CHAPTER 09

ISSUES REGARDING DEFINED BENEFIT AND DEFINED CONTRIBUTION PENSION SCHEMES
Introduction

9.1 Almost all pension schemes in Ireland are either defined benefit (DB) or defined contribution (DC). This Chapter defines these schemes and the newer ‘hybrid’ schemes. A number of issues in relation to DB and DC schemes are also considered.

9.2 This chapter discusses the following issues in particular:
- Defined Benefit Schemes in Pension Provision;
- Integration/Pensionable Salary;
- Adequacy of Defined Contribution; and
- Guarantees and Security.

Definitions of Pension Schemes

Defined Benefit

9.3 A defined benefit (DB) scheme fixes the benefit in advance – usually as a proportion of the member’s earnings when they retire. For instance, a DB scheme might provide a retirement pension of 1% of earnings for each year an employee was in that scheme. If an employee retired after 40 years, that employee would receive a pension of 40% of their pre-retirement earnings.

9.4 In a DB scheme, it is not possible to know in advance how much the scheme is going to cost. The benefits are fixed and the contributions must be adjusted from time to time to make sure that the correct amount is being accumulated to provide for them. It is usual in a DB scheme for the member’s contribution rate to be fixed and for the employer rate to increase or reduce as needed, though in some DB schemes both employer and employee contribution rates change from time to time.

Main Features of a DB Scheme

9.5 The following are the main features of a DB pension scheme:
- Contribution rates vary, depending on the outcomes of the regular actuarial reviews;
- Members can predict the benefits they will receive as a proportion of their earnings just before retirement;
- The higher the investment return achieved by the scheme, the lower the contribution rate will be. On the other hand, if investment returns are poor, contribution rates have to be increased to provide for the agreed benefits;
- The cost of buying a pension at retirement affects the contribution rate; and
- Schemes are best suited to those who stay until retirement, particularly those who experience above average salary growth. Those who leave before retirement can receive much lower benefits.

Defined Contribution Schemes

9.6 A defined contribution (DC) scheme has a set contribution for both the employee and the employer. For example in many DC schemes, the employer and the employee will each contribute 5% of the employee’s earnings, or 10% in total.

9.7 These contributions are invested on behalf of each scheme member. The retirement benefits for each member depend on how much money has been built up by retirement and so it is not possible to know in advance what pension benefits a member will receive.

Main features of a DC scheme

9.8 The following are the main features of a DC pension scheme:
- Contribution rates are fixed in advance – employers know what they have committed to;
- Members will not normally know until very close to retirement what their benefits will be;
- The higher the investment return achieved by the scheme before retirement, the better the pension benefits will be. On the other hand, if investment returns are poor, especially in the years just before retirement, retirement benefits will be lower than expected;
- In a DC scheme, the member builds up a fund by retirement age which is used to buy a retirement pension. The cost of the pension is unknown in advance, and it is to the member’s advantage if the cost is low, but detrimental if pension cost at retirement is high;
- If a member’s earnings increase rapidly throughout their working life, and especially...
towards the end, their DC benefits may be low relative to their earnings just before retirement; and

- Contributions are usually allocated uniformly across all members as a percentage of pensionable earnings – there is no discrimination between those who stay until retirement and those who leave early.

**Definition of a Hybrid Pension Scheme**

9.9 A hybrid pension scheme is one which is neither a full DB nor a full DC scheme, but has some of the characteristics of each. There are many possible types of hybrid schemes.

9.10 In a DC scheme, the member generally bears the full risk (of paying higher costs or receiving reduced benefits) if investment is not as good as expected. In a DB scheme, the employer usually takes that risk and pays higher contributions in order to maintain the agreed level of benefits. In hybrid schemes, the risk is shared between the employer and employees.

9.11 Under the Towards 2016 social partnership agreement, the Pensions Board was asked to research benefit design options in the occupational pensions area. The Board has produced a ‘Guide to Hybrid Pension Schemes’ which deals with hybrid schemes in a comprehensive manner. The reader should refer to this guide for more details.

**Issues for Defined Benefit and Defined Contribution Pension Schemes**

**Issues for Defined Benefit Schemes**

9.12 There are a number of issues which arise which are particularly related to the nature of DB schemes.

These issues include:

- The impact of the funding standard on DB (See Chapter 10 for full details on the funding standard);

**Issues for Defined Contribution Schemes**

9.13 As defined contribution pension schemes are still relatively immature (i.e. have experienced relatively few retirements), a number of issues may arise in due course. However, the main current issue which relates to DC schemes is the adequacy of the pension benefit payable on retirement. The National Pensions Review, published in 2006, and more recent studies have shown that the majority of public and private DB schemes will provide benefits that are adequate (in terms of the NPPI targets) for those with long service. However, because of inadequate contribution levels, the majority of DC scheme members are unlikely to have a retirement income equal to or greater than the NPPI target.

**Issues common to both Defined Benefit and Defined Contribution**

9.14 While there are issues that are exclusive to DB and DC, there are also a number of issues that are common to both. These include:

- The demand for guarantees; and
- Security for pension scheme members.

These issues will be addressed later in this chapter.
9.15 In 2006, the total workforce was just over 2.1 million. According to figures provided by the Pensions Board, the breakdown of occupational pension coverage between public service Defined Benefit, private sector Defined Benefit and Defined Contribution was approximately 33% each and accounted for a total of some 778,400 members.

9.16 Defined benefit (DB) schemes are an important part of Irish pension provision, with 68% of members belonging to such schemes (including the public sector). Members of DB schemes outnumber members of defined contribution (DC) schemes by a ratio of approximately 2:1. However, this ratio is down from 4.5:1 in 1996.

9.17 Defined benefit scheme membership is split evenly between (non-commercial) public sector and private sector workers, with approximately 250,000 DB members in each sector. However, it should be noted that the issues arising for private sector and public sector DB members are very different. Public sector schemes are considered in detail in Chapter 13, while this chapter concentrates, for the most part, on issues relevant to the private sector.

