.9% (40%)	13.2% (45%)	12.2% (41%)	14.1% (45%)
Education	4.9 % (23%)	5.3% (25%)	4.4% (18%)	5.3% (21%)	4.2% (14%)	5.2% (18%)	5.1% (16%)
Total	20.9% (100%)	21.4% (100%)	24.3% (100%)	24.7% (100%)	29.3% (100%)	29.6% (100%)	31.6% (100%)

Sources: IFAC (2020) Long-term Sustainability Report, p. 44 & DFIN submission, p.10.

Conclusions:
- Previously published DFIN and IFAC pension projections are broadly similar.
- The definition of "pensions" as used by IFAC and DFIN in these publications does not meet the needs of the Pensions Commission, as does not separate out public sector and State pensions or working age and pension age expenditure. That breakdown of figures was subsequently provided to the Sub-Committee.

---

[3] A summary of long-term revenue projections in available in IFAC (2020) *Long-term Model Methodology Report*, p.56. Also, Section 5 of the methodology report covers revenues entirely.
[4]DFIN submission refers to fiscal revenue, p.1, 12 & 17.
Information on the Department of Finance, the Interdepartmental Pensions Reform and Taxation Group (IDPRTG) is also on pg. 10 of DFIN submission.
[5] Irish Fiscal Advisory Council (2020) Long-term Sustainability Report p. 41.
[6] DFIN presentation at Meeting 2 - *2021 Ageing Report: Irish Pension Expenditure Projections 2019-2070*
Doc Ref: EPPN 03.0 2021 Ageing Report Irish Pension Expenditure Projections 2019-2070.pptx

What is the appropriate measure?

Before breaking the pension figures down, it is important to consider if GNI* is the appropriate measure of national income.[7] Table 2 below compares the pension expenditure projections from Table 1 above as a proportion of GDP and GNI*. DFIN note in their submission (p. 10) that "*Statistical distortions to GDP, that overstate the size of the Irish economy, mean that expenditure projections scales by GDP can paint an overly benign picture.*" Accordingly, the remaining tables in this note are based on expenditure as a proportion of GNI*.

Table 2: Breakdown – Total pensions expenditure as a per cent of GNI* and GDP

	2019	2021	2030		2050		2070
	DFIN	IFAC	IFAC	DFIN	IFAC	DFIN	DFIN
GNI*	7.4%	9.2%	9.1%	9.6%	11.9%	12.1%	12.3%
GDP	4.6%	5.2%	5.3%	5.9%	6.9%	7.5%	7.6%

Source: IFAC and DFIN, upon request by Secretariat

Conclusions

- The use of GNI* is more appropriate than GDP for the Irish context. It excludes globalisation effects that disproportionally impact the measurement of the size of the Irish economy.
- It is noted that GDP is relevant in the context of determining 'fiscal space' and also that any distortion from using GDP would be constant when examining trends into the future.
- However, looking at expenditure as a proportion of GNI* gives a more valid indication of the scale of expenditure compared to the size of the Irish economy than using GDP.

Separating out public sector pensions

Table 3 separates out these projections for public sector and "State pensions". Again, it should be noted that the definition of "State pensions" is much broader than State pensions alone.[8] As with Table 2, the IFAC projections assume that the

---

[7]For more information on GDP and Modified GNI*, see Department of Finance (May 2018) *GDP and 'Modified GNI' – Explanation Note*, p. 2.

[8] DFIN figures build on the work carried out for the EU Ageing Report due to be published this year. Under the Ageing Report classification, 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, Carer's Allowance and Benefit). IFAC advise their overall state pensions figure contains from Social protection: State pension (Non-Contributory), Window's Pension (Non-Contributory), the sum of the illness, disability and carer's

pension age will increase in line with legislation that was repealed last December, while DFIN assume a constant State pension age of 66.

Table 3 - Breakdown - Public and State Pensions as per cent of GNI*

	2019	2021	2030		2050		2070
	DFIN	**IFAC**	**DFIN**	**IFAC**	**DFIN**	**IFAC**	**DFIN**
Public Sector	1.6%	2.4%	2.4%	2.6%	2.3%	2.7%	1.1%
State Pensions	5.8%	6.8%	7.2%	6.6%	9.9%	9.1%	11.3%
Total Pensions	7.4%	9.2%	9.6%	9.1%	12.1%	11.9%	12.3%

Source: IFAC e-mail to Secretariat on 30/4/21. DFIN submission (Table 2)

Conclusions:
- DFIN and IFAC projections for public and State pension expenditure are broadly similar.
- Public sector pensions make up a relatively small component of total pension expenditure projections. It is also decreasing over time (as a consequence of the introduction of the Single Public Service Pension scheme).
- State pension expenditure is increasing over time – almost doubling from 2019 to 2070 as a proportion of GNI* according to DFIN. However, this figure for "State pensions" is not an accurate representation of State pension expenditure as it includes other social welfare payments, such as disability and survivor payments. The Sub-Committee addressed this by getting figures excluding these other payments from DFIN.

Separating out State pension related expenditure

DFIN provided, in their submission to the Commission, figures on State pension expenditure that applied to those of State pension age alone - i.e. it excluded expenditure on disability, illness, carer's and other working age payments. While we do not have comparable figures from IFAC, given that their projections are broadly similar, Table 4 below provides a reasonable indication of projected pension age related expenditure by the Department of Social Protection. These figures assume a constant pension age of 66. It can be seen that approximately 2 percentage points of expenditure can be attributed to working age payments that are not State pension payments. It should be noted that survivor's pensions below State Pension age are not included in the table below. DFIN estimate that survivors aged below 66 adds about 0.2 pp of GNI* each year.

