PENSIONS POLICY INSTITUTE

The changing landscape of pension schemes in the private sector in the UK

This report was commissioned and funded by MetLife Assurance Limited

MetLife Assurance Limited

Sponsorship has been given to help fund the research, and does not necessarily imply agreement with, or support for, the analysis or findings from the project.

A Research Report by Dr Leandro Carrera, Chris Curry and Niki Cleal

Published by the Pensions Policy Institute © June 2012 ISBN 978-1-906284-23-7 www.pensionspolicyinstitute.org.uk

The changing landscape of pension schemes in the private sector in the UK

Ex	ecutive Summary	1
Int	troduction	10
1.	 The current pension landscape in the private sector Types of private sector pension provision Membership of private pension schemes The status of pension schemes 	11 11 13 16
	Contributions into private sector pension schemes	20
2.	 What challenges have affected pension schemes in the private sector? Longevity risk Investment risk Inflation risk Sponsor default risk Changes in legislation and regulation Broader social factors 	23 23 25 26 27 29 31
3.	 What strategies are pension scheme sponsors and trustees pursuing in response to the challenges affecting pensions in the private sector? Improving the scheme funding position Changing benefit structures Changing investment strategy Reducing liability risk Transferring risks to insurers 	35 37 40 44 46 49
4.	 What is the future of pension provision in the private sector? Automatic enrolment into workplace pensions Solvency II State pension reform The Government's agenda to reinvigorate occupational pensions 	56 56 58 59 60
Appendix 1: Technical appendix Appendix 2: Changes in legislation and regulation Appendix 3: The funding position of DB schemes		
Gl	ossary	73
Ac	knowledgements and contact details	78
Re	ferences	80

Executive Summary

Private sector pension provision in the UK has been changing over the last forty years. Defined Benefit pension schemes have been in decline since the late 1960s. By contrast, Defined Contribution pension schemes have experienced growth, both in terms of membership and assets under management, particularly since the late 1980s.

This report brings together the latest data on the state of private pensions in the UK. The report examines the main factors that have played a role in shaping recent trends in private sector pension provision. It also highlights how employers are responding to the challenges of providing workplace pensions and considers the future of pensions in the private sector in the UK.

The current pension landscape in the private sector

Private sector pension provision in the UK includes all non-state provided pension benefits. These pensions can take the form of Defined Benefit, Defined Contribution or hybrid schemes:

- In Defined Benefit (DB) pension schemes the pension benefits paid out are often linked either to the scheme member's final salary or to their average salary during the course of their career and their length of service.
- In Defined Contribution (DC) pension schemes, a pension fund is built up with the contributions from the member and/or the employer. The Government incentivises members to contribute into these pensions by offering tax relief on members' contributions. The final pension paid out will be related to the returns on the assets in which members' funds are invested (after charges) and the way that the resulting pension pot is converted into a retirement income. If an annuity is taken, the annuity rate available at the time that the member retires will affect the member's final retirement income.
- Private sector pension schemes can also have a combination of DB and DC features. These schemes are often called hybrid schemes.

The decline of Defined Benefit pensions in the private sector in the UK

Active membership in DB pension schemes in the private sector in the UK peaked at around 8 million members in 1967 and has declined since the late 1960s. By 2011 there were only around 1.6 million members actively contributing to DB schemes in the private sector.

There are a wide range of factors that have contributed to the decline of private sector DB pension schemes in the UK by increasing the risks and associated costs of sponsoring DB pension schemes. These factors include:

Increased Life Expectancy: Increases in life expectancy over the last 30 years due to medical advances and improved lifestyles have meant that people are living longer. For example, in 1981 the average male life expectancy at age 65 was estimated as being 14 years. In 2011 it was estimated to be over 21 years.

Higher life expectancy increases the amount of money that DB schemes need to pay out because pensions have to be paid for longer.

Investment risk: Investment risk can be a significant issue for sponsors of DB schemes. The returns on bonds and equities will affect the funding position of DB schemes. Where a scheme is in deficit, lower returns will increase the level of contributions required to close the deficit. Over the last decade, bond yields and equity returns have been volatile, and over the longer term the outlook for investment returns remains uncertain.

Inflation: The value of the pension received and the cost of providing pensions may be affected by changes in price inflation. In DB schemes revaluation of accrued benefits and indexation of pensions in payment are key parts of scheme design. There is a cap on mandatory indexation and revaluation in DB schemes. For the scheme sponsor the cap reduces the level of inflationary risk but it does not eliminate it entirely.

Wage inflation can also increase the cost of providing DB pensions. For example, if an active member of a final salary DB scheme receives a substantial increase in pay at the end of their career, this can disproportionately increase the cost of providing the resulting annual pension.