9.18 While membership of defined benefit schemes continues to increase slowly, it forms a declining percentage of total coverage. The increase is almost entirely due to increases in membership of existing schemes: the only new defined benefit schemes appear to be as a result of restructuring existing schemes, or occasional single member arrangements. Despite the increase in membership, there are concerns about the future of defined benefit provision in the private sector in Ireland.

9.19 Similarly, the number of DB schemes in the OECD area is decreasing, while there has been a corresponding increase in DC. This is part of an overall trend for sponsors of DB schemes to reduce risk through reducing the level, or changing the nature, of benefits offered to employees. There is also evidence of benefit reductions, or increases in member contributions for existing members of DB schemes, indicating a willingness on the part of some sponsors to continue to provide such pensions if members contribute more to the cost.

9.20 It should also be noted that DC schemes can provide certain advantages. These include that the benefits may be more easily transferred.

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Table 9.1: DB/DC Breakdown of Irish Occupational Pension Schemes

<table>
<thead>
<tr>
<th>Date</th>
<th>No. of Schemes</th>
<th>No. of Members</th>
<th>No. of Schemes</th>
<th>No. of Members</th>
<th>Ratio of DB:DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Dec 1996</td>
<td>2,290</td>
<td>412,641</td>
<td>48,261</td>
<td>88,759</td>
<td>4.5:1</td>
</tr>
<tr>
<td>31 Dec 1997</td>
<td>2,315</td>
<td>418,918</td>
<td>53,135</td>
<td>100,551</td>
<td>4:1</td>
</tr>
<tr>
<td>31 Dec 1998</td>
<td>2,069</td>
<td>413,618</td>
<td>61,896</td>
<td>120,580</td>
<td>3.5:1</td>
</tr>
<tr>
<td>31 Dec 1999</td>
<td>2,060</td>
<td>424,795</td>
<td>70,478</td>
<td>144,425</td>
<td>3:1</td>
</tr>
<tr>
<td>31 Dec 2000</td>
<td>2,027</td>
<td>449,111</td>
<td>84,321</td>
<td>180,690</td>
<td>2.5:1</td>
</tr>
<tr>
<td>31 Dec 2001</td>
<td>1,956</td>
<td>455,627</td>
<td>95,975</td>
<td>214,871</td>
<td>2:1</td>
</tr>
<tr>
<td>31 Dec 2002</td>
<td>1,901</td>
<td>471,841</td>
<td>105,863</td>
<td>237,491</td>
<td>2:1</td>
</tr>
<tr>
<td>31 Dec 2003</td>
<td>1,693</td>
<td>483,031</td>
<td>110,972</td>
<td>241,302</td>
<td>2:1</td>
</tr>
<tr>
<td>31 Dec 2004</td>
<td>1,583</td>
<td>500,633</td>
<td>86,486</td>
<td>225,772</td>
<td>2:1</td>
</tr>
<tr>
<td>31 Dec 2005</td>
<td>1,478</td>
<td>499,885</td>
<td>82,841</td>
<td>234,814</td>
<td>2:1</td>
</tr>
<tr>
<td>31 Dec 2006</td>
<td>1,411</td>
<td>542,362</td>
<td>92,075</td>
<td>255,008</td>
<td>2:1</td>
</tr>
</tbody>
</table>

^ The reduction in DC membership in 2004 was as a result of a review of the Pensions Board register and the deletion of some schemes.

114 Includes public sector schemes

115 OECD, “Pensions Market in Focus”, Issue 3, October 2006
between employers, individuals may benefit from high investment returns, and may have greater control over investment options. DC also offers better value for early leavers in comparison to early leavers under DB. Finally, the benefits under DC are more transparent, which may foster greater understanding of and interest in pensions for the individual.

International Drivers

9.21 The reasons that have been given for the decline of defined benefit schemes as a proportion of voluntary pension provision are diverse, depending on the perspective of the various stakeholders involved, but include:

- **Risk aversion by employers:** Volatile financial markets, the cost of funding retirement benefits and an increased awareness by employers of risk distribution as a result of developments such as international accounting standards may have resulted in lower contributions to pension funding and less appetite for long-term pension liabilities.

- **Regulation:** Strict legal, funding and solvency laws and regulation of the type of assets in a pension plan; variations in tax laws, and family law changes in the context of marital breakdown mean that the management of DB pensions has become increasingly complex.

- **New economy:** Workers tend to be more mobile, less likely to stay with one employer throughout their careers, and more likely to have flexible working arrangements. Defined contribution schemes are more attractive for those who stay for a short time, have flexible working patterns or who want more control over asset allocations.

- **Rational Worker:** Internationally, a combination of weak wage growth and prosperous capital markets can lead to a preference for DC over DB by workers. Differences in union participation rates and in investment climates can be key influences in this regard.

9.23 Options to address risks and improve outcomes in a DC world include:

- Educating individuals to ensure that they are aware of their responsibility to plan for their retirement, e.g. National Pensions Awareness Campaign;

- Trustees providing individuals with adequate and up-to-date information about investment decisions;

- Increasing contributions.

9.24 There are limits to what education can achieve if a part of the population is resistant to the idea of planning for retirement. This has resulted in the consideration of alternatives to voluntary provision internationally. This issue was considered in Chapter 8.

9.25 The funding of DB schemes, including the impact of the funding standard and FRS17, are dealt with in detail in the next chapter. The next section deals with an issue primarily of concern to DB schemes, i.e., integration.

Integration/Pensionable Salary

Introduction

9.26 An integrated scheme is a scheme, usually defined benefit, where the contribution and benefits are calculated net of the State retirement benefit. A frequent criticism of these schemes is that if State retirement benefits increase rapidly in the years before retirement, the benefits paid by the scheme, particularly for the lower paid, can be lower than expected.