---

allocations. From the SIF: State Pension (Contributory), Widow(er)'s and Surviving Civil Partner's Pension (Contributory), and Death Benefit.

Table 4 – Breakdown of DFIN projected expenditure, as per cent of GNI*

	2019	2030	2050	2070
State Pension	5.8%	7.2%	9.9%	11.3%
Total below SPA	2.0%	2.1%	2.0%	2.0%
State Pension excluding expenditure below SPA	3.8%	5.0%	7.9%	9.2%

Source: DFIN submission (Table 2). Rounding may affect totals.

Conclusions:
- Approximately 2 percentage points of DFIN projected pension expenditure can be attributed to working age payments.
- Removal of these working age payments highlights that **expenditure actually related to State pensions is significantly increasing over time – more than doubling from 3.8% of GNI* in 2019 to 7.9% in 2050, and increasing further to 9.2% by 2070 according to DFIN.**

Pension age increases

The Commission has been asked to examine the sustainability of the State pension system and the Social Insurance Fund. This section examines the extent to which increasing the State pension age moderates expenditure growth based on analyses by IFAC and DFIN.

Impact on State pension expenditure

Table 5 on the next page presents the difference in State pension expenditure (as set out in last row of Table 4 above) if the State pension age had increased in line with previous legislation i.e. increased to 67 in 2021 and to 68 in 2028. Looking at State pension expenditure alone (social welfare expenditure for those above pension age only, bar survivor's pensions), if can be seen that there is a reduction in such expenditure of 0.5 percentage points of GNI* by 2030, which increases to 0.9 percentage points by 2050.

The projections above are based on pension age increases taking place in 2021 and 2028. State pension age increases at a later stage and/or on a more gradual basis, will reduce the projected level of savings for any given year.

Table 5 – Breakdown of DFIN projected expenditure on social welfare pensions excluding those below State pension age, as per cent of GNI*

	2019	**2030**	**2050**	**2070**
Constant pension age of 66 (as in Table 4 - Survivor's pensions below State Pension age are not included)	3.8%	5.0%	7.9%	9.2%
Increase pension age in line with previous legislation	3.8%	4.5%	7.0%	8.3%

Source: DFIN submission (Table 2). Rounding may affect totals.

Conclusions:
- Increasing the pension age reduces State pensions expenditure.
- However, the net effect of increased expenditure on working age payments and potential knock-on impacts on public sector pensions is not apparent when looking at State pension expenditure alone.
- The projections above are based on pension age increases taking place in 2021 and 2028. State pension age increases at a later stage and on a gradual basis, will reduce the projected level of savings for any given year.

Considering wider fiscal impacts

It is more appropriate to consider the wider expenditure impacts of changing the pension age than just considering the impact on State pension expenditure. Expenditure on working age payments would increase as a result of an increased pension age. On the other hand, public sector pensions would decrease, as the pension age for public servants under the Single Public Service Pension Scheme is the State pension age.[9] In this case, the net effect only becomes apparent through consideration of the wider definition of pension expenditure.

Accordingly, Table 6 on the next page sets out the impact of overall pension expenditure (which includes public sector pension and wider social protection payments) of changes to the State pension age.[10] This shows that by 2030, increases in the State pension age would have moderated increases in annual

---

[9] Under the Single Scheme, the terms "normal pension age" and "normal retirement age" together mean the earliest age at which a member can retire and receive his/her pension.   For the vast majority of Single Scheme members, that age is defined in Section 13 of the Act as being the age of eligibility for the State Pension.

[10] See PC1041 State Pension age: Fiscal Impacts for more detail on this issue.

expenditure by an estimated 0.6 percentage points. of GNI* (DFIN) or 0.8 percentage points. of GNI* by 2030, and this would have increased to 0.8 p.p. (DFIN and IFAC) by 2050.

Table 6: Broader "Pensions" Expenditure Projections by Pension age scenarios – per cent of GNI* - Annual Expenditure

	2019		2030	2050		2070
	IFAC	DFIN	DFIN	IFAC	DFIN	DFIN
Keeping SPA at 66	7.75%	7.4%	9.6%	12.7%	12.1%	12.3%
Previously planned legislative changes i.e. 67 in 2021 and 68 in 2028 (legislation repealed)	7.75%	7.4%	9.0%	11.9%	11.3%	11.5%
Linking to Life Expectancy	7.75%			11.5%		

Sources: Irish Fiscal Advisory Council (2020) Long-term Sustainability Report p. 74.
DFIN submission to the Commission, Table 3.

Conclusions

- Analyses by DFIN and IFAC suggests that should the previously planned increases in pension age have taken place (to 67 in 2021, and to 68 in 2028) that this would reduce overall Government expenditure by between 0.6-0.8 percentage points of GNI* by 2030, and by 0.8 percentage points of GNI* by 2050. This takes account of the knock-on potential impacts on public service pensions and working age payments.

Net present value of difference

The Sub-Committee considered it useful to set out how these GNI*% figures above translate into nominal amounts of expenditure. Given that the specific discount rate used can significantly impact the calculation of the net present value of the savings, the Sub-Committee sought a range of discount values from DFIN.

DFIN they looked at the difference between the cost of keeping the State pension age at 66 and the previously planned changes.

- Nominal figures show a savings of €1.487 billion in 2030, €3.812 billion in 2050 and €8.331 billion in 2070.
- Using a discount rate of 2%, the savings are calculated at €1.196 billion in 2030, €2.063 billion in 2050 and €3 billion in 2070.

