

The background of the entire page is a photograph of a tree with thin, light-colored branches against a pale sky. A semi-transparent teal band runs horizontally across the middle of the image, serving as a backdrop for the chapter title.

CHAPTER 03

A MODERN AND SUSTAINABLE PENSIONS SYSTEM

Introduction

3.1 A key objective of pension policy design is to ensure the sustainability of the system over the longer term. Financial sustainability requires the pension system to be capable of meeting the demands placed upon it from available resources. As noted in Chapter 1, the concept of sustainability is, however, wider than financial. Pension arrangements must also be sustainable from an economic and social perspective.

3.2 The sustainability of the existing pension system will come under considerable pressure in the decades ahead. This follows from Ireland's changing demographic profile, which will see the share of older people rise and the share of the working age population fall¹⁴. This is an international phenomenon. Although Ireland has a longer period available than most other countries to prepare for the coming transition from low to high dependency, we must start planning now, not just for the pension system, but for the public finances and the economy in general.

3.3 It is therefore appropriate that the current consideration of pension policy begins with an examination of the likely impact of demographic change on the sustainability of the existing

system and on the economy over the long-run. As pension provision is only one of many concerns when moving from a relatively young to an older population, attention is paid to the broader policy framework. A number of options that may help address the identified challenges are also discussed.

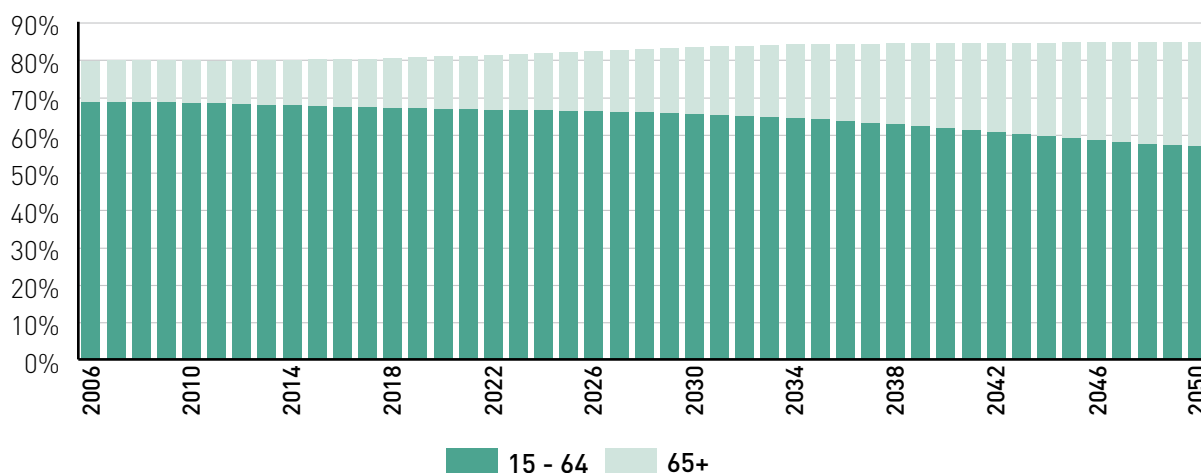
Economic and Financial Sustainability

Challenges facing the Existing System

3.4 Ireland's demographic make-up is set to change dramatically in the coming years. While the overall size of the population is projected to increase, of greater importance from the viewpoint of the pension system is the projected change in its composition, particularly its increasing age. As illustrated in Figure 3.1, the population share of those aged 65 and over is expected to more than double between now and 2050, from 11% to 28%. In contrast, the share of the working age population is projected to gradually decline from 69% to 57%. The upward trend in Ireland's old age dependency ratio – depicted in Figure 3.2 – tells a similar story. This ratio implies that we will move from having six people of working age for every older person today, to two to one by mid-century.

