

Spending Review 2020

The Single Scheme – Improving the Sustainability of Public Service Pensions

STEPHEN OWENS AND JOSEPH KILLILEA

PUBLIC SERVICE PAY AND PENSIONS

DEPARTMENT OF PUBLIC EXPENDITURE AND REFORM

OCTOBER 2020

This paper has been prepared by IGEES staff in the Department of Public Expenditure and Reform. The views presented in this paper do not represent the official views of the Department or Minister for Public Expenditure and Reform.



DISCLAIMER

This policy paper is intended to give an overview of the Single Public Service Pension Scheme. It may not be suitable for use in any other context, for any other purpose or by any other party; we accept no responsibility for any such use. Any reliance placed on this material for another purpose, or by other parties is entirely at their own risk.

In preparing many elements of this paper, the Department has relied upon data supplied by third parties. Whilst reasonable care has been taken to gauge the reliability of this data, the Department provides no guarantee as to the accuracy or completeness of the data, and the Department accepts no responsibility and will not be liable for any errors or misrepresentations in the data made by any third party.

Some elements of this paper incorporate standard assumptions about future demographic and economic developments. The results presented are projections, not forecasts, which should be reviewed in light of updated information being available. Readers are encouraged to focus on the trends in the figures rather than the actual numbers within them.

Executive Summary

Ireland's demographics have changed substantially since the foundation of the State, with life expectancy in 2016 having increased by 22.2 years for men and 25.5 years for women when compared to 1926. The proportion of older people as a percentage of the total population is also increasing. If public service pension reforms were not implemented, these developments would lead to sustainability issues.

Ireland has previously implemented a number of reforms to public service pension schemes, from increasing the contributions public servants were required to pay, to reducing the benefits payable from the public service occupational pension scheme. The Single Scheme is arguably the most fundamental reform to date.

The Single Scheme became operative from 1 January 2013, and is applicable to all new entrant public servants from that date, as well as returning public servants who had a break in service of more than 26 weeks.

When the Single Scheme was introduced, it was projected to reduce long-term expenditure on public service pensions by 35%, primarily through three elements: later normal retirement ages, the career-average method of calculating benefits and the application of CPI indexation. The majority of these savings will materialise after 2050, when significant volumes of Single Scheme members will become eligible to retire.

In the near future, DPER intend to conduct an updated actuarial analysis of the long-term projected savings the Single Scheme will deliver.

Key Findings

- By the end of 2019 there were 140,000 active members of the Scheme, with an average annual
 increase in membership of 20,000 since 2013. Scheme membership will increase further and
 depending on assumptions used, could range between 180,000 and 200,000 at the end of 2025.
- Single Scheme members contributed €201 million in Single Scheme contributions in 2019. Single Scheme members also contributed a further €69 million in Additional Superannuation Contributions (ASC) in 2019.
- Single Scheme benefit pay outs are not expected to be a significant portion of the overall public service pension bill until the second half of the century and are anticipated to remain below €100 million annually until after 2040.
- The reform measures introduced since 1 January 2013, with higher contributions required (through the introduction of ASC) combined with lower retirement benefits payable (through benefits based on career-average pay, later normal retirement ages and CPI indexation), have clearly improved the sustainability of Irish public service pensions.

1. Introduction

The Single Scheme was introduced from 1 January 2013 to improve the sustainability of public service pensions. The purpose of this paper is to provide an update and increase awareness of the impact of the Single Scheme to date.

Section 2 provides a description of the data used and details some of its limitations and areas for improvement.

Section 3 provides an analysis of the demographic changes Ireland has experienced since the State's foundation. The increase in life expectancy combined with an increase in the proportion of people aged 65 or older in Ireland's total population would, if pension reforms were not implemented, lead to public service pension sustainability issues.

The next section of the paper summarises the structural cost-saving reforms to public service pensions that have been introduced to date. A general direction of travel emerges containing elements that either increased the pension scheme contributions public servants were required to make or reduced the benefits payable from the public service pension scheme.

Section 5 provides context for the public service pension reforms that were introduced in the Single Scheme. The proposed reforms initially considered in 2007 are compared to the reforms that were eventually implemented through the Single Scheme. This section also provides the initial (2012) estimated savings from the main elements of the Single Scheme reforms (later retirement ages, CPI indexation of Single Scheme pensions in payment, and Scheme benefits being based on career-average earnings with CPI valorisation). Based on 2012 estimates, the introduction of the Single Scheme was expected to reduce long-term expenditure on public service pensions by 35%, in contrast to an alternative where the previous "final salary and service based" public service pensions arrangements had remained in place for new entrants.