- Applying a discount rate of 4% savings are calculated at approximately €966 million in 2030, €1.13 billion in 2050, and €1.127 billion in 2070.

It should be noted that these savings relate to the particular year alone i.e. the savings in 2030, 2050 and 2070. More detailed DFIN and IFAC figures are set out in Appendix A, which include the cumulative effect of these savings.

Table 7: Present value of savings from previously planned State Pension age increase, applying varying discount rates

Discount rate	2030	2050	2070
0%	€1.487 billion	€3.812 billion	€8.331 billion
2%	€1.196 billion	€2.063 billion	€3.034.6 billion
4%	€965.6 billion	€1.13 billion	€1.127 billion

Conclusions
- Nominal figures show a savings of €1.487 billion in 2030, €3.812 billion in 2050 and €8.331 billion in 2070.
- These figures refer to savings in the specific year. [11]

Table 8 below sets out how much of the savings arise from a State pension age increase can be attributed to savings in the social welfare system, and how much from public sector pensions. It is evident that a small proportion of the savings is due to savings in public sector pensions – they are primarily attributable to savings in the social welfare payments.

Table 8 - Nominal 4%, 2% and 0% Discount Rates - DFIN Projected Expenditure – Difference Between Constant Pension Age and Increasing State Pension Age

Discount Rate	4% - 2030	2% - 2030	0% - 2030	4% - 2050	2% - 2050	0% - 2050	4% - 2070	2% - 2070	0% - 2070
Social Welfare Pension	€901	€1,115.	€1,387	€1,071	€1,955	€3,612	€1,100	€2,962	€8,131
Public Sector Pension	€65	€80	€100	€60	€108	€200	€27.	€73	€200
Total Pension	€965	€1,196	€1,487	€1,130	€2,063	€3,812	€1,127	€3,035	€8,331

Source: DFIN e-mailed additional information on 13/5/21. Rounding may affect totals

---

[11] DFIN in their submission to the Commission emphasised the importance of looking at the cumulative cost, i.e. the sum of the additional cost each year related to keeping the SPA at 66 relative to increasing the SPA in 2021 and 2028. DFIN contend that looking at annual expenditure does not capture the true cost of the policy change. For instance, if a policy choice costs €1 billion each year for 10 years, the cost of the policy decision is €10 billion, rather than €1 billion in a given year.

Other potential sources of savings

The Sub-Committee wished to examine other potential sources of savings. The findings of sensitivity analysis carried out by DFIN are presented below in Table 9. This analysis was carried out on the broader definition of State pension expenditure projections (that is, it includes public sector pensions and those the under State pension age). These are ranked in order of the impact that they have on savings in 2030 compared to the baseline.

Table 9: DFIN Projections – Sensitivity Analysis

	2020	**2030**	**2050**	**2070**
Expenditure % GNI*	% GNI*	% GNI*	% GNI*	% GNI*
Baseline	6.4%	7.2%	9.9%	11.3%
Increasing SPA The original baseline. SPA assumed to increase to 67 in 2021 and 68 in 2028.	No Difference to Baseline	- 0.5%	-0.7%	-0.8%
Higher employment of older workers (+10 pps) Employment rate of older workers (55-74) 10 pps higher than baseline	No Difference to Baseline	-0.2%	-0.5%	-0.5%
Linking SPA to life expectancy For every year increase in life expectancy, ¾ of a year increase in State pension age	No Difference to Baseline	-0.1%	-0.9%	-1.6%
Higher migration (+33 per cent) 33% higher net inward migration compared to baseline	No Difference to Baseline	-0.1%	-0.3%	-0.1%
Higher Total Factor Productivity growth (convergence to 1.2 per cent) Total factor productivity growth assumed to converge to 1.2 % a year (baseline =1.0%).	No Difference to Baseline	Difference less than 0.1%	Difference less than 0.1%	Difference less than 0.1%
Total Factor Productivity risk scenario (convergence to 0.8 per cent) total factor productivity growth assumed to converge to 0.8 % a year (baseline =1.0%).	No Difference to Baseline	Difference less than 0.1%	Difference less than 0.1%	Difference less than 0.1%
Higher life expectancy at birth (+2 years) increase in life expectancy of 2 years by 2070 compared to baseline	No Difference to Baseline	Difference less than 0.1%	+0.2%	+0.6%
Lower migration (-33 per cent) 33% lower net inward migration compared to baseline	No Difference to Baseline	+0.1%	+0.3%	+0.2%
Lower fertility (-20 per cent) 20% lower fertility compared to baseline	No Difference to Baseline	No Difference to Baseline	+0.3%	+1.4%

Source: DFIN e-mailed additional information on 13/5/21.

DFIN provided additional details on the baseline employment rates for older workers for the Sub-Committee's information. This is set out in Table 9a. It can be seen that a 10 percentage point increase in the employment rate for those aged over 65 would be a significant increase to the projected employment rates of c. 20% out to 2070.

Table 9a – DFIN's Employment rate for workers by selected age group (%)

Age	2019	2030	2040	2050	2060	2070
55-64	61.8%	62.1%	63.3%	63.6%	64.5%	64.3%
65-71	20.4%	19.0%	19.1%	18.8%	19.4%	19.4%

Impact of increases in working age participation rates

The Sub-Committee wished to consider the potential impact of higher participation rates among working age people. This had been examined by the Department of Finance in 2018. However, the 2 percentage point higher employment rate for 20-64 year olds scenario was dropped by the EU Ageing Working Group this year and accordingly an updated scenario is not available. For information, DFIN's 2018 Population Ageing and Public Finances in Ireland found that "*In a scenario where the overall employment rate for the 20-64 age group was 2 percentage points higher than the baseline assumption … expenditure could be around 0.3 percentage points of GNI* lower than baseline in 2070.*" It should be noted that this figure cannot be compared to the figures above as the underlying assumptions are different.