14 The working age population is defined here as those aged 15-64.

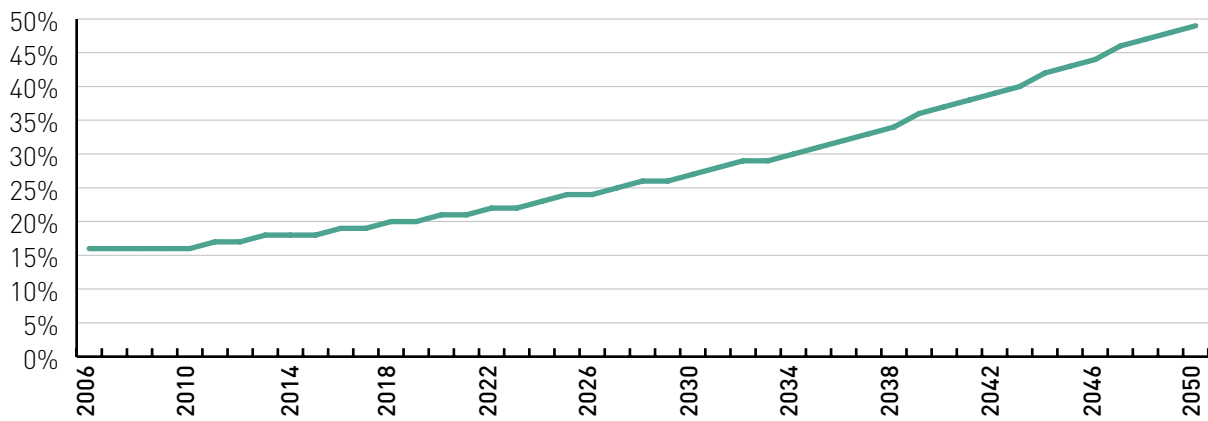
Figure 3.1: Projected Population Structure



Definition: Population in each age cohort as a % of the total population.

Source: Department of Finance

Figure 3.2: Projected Old Age Dependency Ratio



Definition: Population aged 65+ as a % of the population aged 15-64.

Source: Department of Finance

3.5 These population projections were prepared by the Department of Finance taking the results of Census 2006 as the starting point and assuming a particular pattern for fertility, life expectancy and migration¹⁵. While we can say with near certainty that the number of older people will increase over time, the size of the working age population is highly sensitive to the fertility and migration assumptions made at the outset. Notwithstanding these sensitivities, the above projections serve to demonstrate the likely scale of future demographic change. Moreover, alternative projections (see Chapter 2) by the Central Statistics Office and Mercer, present a broadly similar picture of demographic change: namely an increase in the share of older people, a decline in the share of the working age population and a rise in the old age dependency ratio. This is despite somewhat different underlying assumptions.

3.6 As the population ages, age-related public expenditure will begin to rise. Recent projections provide an estimate of the magnitude of the impact that Ireland might expect in this respect¹⁶. These projections indicate that public spending on pensions, health and long-term care will increase from

around 12% of GDP (14% of GNP) today to 26% (31%) by 2050.

3.7 The magnitude of the projected increase in age-related spending is such that Ireland is considered to be at 'medium' risk when it comes to the long-term sustainability of the public finances. To reduce this risk, the European Council has pointed to the importance of 'maintaining high primary surpluses over the medium term and implementing measures aimed at curbing the significant increase in age-related expenditures'¹⁷. Similarly, an analysis by the European Commission indicates that Ireland would need to run substantial budget surpluses – in the region of 5.7% of GDP – over the medium term to cope with the long-term costs of population ageing¹⁸. This would imply a reduction in spending elsewhere or a large increase in taxation, with implications for the actual growth rate of the economy.

¹⁵ The assumed pattern is as follows - the total fertility rate of 1.88 observed in 2005 falls to 1.80 in 2016 and remains constant thereafter; improvements in mortality continue at recent rates until 2041 and halve thereafter; net migration flows will be in the region of 45,000 per annum over the period 2007-2011, falling gradually to 10,000 per annum post 2041.

¹⁶ These projections were prepared by the Department of Finance and reflect the Department's short-term outlook (as of summer 2007) for the economy.