Implications

9.22 While there are some benefits derived from moving to a DC environment, there are increasing concerns that the proportionate change from DB to DC provision is leading to:

- Retirement benefits that are too low, given that contribution rates for DC schemes tend to be lower than for DB (the latest IAPF Benefits survey found that the average contribution rate for DC schemes was 11% compared to 16% for DB schemes);

- A change in the allocation of risks from employers to employees, e.g. investment, longevity risks.

9.27 The majority of private sector defined benefit occupational pension schemes in Ireland are integrated with benefits payable under the Social Welfare system. A typical benefit from
such a scheme would be: (Number of years’ service) multiplied by (Final earnings less 150% of State benefit) divided by 60.

9.28 Suppose a retiring member had 40 years’ service, and final earnings of €30,000 and the State benefit is €10,884, the benefit would be:
- 40 times (€30,000 less 150% of €10,884 (i.e. 16,326)) divided by 60, which results in a pension of €9,116 p.a. from the scheme.

9.29 It should be noted that integrated schemes do not use the actual State benefit entitlement of each member, but use a standard allowance, usually the single person’s maximum benefit.

9.30 The rationale for integrated schemes is an intention to make retirement schemes as efficient as possible, i.e. to take account of total income after retirement, and to allow for the fact that almost all members are likely to qualify for a State pension to which the employee and the employer have contributed.

9.31 The effect of integration is that higher earners receive a proportionately higher overall pension than lower earners. Indeed, in the above example, anyone earning less than €16,326 p.a. will receive no pension at all (except for 120% of own contributions if the scheme was contributory). Correspondingly, as contributions will be calculated on the same basis as benefits, lower earners also pay proportionately smaller contributions.

Criticisms
9.32 A considerable drawback of the integrated scheme design is that where the State pension increases faster than an individual’s earnings in the years before retirement, the pension paid to that person from the scheme will be less than expected. If the individual is earning close to 150% of the State benefit, they could end up with a relatively small pension.

9.33 The problem described above is specific to the experience of recent years where the Social Welfare pension has increased faster than earnings. The result of these increases has been lower than expected payments from the scheme. This has resulted in reduced costs for sponsoring employers, though any savings have in practice been more than offset by increased costs as a result of lower interest rates, investment losses and longevity increases.

Possible solutions
9.34 Under current legislation, the value of pension benefits from a defined benefit scheme must represent at least 120% of the value of member contributions. This provides some security for members against the effects of integration. However, in many cases this provision does not have any effect.

9.35 A number of solutions have been proposed:
- Some have called for integration to be prohibited or limited. The drawback would be that this solution would result in immediate considerable additional contribution costs for such schemes, and is likely to result in reduced member benefits or in some cases, scheme closure;
- Other proposed solutions would restrict the right of schemes to reduce the benefits in the three years before retirement, or forbid any reduction in pensionable salary as a result of the operation of integration.

9.36 The current situation has resulted in a windfall saving to sponsors of integrated schemes as the increased Social Welfare payments have reduced the benefits the schemes were expecting to pay.

Defined Contribution

Adequacy
9.37 As discussed in paragraphs 4.47 to 4.52, the issue which relates mainly to DC schemes is the adequacy of the pension benefit payable on retirement. Members of DC schemes may not know, until very near to retirement, what the level of benefit will be. This raises the question of how to ensure the member’s pension can provide an adequate living standard in retirement.

9.38 While many factors feed in to whether people in DC arrangements will attain the NPPI/NPR replacement income target on retirement, the contribution rate is the main option available to the individual employee to improve his or her retirement income. For occupational
scheme members, AVCs and PRSAs can be used to increase their likelihood of meeting the replacement income target.

9.39 The Society of Actuaries in Ireland translated the NPPI/NPR target into a set of required contribution rates at various income levels and ages for DC/PRSA contributors. These required rates reflect the position at May 2006. The rates shown are those required to provide for a combined total of personal and Social Welfare pension of 50% of pay. For those on pay at or below twice the rate of Social Welfare pension, no contribution is required as the Social Welfare pension alone will amount to at least 50% of pay.

Table 9.2: Society of Actuaries in Ireland recommended contribution rates as of May 2006 (for half-salary pension\textsuperscript{114})

<table>
<thead>
<tr>
<th>Age you start saving</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{\欧元,20,000}^*)</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>(\text{\欧元,30,000})</td>
<td>6%</td>
<td>7%</td>
<td>9%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>(\text{\欧元,40,000})</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
<td>17%</td>
<td>22%</td>
</tr>
<tr>
<td>(\text{\欧元,50,000})</td>
<td>11%</td>
<td>13%</td>
<td>16%</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>(\text{\欧元,60,000})</td>
<td>12%</td>
<td>14%</td>
<td>18%</td>
<td>22%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Source: Society of Actuaries in Ireland, ‘How much do you need to save for a pension?’, May 2006

* The half-salary pension is being provided by the Social Welfare pension.

9.40 Statistical sources on contribution rates of DC scheme members and on AVC contributions by occupational scheme members are limited. While PRSA members account for a small, but growing, share of DC scheme members, it is possible to broadly estimate the numbers of PRSA holders who are currently undersaving for retirement based on the NPPI/NPR 50% replacement income target.

9.41 The Society of Actuaries in Ireland recommend that a 25 year-old on a salary of \(\text{\欧元\,30,000}\) should be contributing 6% of salary to fund a half salary pension. However, the data from Table 9.3 suggest that only 27.8% of those aged 23-27 earning between \(\text{\欧元\,25,000}\) and \(\text{\欧元\,34,999}\) are meeting the Society’s recommendations, which highlights the scope of the adequacy problem facing people. However, the table also shows that the proportion meeting the recommended contribution rate is higher in the lower age groups which may be a positive indicator for the future. It is important that these data are monitored over time as trends in PRSA long-term savings and policy lapses become more apparent.