Debt Scenarios

Table 10 below sets out debt scenarios from IFAC, based on changes to the State Pension age. These are presented in the context that definitions of fiscal sustainability (as set out in Meeting 7, in the presentation PC0730 *Definitions of Fiscal Sustainability*) incorporate debt.[12] In this regard, Table 10 below sets out IFAC's projections that keeping the pension age at 66 would result in a debt burden proportion of GNI* of 132% but increasing the State pension age in line with the previously planned legislation would reduce this to 110% and linking to life expectancy would further reduce this to 106%.[13]

---

[12] Fiscal sustainability being generally defined as the ability to continue current policies into the future with no changes to public services and taxation, and without causing public debt to rise continuously.
[13] These are "no-policy change" scenarios apart from the modelled changes. Things like social welfare payments, public sector pay are kept constant in real terms. Health care expenditure relative to demographics is kept constant (so are rises as the population ages). In education class sizes are kept constant. Tax and PRSI are kept constant in real terms. All these things are going to change. The scenarios illustrate the impact of the different policies relating to the pension age and are not forecasts.

Table 10: IFAC Debt Scenarios - Gross debt burden proportion of GNI*

	Keeping SPA at 66	Increases to the State pension age in line with previous legislation	Linking the pension age to life expectancy
2050	132%	110%	106%

Sources: Irish Fiscal Advisory Council (2020) *Long-term Sustainability Report* p.75.

Conclusion
- Increasing the State pension age improves the sustainability of the State Pension.

Alternative approach: Growth strategy?

It is proposed in some submissions (e.g. Nevin Institute, SIPTU) that a strategy to increase long-term economic growth, and in particular, faster employment growth and improved labour productivity would be the preferable approach to making the State Pension system more sustainable (combined with broadening the revenue base). Extracts from relevant sources are set out in Appendix B.

In this regard, IFAC notes in their Report that "*Ireland currently has relatively high labour productivity compared to elsewhere in the OECD and the scope for "catch up" growth is therefore limited. A general slowdown in productivity growth across OECD countries over the past decade also suggests that economic growth could be expected to slow.*"

IFAC also carried out a range of sensitivity analyses in respect of labour market participation and employment rates and found that, "*Despite the wide range of possible economic outcomes…. age-related expenditure as a share of GNI* varies only modestly across these alternative scenarios and the overall increase in age-related spending follows a similar upward path under all scenarios. This reflects, in part, the fact that the scenarios rest on essentially the same demographic assumptions, other than some variations in migration.* **More importantly, with pensions rising in line with wages, the cost per person broadly follows GNI*.** *As a result, while the actual level of spending would differ greatly across scenarios, the variation, expressed as a per cent of GNI*, is relatively modest*" (emphasis added).

This is reflected in Table 9 above, whereby DFIN's sensitivity analysis finds no or minimal impact of changes in total factor productivity on expenditure in the medium to long term.

Looking at employment growth, the Sub-Committee noted that IFAC projections are based on an increase in the participation rate for 20-64 year-olds from 62% to 66.5% by 2050. This represents a significant increase and there may be limited scope for additional participation.

Another question worth considering is just how strong Ireland's productivity (TFP) growth would need to be in order for debt to be stable at the end of the forecast period. IFAC indicate that given the strong ageing pressures on spending in the later years of the projections, unrealistically high TFP growth of close to 5% would be needed to keep debt constant as a share of GNI* in every year. If TFP growth was assumed to average 1% per annum from 2030–2050 (as opposed to 0.4%), this would yield debt averaging just under 90% over the period 2040–2050. This is the lowest level seen in the baseline projections. However, even in this assumption, debt would rise as a share of GNI* in later years.[14]

Updated Actuarial Review

The Sub-Committee was asked to consider pension expenditure including the SIF. This fund through PRSI contributions and other sources, with subventions from the Exchequer as needed, pays out the State Pension Contributory and other social insurance benefits. This section sets out some of the updates[15] carried out by KPMG for the Pensions Commission to the Actuarial Review of the Social Insurance Fund 2015 Report[16]. It reflects projected income and expenditure (including indirect costs i.e. increased Widow's/Widower's or Surviving Civil Partner's payments) up to and including 2071, using the base case as per the 2017 report, but on the basis that:

- the State Pension Age remains at 66 years and does not increase in either 2021 or 2028;

---

[14] Irish Fiscal Advisory Council (2020) Long-term Sustainability Report p. 104.
[15] KPMG Draft *Analyis for the Pension Commission 2021*, p.4.
[16] gov.ie - Minister Doherty Welcomes Publication of the Actuarial Review of the Social Insurance Fund 2015 (www.gov.ie)

- the 'better of' approach to calculating the State pension remains (the better of either the interim Total Contributions Approach or the yearly average); and
- the introduction of the Benefit payment for 65 year olds.
- In addition, macroeconomic and demographic assumptions have been updated in line with those used for the Ageing Report 2021.

Table 11 below sets out the impact of these changes on projected SIF income, expenditure, and any shortfall (in absolute terms and expressed as a % of GDP). It can be seen that increasing levels of SIF shortfalls are projected each year. It should be noted that this table includes all SIF expenditure; it is not limited to pension expenditure.