¹⁷ European Council (2007) *Council Opinion on the Updated Stability Programme of Ireland, 2006-2009*.

¹⁸ European Commission (2007) *Economic Assessment of the Stability Programme of Ireland (Update of December 2006)*.

Box 3.1: Demographic Change and Age-Related Public Spending

Long-term projections of this nature have also been undertaken by the OECD for the period 2005-2050¹⁹. Allowing for differences in methodology and underlying demographic and other assumptions, the projected rise in public spending on pensions, health and long-term care (14.4 percentage points) in the OECD report is largely in line with that set out above (14.2 percentage points). Studies carried out by the ESRI²⁰, the IMF²¹, and at EU level by the Economic Policy Committee and the EU Commission²², report similar findings. These also suggest that relatively minor savings may be possible in respect of some age-related aggregates, namely education spending.

As pensions are expected to account for the bulk of the increase in age-related expenditure, a number of recent studies have paid particular attention to trends in pension spending. As illustrated below, these present a similar picture of rising costs (notwithstanding the use of varying demographic assumptions and methodological approaches).

| Public Pension Spending Projections | % of GNP | | | | | |
|--|----------|------|------|------|------|------|
| | 2006 | 2016 | 2026 | 2036 | 2046 | 2056 |
| Department of Finance | n/a | 7.4 | 9.1 | 11.1 | 14.2 | n/a |
| EPC & the Commission | 5.8 | 7.3 | 8.8 | 10.4 | 12.6 | n/a |
| National Pensions Review ²³ | 4.3 | 5.8 | 7.7 | 9.8 | 12.3 | 13.8 |
| Mercer (Social Insurance only) ²⁴ | 2.4 | 3.0 | 4.4 | 6.1 | 8.0 | 8.9 |

As in Ireland, rising public pension spending is a concern in many countries. Although Ireland has a longer timeframe than most to prepare for the coming challenge, the increase that we are set to experience over the period to 2050 is roughly three times greater than the European average²⁵. While this primarily reflects Ireland's lagging demographic profile, the effect of cost-reducing reforms in other European countries also plays a part.

3.8 While the shift towards an older society will give rise to increased spending on health and long-term care, it is expected that the majority of the rise in age-related public expenditure will be accounted for by pensions. Spending on public pensions (Social Welfare and Public Service occupational pensions) is projected to increase

from roughly 5% of GDP (6% of GNP) at present, to 13% (15%) by 2050²⁶. Of this increase, over two-thirds can be attributed to the Social Welfare component of the pension system, with the Public Service element accounting for the remainder.

3.9 This rise in public pension expenditure is the equivalent of €12 billion in 2007 present value terms²⁷. In the absence of countervailing policies, an increase of this scale would lead to a deterioration in the General Government Balance of 6.1 percentage points of GDP²⁸.

19 OECD (2007) *OECD Economic Outlook No 81*.

20 Barrett, A. and Bergin, A. (2005) 'Assessing Age-Related Pressures on the Public Finances, 2005 to 2050'. *Budget Perspectives 2006*.

21 Botman, D. and Iakova, D. (2007) *Policy Challenges of Population Ageing in Ireland*.

22 Economic Policy Committee & European Commission (2006) *The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-2050)*.