Section 6 details the growth in Single Scheme membership since 2013, and provides an analysis of the aggregate pension contributions paid by Single Scheme members. This section also provides a summary of Single Scheme policy developments since the commencement of the Scheme and identifies areas for further development.

Section 7 provides examples of pension related contributions that Single Scheme members are required to make for a range of salaries. This section also uses a simplified public service career to illustrate the total pension related contributions a Single Scheme member is required to make, as well as the resulting retirement benefits payable to the Single Scheme member at retirement.

Section 8 provides a summary and the conclusions of the paper.

2. Data

Data on life expectancy and demographics is sourced from the CSO.

The data for Single Scheme membership and Single Scheme pensions in payment is based on annual survey returns from pension administrators across the public service. A limitation of this data source is that each pension administrator returns data only in respect of that public service body. As a consequence of this, there may be an element of double counting where individuals move between public service employers. This double counting is likely to be more prevalent in the deferred member numbers. A Single Scheme Databank is currently being rolled out across the public service, which will address this double counting issue.

The data on Single Scheme member contributions is informed by remittances made by public service bodies. Data on the value of Additional Superannuation Contributions paid by Single Scheme members is based on internal DPER estimates.

The estimated Single Scheme savings presented in this paper are sourced from 2012 estimates. These estimates projected a long-term annual reduction in public service pension expenditure of 35% relative to the counterfactual where pre-existing pension arrangements remained in place. The estimated long-term public service pension expenditure reductions are further quantified to reach €1.8 billion annually (based on 2012 price levels). As over half of the estimated Single Scheme savings are attributable to CPI indexation replacing wage indexation, these estimates are very sensitive to the projected long-term rates of increases for wage growth and CPI.

Lastly, the 2012-estimated Single Scheme savings are now more than 8 years old, and do not reflect later public service developments. A key learning of this paper is that a separate actuarial analysis is required to update the estimated savings the Single Scheme will deliver.

3. Demographic Change

The basis for Irish public service pensions was first established in the 19th century. Ireland's demographic structure has changed substantially since then.

A clear illustration of this is the improvement in life expectancy, which has increased from circa 58 for both males and females in 1926 to circa 79.6 for males and 83.4 for females by 2016. The CSO's analysis of *Population and Labour Force Projections* $2017 - 2051^1$ reported that, based on standard assumptions (e.g. mortality improvement rates of 2.5% for males and 2% for females up to 2040), life expectancy will further increase to 85.6 for males and 88.3 for females in 2051.

This increased life expectancy has led to an increase in the cost of paying public service pensions, as benefit payments must be made for a longer period of time.

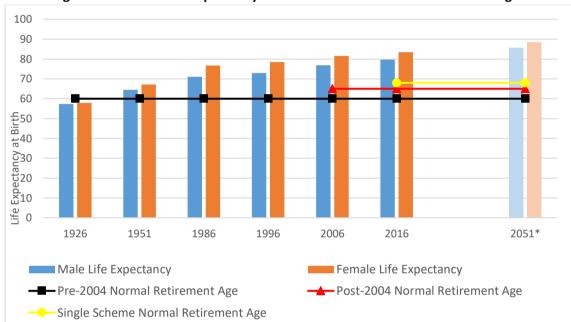


Figure 1: Ireland's Life Expectancy and Normal Public Service Retirement Ages

Sources: CSO (VSA30 and Population and Labour Force Projections 2017 – 2051)

Another element of Ireland's demographic change that poses challenges for pension sustainability is the increasing number of older people as a proportion of Ireland's total population. In 1926, 12.7% of Ireland's population was over the age of 60. By 2016, this proportion had increased to 18.4%. By 2051, this proportion is expected to increase to 31%. As this proportion increases the proportion of the population that receive pension payments increases, while the relative proportion of workers that fund pay-as-you-go pension scheme payments declines.

¹ https://www.cso.ie/en/releasesandpublications/ep/p-plfp/populationandlabourforceprojections2017-2051/

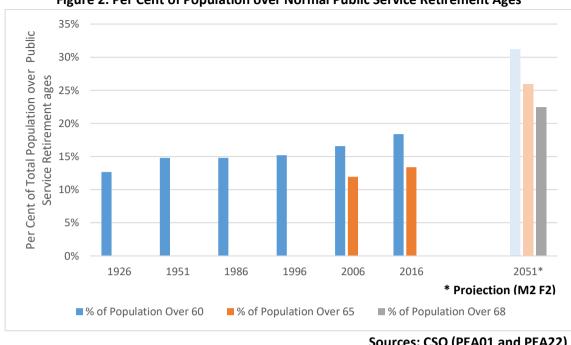


Figure 2: Per Cent of Population over Normal Public Service Retirement Ages

Sources: CSO (PEA01 and PEA22)

By international comparisons, Ireland's current demographic structure is very favourable. The OECD Reviews of Pension Systems: Ireland (2014), reported that, as of 2012, Ireland had the highest oldage support ratio² in the EU 27 countries. However, based on projected demographics, Ireland's oldage support ratio is expected to decline at a faster rate than the OECD average³.