Table 11: SIF Receipts, Expenditure and Surplus/Shortfall

	2021	**2030**	**2045**	**2055**	**2071**
	€ billion	**€ billion**	**€ billion**	**€ billion**	**€ billion**
Receipts	11.4	14.4	18.9	22.2	28.6
Expenditure	12.2	16.4	28.5	37.6	49.1
Shortfall	-0.7	-2.0	-9.6	-15.5	-20.5
	% GNI*	**% GNI***	**% GNI***	**% GNI***	**% GNI***
Surplus/Shortfall	0.3%	0.7%	2.7%	3.7%	3.8%

Source: KPMG Draft update, page 36.

Based on these annual shortfalls, Table 12 below sets out the Net Present Value of projected future shortfalls in the SIF, using a range of discount rates. The shortfalls are in units of billions of euro, increasing steadily over time.

Table 12 - NPV of Projected future shortfalls (€BNs) at varying "real" discount rates

Period	Scenario – SPA 66 throughout & better of formula, 2021 position			
	1%	1.5%	2%	3%
5 years	0	0	-0.1	-0.1
10 years	1.8	1.7	1.6	1.4
20 years	21.5	19.9	18.4	15.8
30 years	75.9	67.9	60.7	48.8
Full Period	344.2	284.1	235.4	163.6

Source: KPMG Draft *Analysis 2021,* Table 11.4.2 Revision to Table 7.5, p. 37.

The update (p.35) also provides estimates of projected expenditure for the State Pension Contributory alone. Table 13 below sets out SIF receipts (from p.36) and compares pension expenditure projections with the current situation (State pension age of 66, and better of approach to calculating pension rate entitlement), and with an alternative **illustrative** scenario where the pension age increases from 66 to 70 over the period out to 2071.

It can be seen that with the current situation, with no changes to pension age, PRSI contributions or pension calculation methods, **by 2045, SPC expenditure alone is projected to equal SIF receipts**. With the illustrative pension age increases (**note: these are not being proposed**), SPC expenditure reduces but still increases significantly over the time period.

Table 13: SIF receipts and SPC expenditure scenarios

	SIF Receipts	SPA 66, 'better of'		SPA 66-70, 'better of'	
	€ billions	€ billions	% of SIF receipts	€ billions	% of SIF receipts
2020	10.7	5.83	54.5%	5.83	54.5%
2030	14.4	9.47	65.8%	8.41	58.4%
2045	18.9	18.90	100%	14.41	76.2%
2055	22.2	26.44	119.1%	21.63	97.4%
2071	**28.6**	33.99	118.8%	28.02	98.0%

Table 14 below displays similar information but looking at all benefits, SPC only and long-term benefits only. The table shows that in 2035, in order to fund all SIF benefits, there would need to be a 19% increase in the rates of PRSI– this is on the basis of <u>no Exchequer subvention</u>. Another way of reading the table is that in 2035, 95% of all SIF income is projected to be spent on long-term benefits. The projections by KPMG indicate that, in the absence of change, significant levels of Exchequer

subventions will be needed in order to maintain the payment of SIF benefits, including State pension payments.

Table 14 – Equivalised Contribution Rates

Year	All SIF Benefits	SPC only	Long Term Benefits only
2020	134%	55%	76%
2035	127%	76%	95%
2045	154%	100%	119%
2055	172%	119%	138%
2071	174%	119%	139%

Source: KPMG Draft *Analysis 2021,* Table 11.6.1 Reworked Table 7.2, p. 41.

Conclusions

- By 2045, KPMG estimate if PRSI rates remain as they are today, and there are no changes to the pension age or pension calculation method, in the absence of Exchequer subventions, all of the PRSI income received will be used to fund State Pension Contributory expenditure alone. SIF income would need to increase by 54% to maintain all SIF benefits.

Appendix A: Detailed pension age projections from DFIN and IFAC

- Tables E1 and E2 provides a breakdown of DFIN of projected expenditure. DFIN first produced the projections on a nominal basis and then scale them by GDP and GNI*. This nominal expenditure, however, isn't discounted. It is important to discount future expenditure by an appropriate discount rate to capture the net present value of the figure (to give an indication of expenditure in today's terms). DFIN used a 4 % discount rate for example when they looked at the difference between the cost of keeping the state pension age at 66 and the previously planned changes (the cumulative €50 billion figure in DFIN's submission). This is the same discount rate use by the CSO accrued-to-date liabilities. The SIF Actuarial Review would also use a discount rate, for example (they used a range of rates beyond the baseline rate).

- Figures are presented as a % of 2019 GNI* rather than any discount being used. i.e. reporting expenditure in today's terms. This is one way of expressing expenditure in *today's* terms, i.e. compared to the size of the economy today.

- The figures in Tables 10 and 11 represent the annual cost in the specified year, they do not represent the cumulative cost. A one-year cost of €24 billion is estimated for 2070 as % of 2019 GNI* (not a cumulative figure)

- Please note the Department of Social Protection estimate that €8.826 billion will be spent on State Pension related spending this year. This would indicate significant increases in pension related expenditure between now and 2070.

- To give the Technical Sub-Committee a complete view of projections, additional information was sought from DFIN in relation to various discount rates. Nominal discount rates were applied to DFIN projected expenditures – 4%, 3%, 2%, 1% and 0% (please see Tables E3, E4, E5, E6 and E7).