23 The Pensions Board (2006) *National Pensions Review*.

24 Mercer Human Resource Consulting (2007) *Actuarial Review of the Social Insurance Fund 2005*.

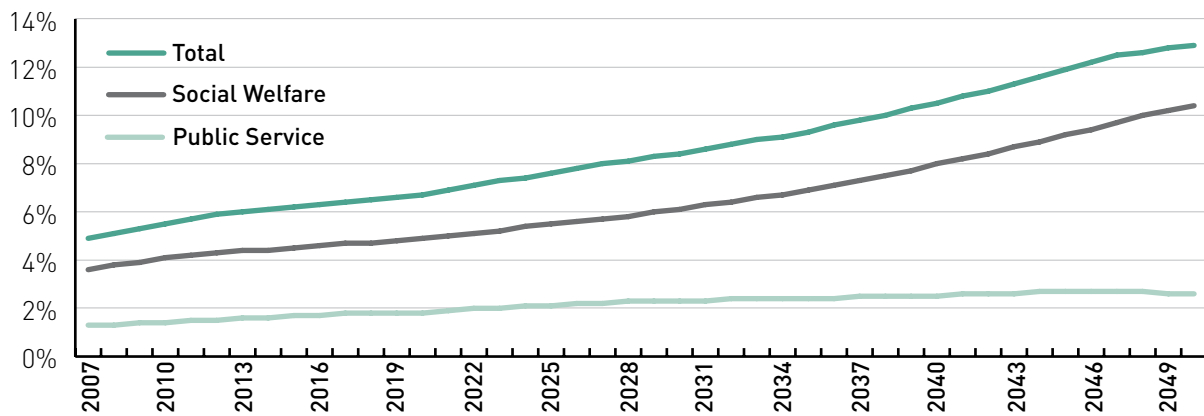
25 See footnote 22.

26 These projections were prepared by the Department of Finance on the basis of work carried out at EU level by the Economic Policy Committee and the EU Commission. They reflect the Department's short-term outlook (as of summer 2007) for the economy.

27 The present value of pension spending in 2050 was calculated using a 3% discount rate.

28 This calculation is based on figures provided by the Department of Finance.

Figure 3.3: Public Pension Spending Projections (% of GDP)



Source: Department of Finance

Taking account of the build-up of debt out to 2050, the deterioration in the General Government Balance would be much greater. This is not a sustainable position, and although alternative projections to those presented here could be chosen, this broad outcome would remain the same.

3.10 The projected longer term path for public pension spending is graphed in Figure 3.3. The projection methodology takes on board the recent Programme for Government commitments to provide personal pension payments to pensioner spouses in receipt of the Qualified Adult Allowance; to extend the Age Allowance to Qualified Adults over 80 years old; and to increase Social Welfare pension payments to €300 per week by 2012. Thereafter, payments are assumed to rise in line with nominal earnings. This is to ensure that the position of pensioners relative to workers does not worsen over time – in the case of the State Pension (Contributory), this translates into a payment of roughly €550 per week (in real terms) by 2050. The impact of moving towards a more contributory based Social Welfare system is also modelled. While these factors account for some of the upward trend in pension spending, the bulk of the increase is attributable to demographic effects.

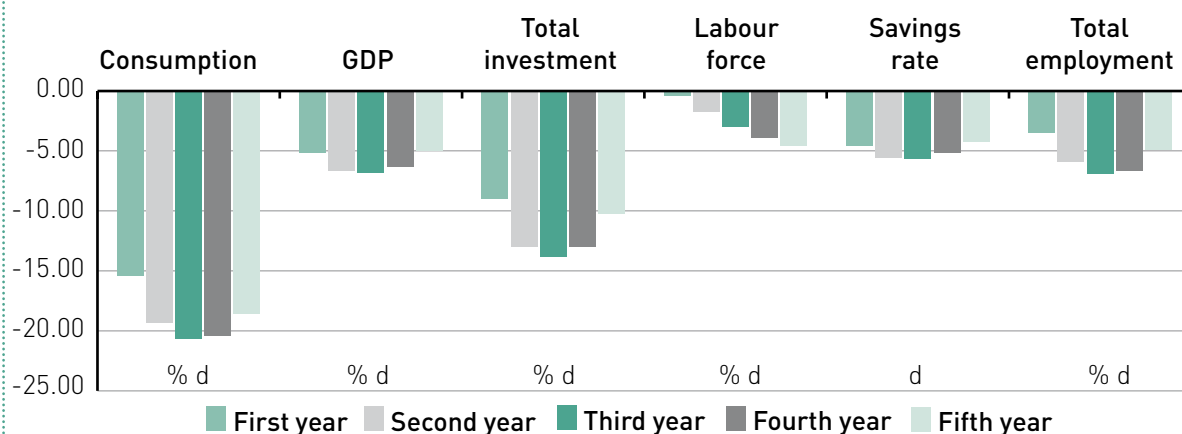
3.11 A further consequence of demographic change is that the task of financing increasing pension spending will fall to a diminishing share of the population. The public pension system is largely funded on a ‘pay as you go’ basis, that is, contributions made by today’s workforce

are used to meet existing pension liabilities. By 2050 however, not only will pension costs have significantly increased, but there will be fewer than two workers per pensioner.