3.1 The current impact of demographic change on public service pensions

The following graph illustrates that the number of pensions in payment under all public service pension schemes has increased by 37% (c. 49k) between 2011 and 2019, an average annual rate of increase of 4.2%. Over the same time period, the ratio of public service pensions in payment to the number of employed public servants (on a whole-time equivalent basis) has deteriorated from 0.43 to 0.53. Readers are encouraged to focus on the overall trend in these figures rather than the absolute figures, as public service pensions in payment include spouses and children's pensions. Additionally, the headcount figures for employed public servants would be a preferable comparison for public service pensions in payment (but are not available).

² The old-age support ratio measures the number of people of working age (20-64) relative to the number of people of retirement age (65+).

³ From 2018 to 2030, Ireland's proportion of population aged over 65 will increase by 41% compared to the OECD average increase of 30%. (OECD Economic Surveys: Ireland 2020)

200,000 179,508 180,000 Number of Public Service Pensions in 160,000 140,000 130,595 120,000 100,000 80,000 60,000 40,000 20,000 0 2011 2012 2013 2014 2015 2016 2017 2018 2019

Figure 3: Number of Public Service Pensions in Payment 2011 - 2019

Source: DPER

4. Synopsis of Irish Public Service Pensions Cost Saving Structural Reforms

This section provides a chronological summary of the permanent structural public service pension reforms implemented to date, illustrating a direction of travel towards improving the overall sustainability of public service pensions⁴.

- 1859 Superannuation Act: Formally introduced a pension for all civil servants payable at 60. Pension accrual rate was 1/60th (1.66%) per year of service. Maximum pension payable was two-thirds (40/60^{ths}) of salary, attainable after 40 years' service.
- 1909 Superannuation Act: Lowered annual pension accrual rate to 1/80th (1.25%) and lowered the maximum pension payable to 50% of salary attainable after 40 years. A retirement lump sum was introduced with an accrual rate of 1/30th per year of service (3.33%). The maximum lump sum payable was 1 ½ times salary. (The lump sum accrual rate was increased to 3/80^{ths} (3.75%) in 1973).
- 1914: Contributions ranging from 3.5% to 5% were introduced for National School Teachers' Superannuation Schemes. These contributions were fixed at 4% in 1921.
- 1928 Teachers Superannuation Act: Set up the Secondary Teachers' Superannuation Scheme, member contributions were 4% of pay. Contributions were increased to 5% in 1951.
- 1948 Local Government (Superannuation) Act: Mimicked the pension and lump sum terms of the 1909 Superannuation Act for Local Government employees. Members of this pension scheme were also required to make pension contributions of 5%. This pension scheme was the largest in the Irish public service, applying to public servants in the Local Government sector as well as significant portions of the public health sector and a cohort of educational bodies (VECs and IOTs).
- 1961: A Ministerial Order was made which reduced the maximum pension payable to retiring members of An Garda Síochána from 66% to 50% of salary and introduced a retirement lump sum, capped at 150% of final salary. Existing Gardaí had the option to elect for the new arrangements, whereas the new terms were mandatory for new recruits.
- 1995: New entrant public servants were required to pay contributions to their pension scheme and most⁵ were also required to pay the higher Class A PRSI contributions. At retirement, the value of the public service pension payable will, in general, be reduced by the value of the state pension. Many sectors of the public service already had contributory pension schemes, so this reform had the biggest impact in the Civil Service, the Defence Force and An Garda Síochána.
- 2004: The normal retirement age was increased from 60 to 65 for most new entrant public servants, while the normal retirement age for An Garda Síochána increased from 50 to 55. Also in 2004, a normal retirement age of 50 was introduced for members of the Defence

⁴ For clarity, this summary does not include temporary measures introduced during the financial emergency (e.g. public service pay cuts, PSPR and PRD).

⁵ Certain office holders continue to be exempt from Class A e.g. judiciary and TDs.

Force. These arrangements only applied to new entrants or previous public servants who had a break in service of more than 26 weeks.