9.42 Based on these figures, 79.5% of PRSA holders aged 23-47 earning over \(\text{\欧元\,25,000}\) are undersaving for retirement based on the NPPI/NPR replacement income target\textsuperscript{117}. While further analysis by CSO shows that people in older age categories tend to have much higher contribution rates (people aged 55-69 have

Table 9.3: PRSA 2005 - % meeting SAI recommendations

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{\欧元,25,000-\欧元,34,999})</td>
<td>27.8</td>
<td>29.5</td>
<td>22.3</td>
<td>19.1</td>
<td>17.4</td>
<td>25.2</td>
</tr>
<tr>
<td>(\text{\欧元,35,000-\欧元,44,999})</td>
<td>17.3</td>
<td>17.6</td>
<td>16.2</td>
<td>14.3</td>
<td>10.6</td>
<td>16.0</td>
</tr>
<tr>
<td>(\text{\欧元,45,000-\欧元,54,999})</td>
<td>19.5</td>
<td>14.9</td>
<td>15.8</td>
<td>16.8</td>
<td>9.8</td>
<td>15.3</td>
</tr>
<tr>
<td>(\text{\欧元,55,000-\欧元,64,999})</td>
<td>12.0</td>
<td>16.4</td>
<td>12.7</td>
<td>11.8</td>
<td>8.4</td>
<td>12.8</td>
</tr>
<tr>
<td>Total ((\text{\欧元,25,000 +}))</td>
<td>24.5</td>
<td>23.3</td>
<td>18.8</td>
<td>16.7</td>
<td>13.4</td>
<td>20.5</td>
</tr>
</tbody>
</table>

Source: Pensions Board PRSA register and Revenue/DSFA earnings data, matched by CSO\textsuperscript{118}

116 Including the Social Welfare pension.
117 Some of this group could be AVC contributors via PRSAs, and the PRSA savings would represent only part of their occupational pension
118 The collection of Personal Public Service (PPS) Numbers for PRSA contributors in the Pensions Board’s regulatory framework allows for data matching against information on employment and earnings held by Revenue/DSFA. The data matching is carried out by CSO under the confidentiality provisions of the Statistics Act 1993. While there are some timing mismatches between the Pensions Board and Revenue/DSFA data, the results are based on the actual recorded information on contributions and earnings in both sources, which improves their accuracy. The analysis covers some 42,109 active PRSA contributors.
an average contribution rate of 17.4%), the Society of Actuaries analysis shows the value of early contributions to pensions.

9.43 Table 9.4 illustrates the importance of increasing pension coverage for all. With regard to gender differences, it should be noted that:

- Women tend to live longer than men, so women face higher annuity costs;
- Women generally earn less than men, as their careers are more likely to have different patterns, with women more likely to take career breaks or job-share or work part-time as they juggle caring responsibilities; and
- The structure of families has changed dramatically in recent years, with women not marrying at the same rate and marriage break-ups increasing.

9.44 Women are more vulnerable to poverty, especially in later years. Given their longer life expectancy, that can make for a longer, but poorer retirement.

Conclusion

9.45 The main conclusion to be drawn from the tables above is that contributions to PRSAs are not high enough across most categories of contributors in order to achieve a half-salary pension. However, as Table 9.3 shows, the pattern by age may provide some encouragement about the level of savings by younger contributors. The data in Table 9.4 also reinforce the case for women and young people to take up the savings habit at an early interval to take away some of the financial pressures that may be faced later. As the proportion of people’s lives spent in retirement increases, the need for adequate provision is essential to ensure a good quality of life. The level of contribution into a DC scheme or PRSA is an essential factor in this regard.

Guarantees and Security

9.46 In relation to both DB and DC, the safety and security of pension funds is an issue. The next section deals with the issues of guarantees and security of pension funds.

Guarantees

Introduction

9.47 People save to provide for the future. In allocating assets towards a long-term target, the acceptable level of risk and return will vary, depending on the objective. For example, maintaining cash in a current account will be low risk but will have a low yield compared to investment in shares which has potentially higher rewards but also a higher risk of losing the value of the investment. This is true for all investment decisions, including when saving for retirement, although the risk in relation to retirement savings is often not fully appreciated by many individuals who may expect a secure
investment and a high return on their life savings.

9.48 When considering guarantees, there is no such thing as a pure guarantee for a future pension promise. No matter how strong a pension promise is guaranteed, that guarantee is subject to a number of conditions. In essence, the promise can only be paid if there are sufficient funds to provide that level of promise. While there may be low-risk guarantees and high-risk guarantees, all guarantees are conditional to some degree.

Bearing the risks of pension provision

9.49 If money is being invested in order to provide for retirement, there can be no certainty about the eventual pension benefit as a percentage of income at retirement. The major unknowns are:

(a) The rate of investment return that will be received, including the return on contributions made in the future. This is especially true of the return that will be earned in real terms, i.e. net of inflation;

(b) For how long a retirement income must be provided;

(c) The level of earnings at or near retirement.

9.50 These unknowns or risks cannot be eliminated by the person, as there is no way of knowing in advance what the outcome will be. From the point of view of someone saving for his/her retirement, the risks can only be reduced if some third party bears these risks. The most common example of this in pension savings is a defined benefit pension scheme, where the above risks are in the normal course of events underwritten by the employer contributions.

9.51 If these risks are removed or reduced, people may be more willing to make retirement savings, though it is by no means certain. In the National Pensions Review, the view was expressed that, if supplementary pension schemes were made mandatory, it would be appropriate to provide investment guarantees of some type for participants. This would provide some form of protection to savers from potential investment losses they would be effectively forced to incur.

9.52 Without such a guarantee, it is unlikely that a mandatory scheme would be welcomed. It is also likely that the presence of a guarantee could be a driver for increasing pension coverage in the context of voluntary provision. There is also a view that, no matter what the system of pension provision, people are entitled to some form of guarantee. Against these views, it is worth stating that no-one, including the State, can give a long-term absolute guarantee. Furthermore, any type of guarantee has a significant cost attached to it. State guarantees would also transfer unknown and unquantified risks onto the Exchequer and future taxpayers.