3.12 Taken together, these changes in the composition of the population imply a mismatch between the spending demands facing the public pension system and its ability to meet these demands. On the positive side, the assets accumulated in the National Pensions Reserve Fund (NPRF) will be available for drawdown from 2025 onwards. The NPRF was established in 2000 with the objective of pre-funding in part the future Exchequer cost of Social Welfare and Public Service occupational pensions. A statutory obligation was placed on the Exchequer to pay a sum equivalent to 1% of GNP into the Fund each year from 2001 until at least 2055, with drawdowns prohibited prior to 2025. The market value of the NPRF at end-2006 was €18.9 billion and it is estimated that in 2050, assets amounting to roughly 3% of GNP will be available for drawdown²⁹. While these assets will go some way towards easing funding concerns, they fall far short of the projected 2050 pension liability of 15% of GNP. As such, the bulk of the funding gap will have to be met by the Exchequer. An alternative is to pursue options which reduce the size of the gap.

²⁹ This estimate is of course sensitive to the chosen rate of return and to the drawdown pattern assumed. See Economic Policy Committee & European Commission (2006) *The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health care, long-term care, education and employment transfers (2004-2050)*.

Figure 3.4: Illustrative Macroeconomic Effects of Increasing Taxes to Raise an Extra €12 billion



Definition: d = change; %d = change in percentage terms.

Source: Department of Finance

These are discussed below under the heading 'Meeting the Challenges'.

3.13 Turning to private pension provision, Ireland's changing demographic profile will also have implications for the manner in which the Exchequer provides tax relief to encourage supplementary coverage. At present, incentives for private saving are skewed towards older age cohorts. As the population ages, these cohorts will account for an increasing share of the total. Thus, a large proportion of the population will be able to avail of tax relief at a time when public pension costs are rising and the public finances are not best placed to forgo this tax.

Meeting the Challenges

3.14 Clearly, the changing composition of the population will pose significant challenges for the long-term sustainability of the pension system. Our ability to meet these challenges will depend on the implementation of appropriate and timely policy responses. In broad terms, the available options are:

- Increasing Exchequer and / or private savings;
- Easing upward spending pressures;
- Raising the retirement age;
- Increasing the share of the population at work;
- Improving the productive capacity of the economy.

In considering which approach, or combination of approaches, to pursue, it will be necessary to bear in mind the wider implications of the various options for the public finances and the economy.

3.15 In particular, securing the sustainability of the public pension system over the longer term will require measures aimed at financing or reducing the size of the projected funding gap. Financing the gap would require an adjustment either on the tax side (taxes would have to be raised) or on the expenditure side (spending elsewhere would have to fall).

3.16 The wider impact of such an adjustment can be illustrated by analysing the macroeconomic effects of raising - by means of higher taxation - the extra €12 billion (in 2007 present value terms) needed to fund pension spending in 2050 alone. As Figure 3.4 shows, an adjustment of this scale would have a negative impact on personal consumption and savings as well as distorting labour market incentives. As a result, it is estimated that both employment and economic output could be up to 6% lower than otherwise. A higher cost base would also serve to undermine Ireland's competitiveness and attractiveness as an investment location. However, additional taxes on this scale could have substantially greater effects than an economic model could capture.³⁰ As a result, some restructuring of the economy might

30 See ESRI (2006) *Economic Impact of Various Mandatory Systems* in Pensions Board (2006) *Special Savings for Retirement*.

occur, though much would depend on the type of tax change.