- 2013: The Single Public Service Pension Scheme became operable from 1 January 2013. Single Scheme entitlements are based on career-average earnings. The age of retirement for non-uniform members increased to 66 initially, and was expected to further increase to 67 and 68 in line with scheduled increases to the age of eligibility for the State Pension (Contributory). Each year Scheme benefits accrued are increased in line with CPI increases. Upon retirement, pension increases are also aligned with CPI increases. These arrangements only apply to new entrants or previous public servants who had a break in service of more than 26 weeks.
- 2017: The Public Service Pay and Pensions Act introduced the Additional Superannuation Contribution (ASC), commencing 1 January 2019. In effect, this transformed (with some ameliorations) the Pension-Related Deduction (PRD), which was introduced as a financial emergency measure in 2009, into a permanent additional pension scheme contribution. Lower rates of ASC apply to members of the Single Scheme, in comparison to members of pre-2013 pension schemes⁶.

The above reforms indicate a general direction of travel whereby public servants were either required to contribute more to fund their retirement benefits, or the retirement benefits payable from the occupational pension scheme were reduced. In recognition of these reforms, the OECD (2014) places Ireland in a group of more advanced countries in tackling pension sustainability. However, the OECD also suggests that more can be done, in particular to reduce Government liabilities in respect of public servants' pensions⁷ and to ensure more equity between different cohorts of the Irish population⁸.

⁶ Specifically, from 2020, most members of "service and final salary" based public service pension schemes pay ASC at a rate of 10% for the portion of pay over €34,500 and 10.5% for the portion of pay above €60,000. In contrast, Single Scheme members pay ASC at a rate of 3.33% for the portion of pay over €34,500, and 3.5% for the portion of pay over €60,000.

⁷ OECD, 2014, p. 113.

⁸ *Ibid*, p. 115.

5. Single Scheme Considerations and Implementation

The Green Paper on Pensions was published in 2007. Chapter 13 of this report solely addressed public service pension issues and recognised that, despite the reforms introduced in 2004, Ireland's public service pension system continued to face sustainability risks. This report suggested further exploration of the following potential public service pension reform measures:

- raising the normal public service pension age
- increasing the rate of pension contributions
- modifying the 'pay parity' basis for post-retirement increases in pensions (where pay increases were generally passed on to pensions in payment)
- removal of fast accrual terms
- abolition of certain notional added years arrangements
- options for accounting for pension costs
- a slower accrual rate in respect of retirement pension and lump sum
- moving to calculation of pensions on the basis of 'career-average' earnings

The reforms under consideration for implementation in the Single Scheme were initially announced in December 2009 (in *Budget 2010*). As is often the case, the policy evolved in the intervening period between the 2009 announcement and the subsequent enactment of the Public Service Pensions (Single Scheme and Other Provisions) Act 2012. The below table compares reforms that were initially considered with the reforms that were subsequently adopted through the 2012 Act;

Single Scheme Elements Considered	Adopted?
Pension increases to be based on CPI rather than pay parity	✓
Pension and lump sum entitlements to be based on career-average earnings	✓
Later normal retirement ages	\checkmark
Abolition of "professional" notional added years	✓
A higher rate of contributions (6.5% of total pay)	***
No fast accrual rates (but earlier payment of pensions would continue)	×
One rate of pension accrual with no separate lump sum provided for	×

^{***} For 90%+ of Single Scheme members, the Scheme contribution rates of 3% and 3.5% apply on the same basis as for pre-existing public service pension schemes. However, the Additional Superannuation Contribution, which is provided for under separate legislation, results in most Single Scheme members indirectly making higher total pension contributions relative to the pre-financial emergency pension contribution rates. For clarity, and as detailed in section 6.2 below, lower rates of ASC apply to Single Scheme members relative to members of pre-existing public service pension schemes. Additionally, for fast accrual Single Scheme members (e.g. members of An Garda Síochána, the Defence Forces, full-time fire-fighters, and certain office holders), higher Single Scheme contributions are explicitly required under the 2012 Act.

5.1 Single Scheme Saving Features

In 2012, it was estimated that the Single Scheme would reduce long-term public service pension expenditure⁹ by 35% (with strong caveats based on the sensitivity to the assumptions used). These projected savings were further quantified as reducing long-term annual public service pension expenditure by €1.8 billion (based on 2012 price levels), although this reduced expenditure would not materialise until after 2050. These initial estimates of the Single Scheme savings were mostly attributed to the following three core reform elements:

- Later normal retirement ages

The normal retirement age of Single Scheme members is aligned to the age of eligibility for the State Pension (Contributory). When the Single Scheme was implemented this was expected to be 68 for most Single Scheme members. Most public servants who commenced public service employment between 2004 and 2012 have a normal retirement age of 65. Most public servants who commenced employment prior to 2004 have a normal retirement age of 60. The later normal retirement ages for Single Scheme members were expected to deliver c. 17% of the Single Scheme's total savings.