9.53 The remainder of this section considers only guarantees of pre-retirement investment returns.

What types of guarantee?

9.54 The following are among the types of guarantees that could be provided:

(a) The accumulated fund at retirement will be no less than the total contributions, or than the total contributions accumulated at a specified rate of return;

(b) The accumulated fund at retirement (or income per annum thereafter) will have a minimum value in real (inflation adjusted) terms;

(c) The investment return in any particular year will be no less than a specified amount.

How much?

9.55 Guarantees cost money, because in some circumstances those with guarantees receive more than the value of assets that have been accumulated for them. The cost of this guarantee could be met in the following ways:

(a) By an annual charge expressed as a percentage of accumulated assets;

(b) By a charge which is only made in years of high investment returns;

(c) By the Exchequer from general taxation.
The appropriate level of charge is determined not only by the value of the guarantee being provided, but by changing investment circumstances, especially expected future interest rates and expected market volatility. This means that the cost of providing a set guarantee may vary over time.

How?

As referred to above, guarantees may be provided either in the context of voluntary pensions, as an incentive for participation, or under a mandatory system, in order to make the obligatory participation more acceptable. In either case, the following points can be made:

- A guarantee can be underwritten by the Exchequer or directly by private sector providers;
- If the Exchequer underwrites the guarantee, it may choose to reinsure its obligations through the private sector. Alternatively, it may provide the guarantee on an unfunded basis, or accumulate any charges towards future claims;
- The existence of a guarantee may encourage those covered by it to make riskier investment choices. Were a guarantee provided, it would probably necessitate significant restrictions on investment choices. Were the Exchequer providing the investment guarantees, and as a result imposing significant investment restrictions, it might be simpler if the Exchequer undertook both the investment management and the provision of guarantees.

Considerations

- The main argument in favour of providing guarantees is that the lack of such guarantees is a deterrent to pension saving. However, there is no evidence to date that lack of such guarantees is indeed a deterrent. This may be because those who have no supplementary pensions savings may not be aware of the risks in investment and so may not have considered the issue;
- Some level of investment risk protection may be necessary to make a mandatory pension system acceptable;
- If guarantees are provided through the private sector, the question of capacity may arise. According to the projections prepared for the Pension Board’s report on Special Savings for Retirement, the amount of pensions savings under a mandatory system could be as high as 4.3% of GNP which equates to over €6 billion in 2006 terms;
- Charges for investment protection may sometimes appear high and unjustifiable. During sustained periods of good investment returns such as occurred during the 1990s, there would be little or no perceived need for investment guarantees, and the awareness of the value of the guarantee may be low. It might therefore be difficult to explain the justification for the charges being deducted in respect of those guarantees;
- The existence of an Exchequer-backed guarantee on mandatory pensions may make voluntary supplementary arrangements unattractive and thereby endanger their continuation. This would contradict the objective in the SSR report of encouraging existing provision to continue;
- Were guarantees to be provided by the Exchequer without any charge, this would represent a transfer from general taxation to members of pension schemes;
- In times of poor investment returns, an investment guarantee (depending on its terms) would represent an economically significant transfer to scheme members. The design of a guarantee should reflect this possibility;
- From the point of view of the State, consideration needs to be given as to the appropriateness of any State expenditure on guarantees. There is an argument that State intervention in this area may crowd out what others would do anyway. State activity may be more justified in concentrating on regulating the market (e.g. issue of charges). Finally, any State guarantee would have to be tempered by its ability to pay.

Holders of small Standard PRSAs should have their benefits underwritten by the State

A suggestion examined by the Pensions Board in the National Pensions Review was that holders of small Standard PRSAs should have their benefit underwritten by the State so that they would be guaranteed a retirement income of, for example, €1 for every €15 of contributions made. [The proceeds of the PRSA would be paid to the State in return for which the contributor would receive an
enhanced Social Welfare pension.) A subset of the suggestion was that voluntary additional contributions would be paid to the State by the PRSA holder which would provide extra Social Welfare pensions at retirement.

9.59 There may be difficulties with this suggestion as the State would be very vulnerable to the investment strategy followed by the Standard PRSA provider and the individual PRSA saver would have a strong incentive to choose higher risk investments, albeit within a default investment strategy or a pooled fund arrangement, in the knowledge that if such investments failed to perform, the State guarantee would be activated.

9.60 In relation to the subset of the suggestion, even if there were no State guarantee involved, the State would be left to bear the very substantial life expectancy risk following the saver’s exit from the labour force, while the savings provider would have had the benefit flowing from selling the product in the first place and maintaining the investment account prior to the saver’s retirement.

9.61 The ratio of 1:15 in the NPR was used to illustrate the possibility of a State guarantee of retirement income. Were this suggestion to be considered further, detailed examination of both mortality and investment returns would be needed in order to determine a conversion factor. There would also be important issues to be considered in relation to how these suggestions would operate in practice. One main effect of the suggestions would be to provide certain Standard PRSA holders with the option of a guaranteed annuity rate at retirement. On this basis, the suggestions would need to be considered in conjunction with Chapter 11.

Security for pension scheme members

9.62 Security of pension benefit, as it relates to DC, is concerned with the security of what was expected from the investment. This relates to the point on investment guarantees discussed in the previous sections. This section examines arrangements that provide additional security to defined benefit scheme members in the event there is a shortfall in the assets of the scheme relative to the liabilities.

Overview

9.63 From time to time, a defined benefit scheme may have a shortfall, i.e. the value of the assets of the scheme may be less than the calculated value of the future benefits of the scheme. In the normal course of events, this is not a particular problem for the scheme, and a shortfall from time to time is a result of the funding approach adopted in most Irish defined benefit pension schemes. Usually, the shortfall is made up by additional contributions into the scheme.