- 3.17** With respect to timing, the Exchequer could opt to meet pension liabilities as they arise, or frontload looming pension costs by running budget surpluses or pre-funding along the lines of the National Pensions Reserve Fund. While raising taxation today and setting aside the funds would have an adverse effect on the economy, by postponing the necessary adjustment into the future, subsequent tax increases will be even higher. Moreover, a rising share of older people and a fall in the population share of working age will lead to slower economic growth – by the mid-2030s, employment growth is expected to have turned negative, with a declining growth trend also projected for labour productivity³¹. In these circumstances, raising taxes will arguably have more injurious consequences.
- 3.18** If pursued, a frontloading approach could however lead to misappropriation concerns. In light of this, it would be necessary to ensure that any additional revenue raised by the Exchequer to meet the projected funding gap be used for that purpose. To protect against the temptation to draw on these funds for other reasons, adequate restrictions would have to be put in place.
- 3.19** While raising taxes is one possible means of addressing the financing imbalance, there are clearly drawbacks to this approach. Given these, another possible option would be to reduce spending elsewhere, although the largely growth-orientated nature of current Exchequer spending means that pursuing this option is not as straightforward as it may seem. For example, appropriate investment over the short to medium term is needed to boost the productive capacity of the economy. Such investment will improve competitiveness and help to sustain economic growth into the future. This, in turn, will place the public finances in a better position to meet the pensions funding gap.

3.20 Of course, some resource reallocation may be possible over the longer term. In particular, it is anticipated that the present high level of capital spending will fall as Ireland's infrastructural deficit is reduced. While this would free up funds, potential savings in this and other areas will not be sufficient to offset the projected increase in spending on pensions and other age-related aggregates. A recent analysis by the ESRI makes this point³². This projects a General Government deficit in 2050 of more than 2% of GNP. This is after assuming a fall in capital and education expenditure and allowing for a rise in the tax share from 29% of GNP in 2005 to 33.3% by 2050. Moreover, given recent spending commitments, such potential savings may not in fact materialise.

3.21 As an alternative to meeting increased pension costs by raising taxation or reducing spending elsewhere, measures to improve the sustainability of the public pension system, or reduce the size of the gap, should be considered. A number of options, including curtailing the growth in pension payments, increasing social insurance contributions and raising the statutory retirement age, are considered in this Green Paper. Of these, curtailing benefits would run counter to the adequacy objective. On the other hand, indexing to prices would keep payments at the same level in real terms.

3.22 Increasing the retirement age is also an option given rising life expectancy. In 2004, life expectancy for males / females aged 65 was 15.4 / 18.6 years. By 2050, EUROSTAT project that this will have risen to 20.2 / 23.4 years respectively³³. In this context, raising the retirement age would be an effective approach. Such a step would allow for contributions over a longer time period and, if the number of years in retirement was held constant at today's average, would considerably ease spending pressures.

31 Economic Policy Committee & European Commission (2006) *The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-2050)*.

32 Barrett, A. and Bergin, A. (2005) 'Assessing Age-Related Pressures on the Public Finances, 2005 to 2050'. *Budget Perspectives 2006*.

33 Economic Policy Committee & European Commission (2005) *The 2005 EPC Budgetary Projections Exercise: Agreed Underlying Assumptions and Projection Methodologies*.

Table 3.1: Impact of Alternative Scenarios on Public Pension Spending Projections (% point of GDP)

| | 2015 | 2020 | 2030 | 2040 | 2050 |
|--------------------------|-------|-------|-------|-------|-------|
| Higher Net Migration | -0.04 | -0.14 | -0.41 | -0.68 | -0.94 |
| Unchanged Fertility Rate | 0.00 | 0.00 | -0.01 | -0.09 | -0.22 |

Definition: Negative figures indicate a percentage point decrease relative to the baseline public pension expenditure projections graphed in Figure 3.3. It is assumed that the total fertility rate of 1.88 observed in 2005 remains constant throughout the projection period and that net migration flows will be in the region of 45,000 per annum over the period 2007-2011, falling gradually to 20,000 per annum post 2041.