- Career Averaging

The Single Scheme benefits (pension and retirement lump sum) are based on average earnings over a public service career. This approach is in contrast to pre-existing public service pension schemes, where the benefits are based on service and final salary. As pay levels during the early career stages tend to be lower than pay levels at retirement, the career-average structure of the Single Scheme was expected to deliver c. 28% of the Single Scheme's total savings.

CPI indexation

The Single Scheme applies annual CPI indexation (also described as valorisation) to increase the value of Scheme benefits accrued each year up to a member's retirement. This approach differs from pre-existing arrangements, where the pension and lump sum benefits are calculated at retirement, based on final salary and length of service.

Additionally, pre-existing public service pensions in payment are generally increased on the same basis as public service pay increases ("pay-parity"). Because, over the long-term, pay increases tend to be higher than inflation, the CPI indexation of Single Scheme pensions in payment will deliver further substantial savings¹⁰.

The application of CPI indexation to Single Scheme benefits accrued up to retirement, as well as to Single Scheme pensions in payment, were estimated to deliver c. 55% of total Single Scheme savings.

⁹ A recent detailed presentation of long-term public pension expenditure is provided in *Public Service Occupational Pensions in Ireland - Cash Flow Analysis* (DPER 2018)

¹⁰ A more detailed analysis of the potential savings deliverable through CPI indexation of pensions in payment is provided in *Actuarial Review of Public Service Occupational Pensions in Ireland as required by EU Regulation 549 / 2013* (DPER 2017)

For further reference, a deeper illustration of these three core Single Scheme reforms is provided in Appendix 1.

Other elements of the Single Scheme that will lead to lower expenditure are the abolition of supplementary pensions¹¹ and the abolition of professional added years that were previously prevalent for specific roles in the public service.

5.2 Further analysis on estimated Single Scheme Savings

Since 2012, the savings delivered by the Single Scheme have been impacted by the following developments:

- The number of public service employees has increased by more than 10%.
- Most public service pay and pension levels have also increased / been restored 12 through a series of public service pay agreements.
- Under the 2020 Programme for Government Our Shared Future, the Government has
 chosen to delay the previously legislated increase in the age of eligibility for the State
 Pension (Contributory), subject to further review.

As a consequence of these developments, DPER will conduct a separate actuarial analysis to update the projected savings that the Single Scheme is expected to deliver.

¹¹ In the context of Irish public service pensions, a supplementary pension is an additional payment from the occupational pension scheme payable in limited circumstances to retired public servants who are not receiving full State Pension (Contributory) payments.

¹² As of October 2020, public service pay levels up to €70,000 will been restored or will be higher than the pre-FEMPI comparable pay rates.

6. The Evolution of the Single Scheme since 2013

6.1 Single Scheme membership growth

DPER conduct an annual survey across the public service requesting information on the numbers of currently employed ("active") Single Scheme members at year-end from each public service body. These survey returns indicate that active Single Scheme membership had reached c. 140,000 at 2019 year-end (an average annual increase of 20,000 per year over 7 years).

This survey also requests information in respect of formerly employed ("deferred") Single Scheme members. The survey returns indicate that there were c. 41,000 deferred members in 2019. However, it should be noted that many of the deferred members reported by public service bodies might now be working in other public service bodies, and so some members may be double counted in the survey returns.

Indicative estimates¹³ for future active Scheme membership can be inferred from previous trends. For example, using the average annual public service retirement numbers from 2010 to 2019 (7,000) and assuming all retiring public servants are replaced by Single Scheme members, this will lead to Single Scheme membership of c. 180,000 by 2025. Using this figure as a base and also including an assumption that public service numbers will continue to increase at the same average annual rate as between 2010 and 2019 (3,200 WTE), Single Scheme membership may increase to c. 200,000 by 2025.

In the following figure, readers are encouraged to focus on the trends in the number of Scheme members rather than the actual numbers.



Figure 4: Single Scheme Membership 2012 - 2025

Source: DPER

¹³ Future Single Scheme active membership will be primarily influenced by factors such as demographics, the retirement patterns of public servants, public service work-force plans, economic cycles and fiscal conditions. However, a detailed model incorporating these factors is beyond the scope of this paper.

6.2 Single Scheme Member Contributions Growth

Contributions from Single Scheme members have also increased year-on-year. It is expected that membership, and thus employee contributions, will continue to increase in the medium term.