9.64 However, a shortfall becomes important in two circumstances:

- Where future contributions are not sufficient to cover the shortfall and there is no agreement to make additional contributions and/or reduce benefits appropriately; or
- Where the scheme is being wound up and there is an uncovered shortfall.

9.65 In general, Irish employers do not have a legal obligation to provide pensions (with the exception of the construction industry). In those cases where employers provide a defined benefit pension, the employer has no legal liability for any shortfalls that might arise from time to time. The security of the benefits of members of defined benefit schemes therefore depends on the assets already accumulated in the pension fund and on the willingness of the employer to continue to make contributions.

9.66 In some countries, there are mechanisms to provide additional security for scheme members in the event that the scheme has an unmanageable asset shortfall. These mechanisms include:

- Obligations on employers to make contributions and/or to take responsibility for fund shortfalls;
- Insurance or similar arrangements to meet part or all of any shortfalls that may arise.
**Employer obligation**

9.67 A debt on the employer would make any shortfall in funding the legal responsibility of the employer. It therefore acts as an additional level of security for scheme members over and above the assets of the scheme.

9.68 As normally understood, the debt is activated at any time when a scheme is wound up and/or when a sponsoring employer goes into liquidation. The employer is liable for any difference between the liabilities of the scheme (calculated on a prescribed basis) and the assets of the scheme. In the event of liquidation, the amount of this difference is treated as a creditor. Because the amount of the debt depends on a prescribed basis for calculating the scheme obligations, the security provided depends on how demanding this basis is.

9.69 The advantages of introducing such a concept are:

- Security for members is better than with a funding standard alone;
- The debt acts as a disincentive for solvent employers to wind up underfunded schemes;
- Where schemes do not meet the Funding Standard, the existence of the debt allows longer term and therefore less demanding funding plans to be put in place; and
- There is no immediate cost to employers.

9.70 Among the potential disadvantages are:

- In many cases where the employer is in liquidation, particularly for smaller companies, there may be little or no assets available once the claims of preferred and secured creditors have been satisfied. The net benefit of this provision may therefore be small unless the scheme is ranked as a preferred creditor;
- It is likely to be opposed by those whose rights in liquidation would be affected;
- The existence of a potential debt might in some cases affect the ability of the sponsoring employer to raise funds. However, the introduction of FRS17 in company accounts may have this effect in any event;
- This may be seen as penalising employers who have voluntarily undertaken to sponsor defined benefit schemes vis-à-vis those who have less valuable or no occupational pension arrangements;
- There is a risk that the introduction of this measure would prompt the wind-up of some underfunded schemes before it took effect; and
- There may be some concern that, in the event of a debt on the employer, some scheme trustees may be more likely to follow more aggressive investment policies in the belief that any shortfalls would be covered by the employer.

9.71 The Funding Standard Expert Group of the Pensions Board recommended against the introduction of such a debt on employers in 2004. They saw it as introducing a retrospective cost on employers and feared that it would undermine the voluntary basis on which defined benefit schemes were set up. On the other hand, a view exists that a debt on a solvent employer should be part and parcel of any decision relating to the statutory order of priority on wind-up that would affect pensioners’ rights.

9.72 This issue was considered again in the Pensions Board’s review of the Funding Standard in 2005, and views were invited on this topic as part of a consultation process. All replies recognised the additional security that a mandatory debt would provide for scheme members, though some questioned whether this would be significant and would be worth the drawbacks. Some responses stated that the advantages to members outweighed the disadvantages, while others had the view that the effect of the introduction of a debt would further weaken defined benefit pension provision. After consideration of this issue, including the submissions made as part of the consultation process, the Board did not recommend the introduction of a mandatory employer debt.

**Insurance or similar arrangements**

9.73 In some jurisdictions, there are arrangements whereby, in the event of a scheme shortfall not being met by the sponsoring employer, some other arrangement makes up at least part of the shortfall. The most well-known of these arrangements are:

- The Pension Protection Fund in the U.K., which became operational in April 2005,
is a scheme which covers defined benefit shortfalls up to statutory maxima. The fund takes over responsibility for scheme liabilities and assets in the event that the employer is unable to meet the shortfall. It is funded by a risk-based levy on defined benefit schemes;

- The Pension Benefit Guarantee Corporation (PBGC) in the U.S.A. which is similar to the U.K. arrangement and takes responsibilities for scheme benefits (to a maximum) in the event that the employer is unable to meet the shortfall or that meeting it would endanger the viability of the employer. The PBGC is currently experiencing large deficits;

- The German Pensions-Sicherungs-Verein (PSV), through which book reserve and unfunded support funds plans must be insured against bankruptcy of the employer through a mutual insurance corporation. The insurance covers benefits in payment and vested entitlements for active workers, subject to certain exclusions and limits. Shortfalls are funded by a levy on participating employers related to their pension liabilities, and not linked to risk of insolvency.

9.74 Pension protection can be achieved in a number of ways, for instance:

- By setting up a fund, i.e. a quasi-insurance company, which builds up funds from charges imposed on pension schemes and uses these funds to meet the shortfalls as they arise;

- By imposing a levy on remaining schemes in the event of a scheme failing with a shortfall;

- By meeting shortfalls from the Exchequer, i.e. from general taxation.

9.75 Meeting any funding requirements from the Exchequer represents a fundamentally different approach to the other approaches listed. If shortfalls are met from general taxation, at least part of the cost is being paid by those who cannot benefit from the scheme because they are not members of qualifying pension schemes. The other approaches attempt to fund this protection from the group of people who can potentially benefit from the protection offered by the arrangement. However, even if costs are met by pension schemes, there is still an argument that better funded schemes, those least likely to need or to avail of the protection, pay for a benefit for less well-funded schemes.