Source: Department of Finance

3.23 Pension system reforms involving increases in the retirement age are becoming increasingly common across European countries, as are rewards in the form of higher entitlements for deferring retirement and penalties for retiring early. Of course, any moves in this direction would need to be introduced on a phased basis. This and other issues surrounding a potential increase in the statutory retirement age in Ireland are discussed in detail in Chapter 14. However, by way of illustrating the potential savings from such an approach, a sensitivity analysis on the projections set out in Figure 3.3 shows that if the statutory retirement age were increased by one year per decade from 2026 onwards, the projected increase in Social Welfare pension costs between now and 2050 would fall by around €1 billion (in 2007 present value terms).

3.24 More generally, putting in place policy measures that aim to increase the share of the population at work (family supports, removing barriers to employment, migration, etc.) as well as improving the economy's productive capacity and overall competitiveness, will be of benefit in meeting future challenges. Figures set out in Table 3.1 above illustrate this point. These show the impact of alternative scenarios on public pension spending relative to the baseline projections graphed in Figure 3.3. As is evident from this table, higher net migration and an unchanged fertility rate lead to lower public pension spending as a percentage of GDP than would otherwise be the case. While of value, the scale of these effects indicates that such factors are likely to play only a partial role in addressing the sustainability challenge.

3.25 Overall, given the magnitude of the task, it is unlikely that any one of the options discussed in

sections 3.14 to 3.24 will be sufficient to secure the long-term sustainability of the pension system. Instead, a combination of some or all may be required. In this context, it should be borne in mind that these challenges will not materialise in full for some time yet. As such, a 'window of opportunity' exists in which the public finances and the economy have time to adjust. Moreover, as the debate progresses, it will be important to ensure that the budgetary and economic considerations set out above form the backdrop to the chosen policy response.

Changes to the Existing System

3.26 While the discussion so far has focused on the challenges facing the existing pension system, it will also be necessary to consider the sustainability implications of the policy options outlined in later chapters.

3.27 By way of illustration, a sensitivity analysis on the projections presented in figure 3.3 shows that even relatively modest changes to the level of pension provision would have significant longer term effects. For example, an increase in the Social Welfare pension to 40% of Gross Average Industrial Earnings (GAIE) would require an extra €1 billion (in 2007 present value terms) in order to meet pension liabilities in 2050 alone. This is on top of existing pension costs and the additional €12 billion needed to cover costs arising from demographic change. A more significant increase to 50% of GAIE would add an extra €5 billion to overall costs. If financed by means of increased taxation, the economic consequences illustrated in section 3.16 would be even more pronounced.

3.28 As is evident from this simple illustration, any changes in pension provision can have profound long term financial consequences. For this reason, policy changes that seek to improve the pension system should have regard to reforms to the public pension system, including key issues such as the retirement age.

3.29 Similarly, policy changes to encourage supplementary pension coverage, such as extending tax relief, will have longer term impacts that require careful assessment.

Conclusion

3.30 A central objective of pension policy design is to ensure the sustainability of the system over the longer term. As discussed above, demographic change means that the existing pension system is simply not sustainable. In light of this, the current consideration of pension policy needs to cover not only the scope and adequacy of benefits, but also funding arrangements.

3.31 In safeguarding the pension system into the future, the next step will be to consider how we put in place appropriate measures. In broad terms, the available options are:

- Increasing Exchequer savings (raising taxes or reducing spending elsewhere) and / or private savings;
- Easing upward spending pressures;
- Raising the retirement age;
- Increasing the share of the population at work;
- Improving the productive capacity of the economy.

In considering which policy responses to pursue, due attention needs to be paid to the public finance and economy-wide implications of the various options, particularly their effect on competitiveness.

3.32 Timeliness should also be a key concern when moving forward. In particular, if we are to secure the long-term sustainability of the pension system, we must take action before the challenges of an ageing society fully materialise and our ability to act is either limited or our

actions have more injurious consequences. This suggests that we take advantage of the current fiscal and demographic 'window of opportunity' to pursue appropriate policy responses. Doing so will place the economy and the public finances in a better position to cope with future spending pressures.