Table E1 - Breakdown of DFIN projected expenditure – Constant Pension Age

	2019	2020	2030	2040	2050	2060	2070
Constant Pension Age							
Nominal expenditure							
Social Welfare Pension	12,317	2,659	22,672	38,978	64,524	100,506	150,433
€ billions	€12.32	€12.66	€22.67	€38.98	€64.52	€100.51	€150.43
Public Sector Pension	3,500	3,700	7,500	12,200	14,800	13,900	14,300
€ billions	€3.50	€3.70	€7.50	€12.20	€14.80	€13.90	€14.30
Total Pension	5,817	16,359	30,172	51,178	79,324	14,406	164,733
€ billions	€15.82	€16.36	€30.17	€51.18	€79.32	€114.41	€164.73
GDP € billions	€347	€324	€513	€743	€1,062	€1,525	€2,170
as % GDP							
Social Welfare Pension	3.5%	3.9%	4.4%	5.2%	6.1%	6.6%	6.9%
Public Sector Pension	1.0%	1.1%	1.5%	1.6%	1.4%	0.9%	0.7%
Total Pension	4.6%	5.1%	5.9%	6.9%	7.5%	7.5%	7.6%
GNI* € billions	€213.71	€199.13	€315.68	€457.53	€653.65	€938.74	€1,335.65
as % GNI*							
Social Welfare Pension	5.8%	6.4%	7.2%	8.5%	9.9%	10.7%	11.3%
Public Sector Pension	1.6%	1.9%	2.4%	2.7%	2.3%	1.5%	1.1%
Total Pension	7.4%	8.2%	9.6%	11.2%	12.1%	12.2%	12.3%
If GNI* from 2019 is used							
€, billions							
Social Welfare Pension	€12.32	€13.59	€15.35	€18.21	€21.10	€22.88	**€24.07**
Public Sector Pension	€3.5	€4.0	€5.1	€5.7	€4.8	€3.2	€2.3
Total Pension	€15.8	€17.6	€20.4	€23.9	€25.9	€26.0	€26.4

Source: DFIN e-mailed additional information on 30/4/21. Rounding may affect totals.
The figures represent the one-off annual cost in the specified year. They do not represent the cumulative cost.

Table E2 – Breakdown of DFIN projected expenditure – Previously Planned Increases in State Pension Age (Legislative Provisions have been repealed)

Increasing Pension Age							
	2019	**2020**	**2030**	**2040**	**2050**	**2060**	**2070**
Nominal expenditure							
Social Welfare Pension	12,317	12,659	21,285	36,667	60,912	95,345	142,301
€ billions	€12.32	€12.66	€21.29	€36.67	€60.91	€95.35	€142.30
Public Sector Pension	3500	3700	7400	12000	14600	13800	14100
€ billions	€3.5	€3.7	€7.4	€12	€14.6	€13.8	€14.1
Total Pension	15,817	16,359	28,685	48,667	75,512	109,145	156,401
€ billions	€15.82	€16.36	€28.69	€48.67	€75.51	€109.15	€156.40
GDP € billions	€347.2	€323.7	€518.3	€756.3	€1083.4	€1553.6	€2214.2
as % GDP							
Social Welfare Pension	3.5%	3.9%	4.1%	4.8%	5.6%	6.1%	6.4%
Public Sector Pension	1.0%	1.1%	1.4%	1.6%	1.3%	0.9%	0.6%
Total Pension	4.6%	5.1%	5.5%	6.4%	7.0%	7.0%	7.1%
GNI* € billions	€213.708	€199.26246	€319.02186	€465.47952	€666.81975	€956.201231	€1362.85005
as % GNI*							
Social Welfare Pension	5.8%	6.4%	6.7%	7.9%	9.1%	10.0%	10.4%
Public Sector Pension	1.6%	1.9%	2.3%	2.6%	2.2%	1.4%	1.0%
Total Pension	7.4%	8.2%	9.0%	10.5%	11.3%	11.4%	11.5%
If GNI* from 2019 is used							
€, billions							
Social Welfare Pension	€12.3	€13.6	€14.3	€16.8	€19.5	€21.3	**€22.3**
Public Sector Pension	€3.5	€4.0	€5.0	€5.5	€4.7	€3.1	€2.2
Total Pension	€15.8	€17.5	€19.2	€22.3	€24.2	€24.4	€24.5

Source: DFIN e-mailed additional information on 30/4/21. Rounding may affect totals
The figures represent the one-off annual cost in the specified year. They do not represent the cumulative cost

Table E3 – Nominal 4% Discount Rate ‑ DFIN Projected Expenditure

Discount Rate 4%	2019	2030	2040	2050	2060	2070
Constant Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	14,727	17,105	19,129	20,129	20,354
Public Sector Pension	3,500	4,872	5,354	4,388	2,784	1,935
Total Pension	15,817	19,599	22,459	23,516	22,913	22,288
Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	13,827	16,091	18,058	19,096	19,253
Public Sector Pension	3,500	4,807	5,266	4,328	2,764	1,908
Total Pension	15,817	18,633	21,357	22,386	21,859	21,161
Discount Rate 4 % - Difference between Constant Pension Age and Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	-	900.67	1,014.10	1,070.76	1,033.54	1,100.2
Public Sector Pension	-	64.96	87.77	59.29	20.03	27.1
Total Pension	-	965.63	1,101.87	1,130.05	1,053.57	1,127.2
Cumulative Difference (adding up difference in every year)						
net present value, € millions						
Social Welfare Pension	-	5,495	15,007	25,786	36,153	47,006
Public Sector Pension	-	202.77	1,021	1,733	1,985	2,220
Total Pension	-	5,698.04	16,028	27,518	38,137	49,227

Source: DFIN e-mailed additional information on 13/5/21. Rounding may affect totals Discount rates are nominal discount rates.