9.76 Where pension schemes are being charged for the protection scheme, there are a number of advantages in building up a fund rather than applying a levy only when the need has arisen:

- A levy to accumulate a fund will be more predictable and will smooth out the pension. A levy after the event is more likely to arise when many schemes are encountering funding difficulties of their own;

- An ongoing levy is a more predictable expense for pension schemes.

9.77 It would not be practical to introduce a pension protection arrangement for defined benefit schemes without some change to the structure of pension schemes. At present, employers have no obligation to meet any funding shortfalls in the schemes they sponsor, though the great majority of sponsoring employers do cover shortfalls when they arise. Were a pension protection arrangement introduced, there would be an incentive for unscrupulous employers to refuse to cover any shortfalls in order to pass them on to the protection scheme. It would seem to be a necessary condition that the protection would only apply where the employer was unable to make up any shortfall: however, this would be a fundamental change to the basis of Irish pensions.

9.78 Where shortfalls are to be met by a charge on other pension schemes, before or after the event, it must be decided how to allocate this cost among the eligible schemes. Possible approaches include:

- A per member charge;

- A proportion of assets;

- A proportion of eligible liabilities;

- A risk-related levy;

- Some combination of the above or other criteria.

9.79 There is an obvious logic to the concept of levying charges only on eligible schemes, on a basis proportionate to their eligibility. If this charge is related in some way to the perceived risk of claim, it will partly meet the argument that well-funded secure schemes
are paying for schemes that cannot meet their obligations, and may also act as an incentive to reduce the risk of shortfall. On the other hand, if vulnerable schemes are charged more, it may increase the likelihood of such schemes themselves failing. Furthermore, it is very difficult to calculate an appropriate rate of charge, even where the principle of relative charging has been accepted. The design and administration of a risk-related levy is a considerable technical challenge, and will represent a significant cost.

9.80 A pension protection fund must invest the scheme charges made in order to accumulate a fund to meet shortfalls as they arise. The investment of these assets is fundamentally different from the investment of the assets of pension schemes, and presents significant challenges.

9.81 A pension protection fund is most likely to be called upon to meet shortfalls in times of poor investment returns, especially if combined with low interest rates. The assets of the fund would therefore ideally be invested in order to gain value during those periods when scheme assets are likely to be losing value. This issue would require considerable further work, but the following observations can be made:

- The fund assets are likely to include a high proportion of bonds or similar instruments matched to the typical liability profile of eligible schemes, particularly those considered at higher risk of failure;
- The fund is likely to consider equity put options or derivatives whose value would move in the opposite direction to the equity market indices;
- Because the likelihood of scheme failure is a function of scheme investment strategy, the protection fund strategy should be modified in the event of movement in typical scheme investment;
- The introduction of a pension protection arrangement, irrespective of its design or funding, may reduce the incentive of scheme trustees and/or sponsoring employers to avoid scheme failure, in the expectation that there are now alternative safety mechanisms for scheme members. Pension regulations may need to be reviewed in order to ensure that the protection fund is suitably protected. Such a review might incorporate:
  - Investment policy;
  - Payment of contributions;
  - Employer obligations;
  - Treatment of surpluses;
  - Benefit improvements;
  - Discretionary pension increases.

9.82 In summary, the advantage of a pension protection scheme is the improved security provided for scheme members, especially those who have not yet retired. It is arguable that the result would be to bring scheme benefit security more into line with what many members assume it already is.

9.83 A pension protection scheme involves the transfer of resources to schemes with a shortfall. The principal difficulty is to decide who should provide these resources – taxpayers, members of other pension schemes, sponsoring employers, or some other group. By definition, they will be provided by those who do not benefit from the pension protection in the short term.

9.84 The technical difficulties of a pension protection arrangement, other than one paid for from general taxation, must not be underestimated. International experience has shown that it is difficult to calculate appropriate charges, and that the technical management of a pension protection system is demanding and expensive.

**Judgment of the Court of Justice on Protection of employees in the event of the Insolvency of their employer**

9.85 Council Directive (80/987/EEC), which refers to the protection of employees in the event of the insolvency of their employer, was introduced in 1980. A Judgment of the Court of Justice [Case C-278/05] was made in relation to this directive in January 2007. The background and findings of the Court are set out in the box below, which is an extract from a press release of the EU Commission [No 08/07], copy at Appendix E.

9.86 In the light of this Judgment, the EU Commission is undertaking a detailed examination of the relevant legislation in each member state, in the context of an overall examination of the directive. It is understood
Judgment of the Court of Justice in Case C-278/05

Carol Marilyn Robins and Others v Secretary of State for Work and Pensions.

Ms Robins and 835 other claimants are former employees of the company, ASW Limited, which went into liquidation in April 2003. They were members of final-salary pension schemes funded by ASW. The schemes were terminated in July 2002 and are in the process of being wound up. According to actuarial valuations, there will be insufficient assets to cover all the benefits of all members, and the benefits of non-pensioners will therefore be reduced.

Under the legislation in force in the United Kingdom, the claimants will not receive all the benefits to which they were entitled. Two of the claimants will receive only 20% and 49% respectively of those benefits.

Taking the view that the United Kingdom legislation did not provide them with the level of protection called for by the directive, the claimants brought an action against the Government of the United Kingdom for compensation for the loss suffered. Hearing the case, the High Court has referred three questions to the Court for a preliminary ruling: (i) are the Member States required to fund themselves the rights to old-age benefits and if so to fund them in full? (ii) is the United Kingdom legislation compatible with the directive? and (iii) what is the liability of the Member State in the case of incorrect transposition of the directive?

The funding of rights to benefits by the Member States themselves

The Court finds that the directive does not oblige the Member States themselves to fund the rights to old-age benefits. Inasmuch as it states in a general manner that the Member States ‘shall ensure that the necessary measures are taken’, the directive leaves the Member States some latitude as to the means to be adopted to ensure protection. A Member State may therefore impose, for example, an obligation on employers to insure or provide for the setting up of a guarantee institution in respect of which it will lay down the detailed rules for funding, rather than provide for funding by the public authorities.