3.33 Finally, when considering modifications to the existing pension system, a set of criteria against which all proposed changes should be examined, needs to be drawn up. *Inter alia*, this should include:

- Funding arrangements;
- The public finance and economic implications of the policy change;
- Timeliness;
- The wider policy framework.

Social Sustainability

3.34 Social sustainability is not as straightforward to define or project as economic or financial sustainability. However, there are clearly some current social trends that will impact on future pensioners' welfare. These trends include supplementary coverage levels, family formation patterns and home ownership developments. This section attempts to assess the implications of these developments for public policy in the long term.

3.35 Demographic ageing is a social success and an economic challenge. Increasing life expectancy is a highly valued social outcome, and is clear evidence of successful policies across the social domain. The costs of this success, however, will have to be borne by the working population. There will have to be some level of re-allocation of resources between the generations as a result. This will either be done formally through taxes and Social Welfare, or otherwise through asset sales by pensioners to people at work. The economic costs of ageing need to be balanced against the social costs of not dealing with pension provision. These potential costs include:

- 38% of employees aged 30-65 have no supplementary pension, and a further 20% of people in this age group are not employed. The current Social Welfare pension is at

around the level of the risk of poverty line (60% of median income). Around half of the working age population could be at risk of poverty in retirement under current pension arrangements (though other sources of wealth and income-sharing in pensioner households would lessen this risk). This translates into around 750,000 pensioners in 2056. This would result in pressure for state intervention to make up for system failures;

- It would be difficult at that stage to respond to this pressure given the strain on public finances due to ageing;
- Over 90% of pensioners are owner occupiers without mortgages at present. Future pensioners are more likely to have housing costs if home ownership declines and mortgage terms continue to extend;
- Current workers are likely to have had higher lifetime earnings than current pensioners, and are also likely to have more expensive lifestyles. The drop in living standards at retirement for future pensioners could be exacerbated by both factors;
- Current pensioners are experiencing rapidly rising real Social Welfare incomes;
- Women have lower coverage, earnings and employment rates than men. Women's entitlements to pensions will become an even more important issue over time as marriage breakdowns become increasingly prevalent;
- Family supports are an important feature of Irish society at present, and could be expected to be relatively more important for low income pensioner households. This might not be the case in future, due to changes in family formation and lower fertility.

A Modern and Sustainable Pensions System

A key objective of pension policy design is to ensure the sustainability of the system over the longer term. For many countries, including Ireland, a growing concern in this respect is demographic change.

The projected ageing of the population will give rise to a substantial increase in age-related expenditure, of which pension provision is expected to be the single largest component. Recent projections indicate that spending on this age-related aggregate will increase from roughly 5% of GDP today to 13% by 2050. This is the equivalent of a €12 billion increase in 2007 present value terms.

A further consequence of demographic change is that the task of financing increasing pension spending will fall to a diminishing share of the population. By 2050, it is projected that there will be fewer than two workers per pensioner.

Taken together, these changes in the composition of the population imply a mismatch between the spending demands facing the public pension system and its ability to meet those demands (notwithstanding the accumulation of assets in the National Pensions Reserve Fund). In short, the existing system is not sustainable on the basis of current projections, without adjustments to the overall policy mix.

To safeguard the pension system into the future, a combination of measures aimed at financing and reducing the size of the projected funding gap will be required. In broad terms, the available options are:

- Increasing Exchequer savings (raising taxes or reducing spending elsewhere) and/or private savings;
- Easing upward spending pressures;
- Raising the retirement age;
- Increasing the share of the population at work;
- Improving the economy's productive capacity and overall competitiveness.

Meeting future challenges will clearly require major policy choices on our part. In making these choices, it will be important to recognise the trade-offs that exist, and to take advantage of the current 'window of opportunity', so as to put in place an appropriate and timely policy mix. This should aim to secure the financial and social sustainability of the pension system, with minimum disruption to the wider economy.