Table E4 – Nominal 3% Discount Rate -- DFIN Projected Expenditure

Discount Rate 3%	2019	2030	2040	2050	2060	2070
Constant Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	16,379	20,953	25,809	29,913	33,315
Public Sector Pension	3,500	5,418	6,558	5,920	4,137	3,167
Total Pension	15,817	21,797	27,511	31,728	34,050	36,482
Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	15,377	19,710	24,364	28,377	31,515
Public Sector Pension	3,500	5,346	6,451	5,840	4,107	3,123
Total Pension	15,817	20,723	26,161	30,204	32,485	34,637
Discount Rate 3% - Difference between Constant Pension Age and Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	-	1,001.67	1,242.22	1,444.68	1,535.92	1,800.8
Public Sector Pension	-	72.24	107.51	80.00	29.76	44.3
Total Pension	-	1,073.91	1,349.73	1,524.67	1,565.69	1,845.1
Cumulative Difference (adding up difference in every year)						
net present value, € millions						
Social Welfare Pension	-	5,910	17,082	31,022	45,774	62,798
Public Sector Pension	-	223.29	1,187	2,104	2,458	2,829
Total Pension	-	6,133.09	18,269	33,126	48,232	65,627

Source: DFIN e-mailed additional information on 13/5/21. Rounding may affect totals. Discount rates are nominal discount rates.

Table E5 – Nominal 2% Discount Rate - DFIN Projected Expenditure

Discount Rate 2%	2019	2030	2040	2050	2060	2070
Constant Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	18,234	25,717	34,923	44,626	54,794
Public Sector Pension	3,500	6,032	8,049	8,010	6,172	5,209
Total Pension	15,817	24,266	33,766	42,934	50,797	60,003
Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	17,119	24,192	32,968	42,334	51,832
Public Sector Pension	3,500	5,952	7,917	7,902	6,127	5,136
Total Pension	15,817	23,071	32,109	40,871	48,462	56,968
Discount Rate 2% - Difference between Constant Pension Age and Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	-	1,115.14	1,524.68	1,954.88	2,291.33	2,961.7
Public Sector Pension	-	80.43	131.96	108.25	44.40	72.8
Total Pension	-	1,195.57	1,656.63	2,063.13	2,335.74	3,034.6
Cumulative Difference (adding up difference in every year)						
net present value, € millions						
Social Welfare Pension	-	6,365	19,519	37,605	58,686	85,527
Public Sector Pension	-	246.14	1,385	2,570	3,068	3,656
Total Pension	-	6,611.22	20,904	40,176	61,754	89,184

Source: DFIN e-mailed additional information on 13/5/21. Rounding may affect totals. Discount rates are nominal discount rates.

Table E6 – Nominal 1% Discount Rate - DFIN Projected Expenditure

Discount Rate 1%	2019	2030	2040	2050	2060	2070
			Constant Pension Age			
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	20,321	31,628	47,398	66,837	90,563
Public Sector Pension	3,500	6,722	9,899	10,872	9,244	8,609
Total Pension	15,817	27,044	41,527	58,269	76,080	99,172
			Increasing Pension Age			
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	19,079	29,753	44,745	63,405	85,668
Public Sector Pension	3,500	6,633	9,737	10,725	9,177	8,488
Total Pension	15,817	25,711	39,490	55,469	72,582	94,157
		Discount Rate 1% - Difference between Constant Pension Age and Increasing Pension Age				
Annual expenditure						
net present value, € millions						
Social Welfare Pension	-	1,242.79	1,875.13	2,653.15	3,431.78	4,895.1
Public Sector Pension	-	89.63	162.29	146.92	66.50	120.4
Total Pension	-	1,332.42	2,037.42	2,800.07	3,498.28	5,015.5
		Cumulative Difference (adding up difference in every year)				
net present value, € millions						
Social Welfare Pension	-	6,866	22,390	45,936	76,190	118,733
Public Sector Pension	-	271.60	1,620	3,157	3,861	4,798
Total Pension	-	7,137.44	24,010	49,093	80,051	123,531

Source: DFIN e-mailed additional information on 13/5/21. Rounding may affect totals Discount rates are nominal discount rates.

Table E7 – Breakdown of DFIN Projected Expenditure – Applying 0% Discount Rate

Discount Rate 0%	2019	2030	2040	2050	2060	2070
Constant Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	22,672	38,978	64,524	100,506	150,433
Public Sector Pension	3,500	7,500	12,200	14,800	13,900	14,300
Total Pension	15,817	30,172	51,178	79,324	114,406	164,733
Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	12,317	21,285	36,667	60,912	95,345	142,301
Public Sector Pension	3,500	7,400	12,000	14,600	13,800	14,100
Total Pension	15,817	28,685	48,667	75,512	109,145	156,401
Discount Rate 0% - Difference between Constant Pension Age and Increasing Pension Age						
Annual expenditure						
net present value, € millions						
Social Welfare Pension	-	1,386.54	2,310.90	3,611.81	5,160.55	8,131.2
Public Sector Pension	-	100.00	200.00	200.00	100.00	200.0
Total Pension	-	1,486.54	2,510.90	3,811.81	5,260.55	8,331.2
Cumulative Difference (adding up difference in every year)						
net present value, € millions						
Social Welfare Pension	-	7,417	25,784	56,542	100,155	167,948
Public Sector Pension	-	300.00	1,900	3,900	4,900	6,400
Total Pension	-	7,717.43	27,684	60,442	105,055	174,348