Furthermore, the Court considers that the directive cannot be interpreted as demanding a full guarantee of the rights in question. In so far as it does no more than prescribe in general terms the adoption of the measures necessary to ‘protect the interests’ of the persons concerned, the directive gives the Member States, in relation to the level of protection, considerable latitude which excludes an obligation to guarantee in full.

Conclusion

9.87 While defined benefit and defined contribution arrangements are currently the most popular supplementary pension arrangements, the development of alternative hybrid models is gaining momentum.

9.88 In addition, this chapter highlights issues of particular concern in terms of DB and DC schemes and offers some options in relation to these issues. It should be read in conjunction with other relevant chapters, e.g. the funding standard chapter.
Compatibility of the United Kingdom legislation with the directive
The Court notes that in 2004, according to figures communicated by the United Kingdom, about 65,000 members of pension schemes suffered the loss of more than 20% of expected benefits and some 35,000 of those suffered losses exceeding 50% of those benefits.

Even if no provision of the directive contains elements which make it possible to establish with any precision the minimum level of protection required, a system that may, in certain cases, lead to a guarantee of benefits limited to 20 or 49% of the expected entitlement, that is to say, of less than half of that entitlement, cannot be considered to fall within the definition of the word ‘protect’ used in the directive. A system of protection such as the United Kingdom system is therefore incompatible with Community law.

Liability of the Member State in the case of incorrect transposition
The Court considers that, given the general nature of the wording of the directive and the considerable discretion left to the Member States, the liability of a Member State by reason of incorrect transposition of that directive is conditional on a finding of manifest and serious disregard by that State for the limits set on its discretion.

In order to determine whether that condition is satisfied, the national court must take account of all the factors which characterise the situation put before it. In the present case, those factors include the lack of clarity and precision of the directive with regard to the level of protection required, and a Commission report of 1995 concerning the transposition of the directive by the Member States, in which the Commission had concluded that ‘the abovementioned rules [adopted by the United Kingdom] appear to meet the requirements [of the Directive]’, which may have reinforced the United Kingdom’s position with regard to the transposition of the directive into domestic law.

Issues Regarding Defined Benefit and Defined Contribution Pension Schemes
Almost all schemes in Ireland are either defined benefit (DB) or defined contribution (DC), though the development of hybrid schemes is gathering momentum. A number of issues arise which are particularly related to the nature of DB. These issues include:

The impact of the funding standard [which is dealt with in detail in Chapter 10].

The growth of DC. While the number of DB schemes is remaining constant, the majority of new schemes are DC. DB schemes are an important part of Irish pension provision and DB scheme members currently outnumber DC members by a ratio of about 2:1, down from 4.5:1 in 1996. While DC schemes can provide certain advantages, the main concerns about the declining proportion of DB membership include: i) that retirement benefits are too low, given the contribution rates for DC schemes and; ii) a change in the allocation of risks from employers to employees.

The integration of DB pensions with Social Welfare pension. An integrated scheme is a scheme, usually DB, where the contribution and benefits are calculated net of the Social Welfare retirement benefit. A frequent criticism of these schemes is that if Social Welfare retirement benefits increase rapidly in the years before retirement, the benefits paid by the scheme, particularly for the lower paid, can be lower than expected.

The main issue which arises in relation to DC is the adequacy of the pension benefit payable on retirement. Most DC members are unlikely to have a retirement income equal to, or greater than, the NPPI target. The level of contribution into a DC scheme is an essential factor in this regard.
Issues that are common to both DB and DC include:

**Guarantees.** People save to provide for the future. In allocating assets towards a long-term target, the acceptable level of risk and return will vary, depending on the objective. However, no-one, including the State, can give long term absolute guarantees.

**The security of the pensions benefit.** Security of pension benefit as it relates to DC is concerned with the security of what was expected from the investment.

From time to time, a DB scheme may have a shortfall, i.e. the value of the assets of the scheme may be less than the calculated value of the future benefits of the scheme. Usually the shortfall is made up by additional contributions into the scheme. A shortfall becomes important in two circumstances; where future contributions are not sufficient to cover the shortfall and where the scheme is being wound up and there is an uncovered shortfall.

In Ireland, the security of benefits of members of DB schemes depends on the assets already accumulated in the pension fund, and on the willingness of the employer to continue to make contributions.

In some countries, there are mechanisms to provide additional security for scheme members in the event that the scheme has an unmanageable asset shortfall, including obligations on employers to make contributions and/or to take responsibility for fund shortfalls and insurance or similar arrangements to meet part or all of any shortfalls that may arise.

**Questions for consideration**

1. Are there problems with the current integration arrangements for DB schemes?
   
   If so, what are the possible solutions?
   
   a. prohibit integration?
   
   b. restrict a reduction in pensionable pay in the last, say, 3 or 5 years?
   
   c. have a different integration formula for lower earners, as is the case in the public sector?

2. How can we ensure that savers understand that the level of contributions, the length of time the contributions will be made, and the return on investments will influence the level of benefits in a DC scheme?

3. What would be considered appropriate security of pension benefits? Does this exist at present?

4. Are people sufficiently aware of the trade-off between risk and the return on investments, i.e. usually the higher the potential return, the greater the risk?

5. What could be done to enhance guarantees of pension benefit? Do guarantees justify the associated costs and risks?

6. In some countries, there are arrangements to meet at least part of a shortfall in the event of a scheme shortfall. Some of these arrangements include the Pension Protection Fund in the UK, the Pension Benefit Guarantee Corporation (PBGC) in the USA and the German Pensions-Sicherungs-Verein. These arrangements can run into considerable difficulties, with the experience of the PBGC, which is currently experiencing large deficits, being a particular case in point. Having considered the discussion, would you be in favour of any of these arrangements, having regard to the pros and cons outlined in this chapter?