Figure 5: Single Scheme Employee Contribution Income

	2013	2014	2015	2016	2017	2018	2019
Contribution Income (€m)	2	18	51	76	117	167	201

Source: DPER

In addition to Single Scheme member contributions, which are set out in the 2012 Act, Single Scheme members were also required to pay the Pension-Related Deduction (PRD) on the same basis as other pensionable public servants. Under the Public Service Pay and Pensions Act 2017, the PRD was replaced by the Additional Superannuation Contribution (ASC). In effect, the ASC replaced the financial emergency measure with a permanent additional pension contribution. To partly reflect the lower Single Scheme benefits relative to the benefits of pre-existing public service pension schemes, lower rates of ASC are applied to members of the Single Scheme¹⁴.

The estimated PRD and ASC in respect of Single Scheme members is as follows;

Figure 6: PRD & ASC Estimates 2017 -2019

	2017 (PRD)	2018 (PRD)	2019 (ASC)
Estimated Amounts (€m)	65	98	69

Source: DPER

The increase of nearly €33 million from 2017 to 2018 is mostly explained by the increase in Single Scheme membership. The decline of €29 million between 2018 and 2019 reflects the introduction of lower rates of ASC for Single Scheme members. For context, the total ASC collected in 2019 from both members of pre-existing pension schemes and the Single Scheme is estimated at €650 million.

6.3 Expenditure on Single Scheme benefits

As the Single Scheme was only implemented from 2013, its membership has a youthful age profile (the reported average age of Scheme membership in 2015 was 34.2 – with an average service of 1.1 years¹5). Current expenditure levels on the pay-out of Single Scheme benefits is minuscule, with less than 300 Single Scheme pensions in payment at the end of 2019, many of which are payable to surviving spouses and children. As a consequence of the age-profile of Single Scheme members, Single Scheme benefits payable are anticipated to remain below €100 million – approximately 3% of current public service pension expenditure – until after 2040.

¹⁴Specifically, ASC rates applicable to Single Scheme members in 2020 are 3.33% for pensionable earnings between €34,500 and €60,000, and 3.5% on the portion of pensionable earnings above this.

¹⁵ Department of Public Expenditure and Reform (2017), Actuarial Review of Public Service Occupational Pensions in Ireland as required by EU Regulation 549 / 2013

6.4 Single Scheme Policy Developments

Having established in detail the main provisions of the Single Scheme, the 2012 Act also included a number of specific provisions that could subsequently be provided through Regulations or circulars.

Since the Single Scheme became operative, the following policies have been established under these provisions;

- 1. The rate of employer contributions that are required in respect of mainly self-financing public service roles was set at three times the Single Scheme member contributions.
- 2. The actuarial tables for cost neutral early retirement were provided.
- 3. Regulations were made to provide for enhancement of Single Scheme benefits in cases of retirement on medical grounds.
- 4. Provisions were made to allow Single Scheme members to transfer certain pension entitlements into the Single Scheme on cost neutral terms and also to purchase additional Scheme benefits.

A number of other circulars have been issued, primarily to clarify operational matters.

6.5 Ongoing and Future Single Scheme Developments

Single Scheme Databank

A Single Scheme Databank is currently being rolled out across the public service on a phased basis. This Databank is primarily aimed at supporting the administration of the Single Scheme across the public service. It will also provide more accurate information on the number of Single Scheme members (both deferred and active), as well as on Scheme benefits accrued.

Accounting and Management of Single Scheme contributions

Single Scheme contributions are currently accounted for in Vote 12. Vote 12 was initially established to administrate the payment of Civil Service pensions. Alternative long-term arrangements for accounting for Single Scheme contributions are currently being explored.

7. Retirement benefits payable to Single Scheme members relative to required pension related employee contributions

The table below provides an example of the level of pension contributions Single Scheme members are required to make for a range of salary levels. For completeness, this table includes Single Scheme specific contributions as set out in the 2012 Act, the ASC amounts as set out in the Public Service Pay and Pensions Act 2017, and PRSI Class A contributions that are required for eligibility to receive the State Pension (Contributory), as well as other social insurance benefits.

	nnual Salary		gle Scheme Annual ASC ntributions Contribution				nual PRSI ntributions	Total % Contributions
€	25,000	€	750	€	-	€	1,000	7%
€	35,000	€	1,368	€	17	€	1,400	8%
€	45,000	€	2,018	€	350	€	1,800	9%
€	55,000	€	2,668	€	683	€	2,200	10%

Figure 7: Pension Related Contributions Example

As an illustrative example, assuming a Scheme member worked for 10 years at each pay rate in the above table, amounting to a 40 year public service career, and assuming no changes in CPI (for simplicity), this individual would;

- Pay €68,040 in Single Scheme contributions over this public service career
- Pay a further €10,490 in ASC contributions over this public service career
- Upon retirement, receive a once-off retirement lump-sum of €60,000 and an annual Single Scheme pension of just under €9,720¹⁶

In addition to the benefits arising from membership of the Single Scheme, Scheme members are also required to pay PRSI Class A contributions (amounting to €64,000 over this career) and may therefore be eligible to receive the State Pension (Contributory) at retirement (along with the other PRSI related benefits), amounting to €12,956 per year. Figure 8 illustrates the relative contributions and benefits for this example more clearly.