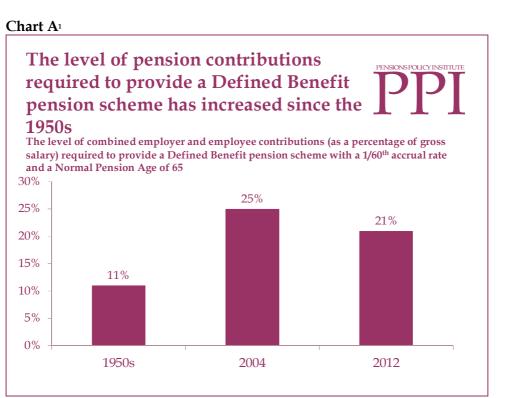
Changes in regulation and legislation: Many different pieces of legislation have been introduced since the 1970s, predominantly with the aim of protecting individual pension rights. However, many of these changes have also led to increased costs for DB schemes, or reduced the attractiveness of providing DB pensions. These include:

- measures to protect members' rights and the security of pension benefits;
- changes in the taxation of pension funds;
- EU regulations, such as equal treatment of men and women's pensions;
- tighter accounting standards for DB pensions;
- revised standards for DB pension scheme funding.

However, the Government recently changed the measure of inflation required to be used for the indexation and revaluation of DB pensions from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI). Those DB pension schemes that are able to make this change are likely to reduce their costs of providing a DB pension.

As a result of these factors the cost of providing DB pensions has increased significantly. It is difficult to measure the precise effects that each of these factors has had on the cost of sponsoring DB schemes. However, PPI analysis suggests that between the 1950s and the early 2000s, the cumulative impact of all of these changes meant that the total level of pension contributions required to fund a typical final salary scheme increased from approximately 11% of salary to 25% of salary (i.e. the combined employer and employee contributions required on an ongoing basis). Since then the required pension

contributions have fallen to 21% of salary despite increasing longevity, mainly as a result of changes in the measure of inflation used for indexation from RPI to CPI (Chart A).



It has therefore become harder to fund DB schemes. The funding position of a DB scheme is measured as the ratio of the assets held in the scheme compared to the liabilities owed to current and future pensioners for service completed to the date of the valuation. The funding position provides a snapshot of the situation at a given point in time.

The different risks associated with DB provision will affect the value of scheme liabilities, and therefore the funding position of a scheme. For example, rising longevity will lead to an increase in the estimated liabilities of the scheme.

What strategies are DB pension scheme sponsors and trustees pursuing in response to the challenges affecting pensions in the private sector?

In recent years, trustees and sponsors of DB schemes have adopted a wide range of strategies to help mitigate the increased costs and risks associated with DB pension provision.

¹ PPI analysis based on a final salary scheme with a 1/60th accrual rate and a Normal Pension Age of 65. See Appendix 1 for more details.

Improving the scheme funding position: By increasing contributions to the scheme or by assigning contingent assets to increase the security of members' benefits. Employers' special contributions have increased from around £11.9bn in 2007 to around £16bn in 2011. In addition, the use of contingent assets assigned to increase the security of DB schemes has risen, with the number of contingent assets set aside increasing from around 750 in 2010/11 to around 900 in 2011/12.

Changing benefit structures: Changes in the structure of private pension provision have been significant in recent years. Only 16% of DB schemes were still open to new members in 2011, compared to 36% in 2007. While most employers have changed provision to DC, others have offered membership of hybrid schemes (which combine elements of DB and DC provision). Employers may decide to make the same level of contributions to a DC pension offered in replacement for a closed DB scheme. However, typically the replacement DC schemes are less generous than the previous DB schemes offered to employees.

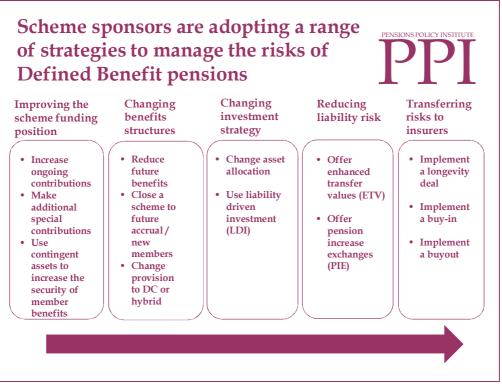
Changing investment strategy: DB schemes may change their asset allocation as a way to achieve diversification in their portfolios and reduce some of their investment risk. Schemes may also change their asset allocation to reduce risk by better matching their liabilities. DB schemes have been moving away from equities towards investing in bonds, which better match their liabilities. In 2006, 60% of all assets in DB schemes were invested in equities and 30% in bonds. By 2011, DB schemes had reduced their exposure to equities to over 40% of total assets, and had increased the proportion held in bonds to around 40%. Another strategy to better match liabilities is to use derivatives-based techniques such as Liability Driven Investment (LDI). The total value of LDI assets under management in the UK has increased from £243bn at the end of 2010 to £312bn at the end of 2011, an increase of almost 30%.