Source: DFIN e-mailed additional information on 13/5/21. Rounding may affect totals

For Agreement

Table E8 - Breakdown of IFAC's figures for Public and State Pensions as per cent of GNI* and GDP

	2021	2022	2030	2040	2050
Nominal GNI*	190,425	205,114	291,402	399,837	519,631
Nominal GDP	338,675	362,786	501,153	687,641	893,661
Public Sector Pension	4,583	5,116	7,451	11,227	14,206
*% GNI**	2.4%	2.5%	2.6%	2.8%	2.7%
% GDP	1.4%	1.4%	1.5%	1.6%	1.6%
State Pension	12,895	13,421	19,163	30,335	47,423
*% GNI**	6.8%	6.5%	6.6%	7.6%	9.1%
% GDP	3.8%	3.7%	3.8%	4.4%	5.3%
Total GNI*	9.2%	9.0%	9.1%	10.4%	11.9%
Total GDP	5.2%	5.1%	5.3%	6.0%	6.9%

Source: IFAC e-mail to Secretariat on 30/4/21. The figures provided in the IFAC response relate to the assumptions made and modelling performed as part of the LTSR, therefore the figures do not reflect the cancellation of raising the pension age, and other changes such as departmental spending increases since publication of the report

Appendix B Economic Growth – Extracts from Reports and Consultation

Table F1: Comments on Irish economic growth

IFAC	"Economic growth is set to slow over the coming decades. As a small, highly-open economy in the Euro Area and the European Union (EU), Ireland has achieved remarkable income growth averaging 3.1 per cent per year, over recent decades, in real terms. Yet, the pace of growth has slowed since 2000. This report projects that growth will slow further over the coming decades before converging to a long-run growth rate of around 1 per cent. This is largely driven by a slowdown in labour productivity growth. Ireland currently has relatively high labour productivity compared to elsewhere in the OECD and the scope for "catch up" growth is therefore limited. A general slowdown in productivity growth across OECD countries over the past decade also suggests that economic growth could be expected to slow."[17]
IFAC	IFAC note in their report that, "Despite the wide range of possible economic outcomes…. age-related expenditure as a share of GNI* varies only modestly across these alternative scenarios and the overall increase in age-related spending follows a similar upward path under all scenarios. This reflects, in part, the fact that the scenarios rest on essentially the same demographic assumptions, other than some variations in migration. More importantly, with pensions rising in line with wages, the cost per person broadly follows GNI*. As a result, while the actual level of spending would differ greatly across scenarios, the variation, expressed as a per cent of GNI*, is relatively modest."[18]
DFIN	"Long term economic forecasts rely on the assumption that output moves in line with the growth rate of labour input (labour supply) together with an assumption of how productive each unit of labour is (labour productivity). While labour productivity across the EU is assumed to converge, the growth rate of labour supply is expected to slow significantly by the mid-point of the century, as a result of population ageing. Consequently, GDP growth over the next half century is projected to slow relative to current growth rates. The baseline outlook envisages a Covid-related fall in GDP growth from 5.5 per cent in 2019 to -8.0 per cent in 2020 before recovering in 2021 (6.0 per cent). Following this, growth is expected to slow to an average of 2.5 per cent from 2022 to 2030, stabilising thereafter at an average of 1.6 per cent per annum over the rest of the projection period to 2070."[19]
DFIN	"..as the pace of growth of the working age population slows, the

---

[17] Irish Fiscal Advisory Council (2020) *Long-term Sustainability Report - Fiscal challenges and risks 2025-2050,* p.11. Available at: https://www.fiscalcouncil.ie/long-term-sustainability-report/
[18] Ibid, p.102-3.
[19] DFIN submission to the Commission, p.9.

For Agreement

	rate of economic growth will moderate, as additional labour supply becomes more scarce. Fiscal revenues will, accordingly, evolve at a slower rate.[20]
ESRI	"Projections based on flexible wage conditions (i.e. assuming that labour demand and supply respond to demographic change) suggest that labour scarcity will lead to strong wage growth and small employment increases. This can be expected to somewhat counteract the worsening fiscal balance, defined as the sum of all personal taxes and social insurance contributions paid less cash benefits received and expenditures related to the population structure. However, overall, the European fiscal balance can be expected to decrease by around 2% compared to its 2010 level. The fiscal outlook is broadly similar across European countries, with Ireland's fiscal balance expected to worsen by around 1%. In the longer run, the Irish Fiscal Advisory Council (2020) estimate that ageing will lead spending on pensions, health and long-term care in Ireland to almost double as a share of national income between 2019 and 2050."[21]
Nevin Economic Research Institute (NERI)	"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."[22]
SIPTU	"Growing the economy: by the end of the decade Ireland will be entering a long-term period of ultra low economic growth, bordering on stagnation, according to projections from the Irish Fiscal Advisory Council and the Department of Finance. Policies to address this long-term prospect would make a significant contribution to lowering pension costs (as a percentage of national income). For example, forecasters show that raising the Irish employment rate to the EU average by 2050 would do more to reduce pension costs than raising the pension age. The Commission should identify long-term growth as a key contributor to pension sustainability, focusing on issues such as investment, education, raising the labour share, reducing precariousness, and increasing family supports, especially childcare and family-friendly workplaces. [23]

---

[20] Ibid, p.17.
[21] ESRI submission to the Commission, p. 1.
[22] NERI submission to the Commission, p. 2.
[23] SIPTU submission the Commission, p. 5.