¹⁶ To compare the value of contributions over a public service career with an annual Single Scheme pension payable over the expected retirement period, it may be helpful to apply the age-based factor of 18 to a pension payable at 68. This leads to a capitalised value of c. €175,000 for the Single Scheme pension.

Single Scheme Contributions: €68,040 Single Scheme Annual Pension: €9,718 & **Retirement Lump** Sum: **€60,000** ASC Contributions: €10,490 State Pension PRSI (Contributory): Contributions: €64,000 €12,956

Figure 8: Example of Career Pension Related Employee Contributions relative to Retirement Benefits

8. Conclusion / Summary

An overview of the demographic changes Ireland has already experienced and the projected medium term changes provide clear evidence that the cost of providing public service pensions has increased substantially and is projected to increase further.

Ireland has historically implemented a number of cost-saving structural public service pension reforms, ranging from increasing the contributions required by public servants to reducing the benefits payable from the occupational public service pension scheme. The Single Scheme is arguably the most fundamental cost-saving structural public service pension reform to date.

The Single Scheme was introduced on 1 January 2013 and applies to all new-entrant public servants from this date. At the end of 2019, there were c. 140,000 active members of the Single Scheme.

The Single Scheme was projected to reduce expenditure on public service pensions by 35% in the long-term. The core elements of the Single Scheme that contribute to these savings are later normal retirement ages, benefits based on career-average earnings and CPI indexation of accrued benefits up to retirement, as well as CPI indexation of Single Scheme pensions in payment.

As membership of the Single Scheme increases, the total value of Single Scheme contributions, as well as ASC contributions will increase. Due to the age profile of Single Scheme members, Scheme benefit pay outs are not expected to be a significant portion of overall public service pensions' expenditure until the second half of this century and are anticipated remain below €100 million annually until after 2040 (approximately 3% of current public service pension expenditure).

The reform measures introduced since 2012, with higher contributions required (through the introduction of ASC) combined with lower retirement benefits payable (through career-average based retirement benefits, later normal retirement ages and CPI indexation), have clearly improved the sustainability of Irish public service pensions.

References

Department of Public Expenditure and Reform (2017), Actuarial Review of Public Service Occupational Pensions in Ireland as required by EU Regulation 549 / 2013

Department of Public Expenditure and Reform (2018), *Public Service Occupational Pensions in Ireland - Cash Flow Analysis*

Department of Social and Family Affairs (2007), Green Paper on Pensions

OECD (2014), OECD Reviews of Pensions Systems: Ireland, OECD Publishing. http://dx.doi.org/10.1787/9789264208834-en

OECD (2019), *Pensions at a Glance 2019: OECD and G20 Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/b6d3dcfc-en.

OECD Economic Surveys: Ireland 2020, OECD Publishing https://doi.org/10.1787/dec600f3-en

Appendix 1: Illustrations of Main Single Scheme Cost Saving Features

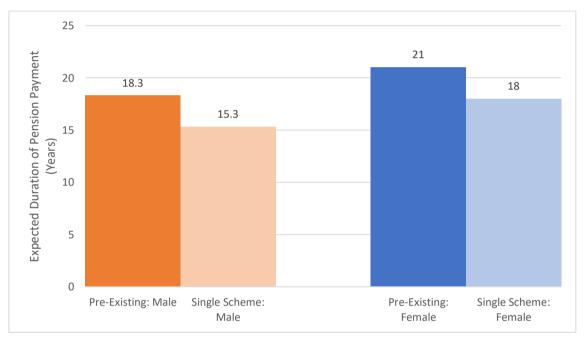
1. Later Retirement Ages

As currently legislated, most Single Scheme members will be eligible to retire at 68 years. In 2016, the life expectancy was 18.3 years for a 65-year-old male, and 21 years for a 65-year-old female.

The Single Scheme increased the normal retirement age to 68 for most Single Scheme members, compared to 65 for the pre-existing arrangements.

Figure A.1 illustrates the shorter expected duration of pension payments for Single Scheme members compared to public servants who are members of the pre-existing public pension schemes.

Figure A.1: Expected Duration of Pension Payment for Pre-Existing Schemes Relative to the Single Scheme



Source: CSO

Increasing the normal retirement age by 3 years will reduce the period of time the public service pension is payable by c. 16% for males and c. 14% for females. (However, the savings from the shorter time period will be partially offset by higher pension values associated with longer public service careers).

It should be noted that the Single Scheme normal retirement age is linked with the age of eligibility to receive the State Pension (Contributory). Under the 2020 Programme for Government – Our Shared Future, the previously legislated increase in the age of eligibility for the State Pension (Contributory) will be delayed subject to further review. If the normal retirement age remains at 66 as a result of this review, then the duration of Single Scheme pension payments will be c. 5% shorter for males and females relative to pre-existing arrangements.

2. Career-Average Design

Single Scheme retirement benefits are calculated every pay period throughout a public service career. This is in contrast to pre-existing public service pension schemes, where the retirement benefits are based on final salary and service. A detailed breakdown of average pay levels by age across the public service is not readily available. However, as an example, the following chart illustrates the average earnings by age cohort across the Civil Service, which makes up approximately 12% of the total public service.

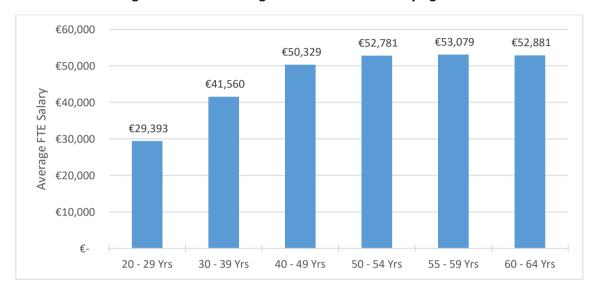


Figure A.2: 2019 Average Civil Service Salaries by Age Band

Source: DPER

The average FTE salary for the 60-64 age cohort is €52,881, almost €23,500 higher than the average FTE salary for civil servants aged 20-29. In percentage terms, the 60-64 age-cohort earns 80% more on average than the 20-29 cohort.

3. CPI Indexation relative to Wage indexation

Single Scheme retirement benefits are increased in line with CPI increases. More specifically, CPI indexation is applied to benefits that have accrued up to the point they become payable, as well as to Single Scheme pensions in payment. The following chart illustrates the changes in Irish nominal wages relative to CPI increases from 1990 to 2019.

20%

15%

10%

5%

0%

1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

Nominal Wages % Change

CPI % Change

Figure A.3: Irish Nominal Average Wage Increases Relative to CPI Increases 1990-2019

Source: OECD

Over this 29-year period, nominal wage increases were higher than CPI increases in 23 years.

The long-term impacts of CPI indexation and wage indexation is illustrated in Figure A.4, which compounds €1 at the relative growth rates for Irish nominal wages and Irish CPI increases over a 20 year period from 1999-2019.

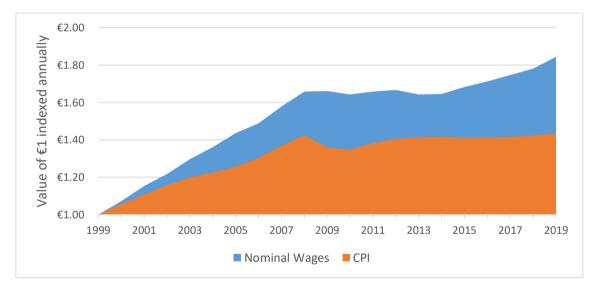


Figure A.4: Illustration of Differing Long-Term Pension Values

Source: OECD

Applying nominal wage indexation to €1 in 1999 will produce a value of €1.84 in 2019. In comparison, applying CPI indexation to €1 from 1999 will produce a value of €1.44 over the same period (22% lower).

Quality Assurance process

To ensure accuracy and methodological rigour, the author engaged in the following quality assurance process.

- ✓ Internal/Departmental
 - ✓ Line management
 - ✓ Spending Review Steering group
 - √ Other divisions/sections
 - ✓ Peer review (IGEES network, seminars, conferences etc.)
- □ External
 - ✓ Other Government Department
 - ☐ Other Steering group
 - ✓ Quality Assurance Group (QAG)
 - ☐ Peer review (IGEES network, seminars, conferences etc.)
 - ✓ External expert(s)
- ☐ Other (relevant details)



Tithe an Rialtas. Sráid Mhuirfean Uacht, Baile Átha Cliath 2, D02 R583, Éire Government Buildings, Upper Merrion Street, Dublin 2, D02 R583, Ireland

T:+353 1 676 7571 @IRLDeptPer www.per.gov.ie