Reducing liability risks: Two of the most common strategies to reduce liability risks are the use of incentive exercises such as Enhanced Transfer Values (ETV) and Pension Increase Exchanges (PIE). An ETV allows deferred members to transfer out of the scheme in exchange for a statutory amount plus an enhancement in respect of the pension given up. A PIE involves exchanging some of the member's right to a pension that increases in line with changes in prices for a higher but non-increasing or fixed-increasing pension. Since 2008, there have been around 80 ETV exercises, involving around 90,000 members. The use of PIEs has also increased in recent years. An industry working group set up by the Government has recently published a code of conduct on incentive exercises.

Transferring risks to insurers: Risk-transfer deals such as longevity deals, buy-ins and buyouts have reached around £40bn since 2007. This represents less than 3% of total liabilities in DB schemes. This may indicate that, subject to market capacity and affordability, risk-transfer deals could increase in the future.

Often, schemes move from one end of the spectrum of strategies to the other to manage the costs of DB pension provision (Chart B). For example, schemes may start by improving the scheme funding position or by changing the structure of benefits by increasing the scheme Normal Pension Age or lowering accrual rates. They may also change investment strategy or aim to reduce liabilities through Enhanced Transfer Values or Pension Increase Exchanges. Finally, they may decide to transfer risks to an insurer by implementing a buy-in or a buyout.



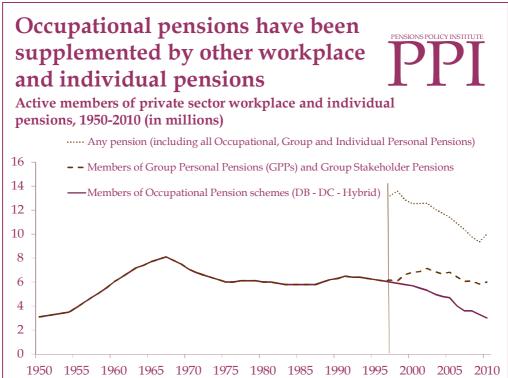


Active Membership of Defined Benefit schemes is now concentrated in a small number of large schemes. In 2011, around 200 DB schemes, or just over 3% of all DB schemes, had 10,000 or more members (including active, deferred and pensioner members). However, these 200 DB schemes contained around 65% of all active members in DB schemes. Future decisions taken by a small number of very large DB schemes may therefore have a significant impact on future levels of active membership in DB pensions.

The growth in Defined Contribution pension schemes

As membership in DB schemes in the private sector in the UK has declined there has been growth in the membership of other types of private pensions, and in particular, in DC pensions (Chart C).

Chart C²

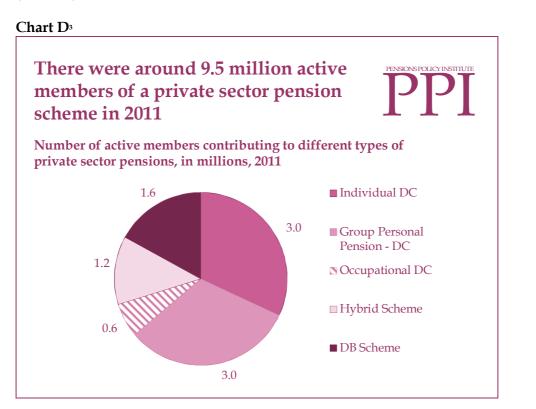


There are a wide range of DC pension schemes available in the UK. DC pension schemes can be organised as occupational schemes, typically run by a board of trustees, or they can be offered on a contract basis, usually provided by an insurance company.

DC schemes can also be sponsored by the employer, where the employer contributes into the scheme or runs the scheme on behalf of a group of employees (such as Group Personal Pensions and Group Stakeholder Pensions) or they can be taken out by individuals as individual personal pensions. After the introduction of individual personal pensions in 1987 there was a very rapid growth in individual pension arrangements.

² Sources: ONS (2011a), Table 3.6; ONS (2010); PPI analysis of the 2009/10 Family Resources Survey (DWP 2011c); ONS (2012c). Estimates are of membership of private sector pension schemes, and so exclude membership of public sector pension schemes (including the Local Government Pension Scheme). See Appendix 1 for more details.

Including individual pensions, there were almost 9.5 million active members of a pension scheme in the private sector in 2011. Of these, 6.6 million members, around 65% of all active members, were saving in DC pensions (Chart D).



What is the future of pension provision in the private sector?

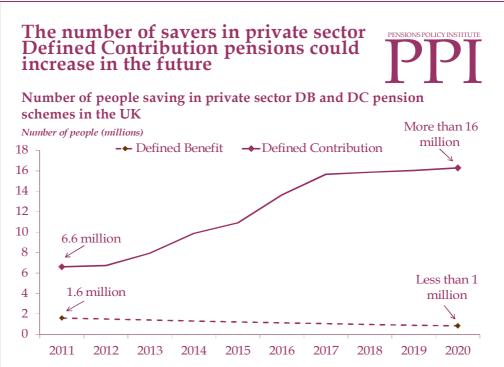
There are a number of policy changes that are likely to have a significant impact on the future of pensions in the private sector in the UK.

The introduction of automatic enrolment into private pensions from October 2012 is likely to lead to a substantial further increase in the number of individuals saving in DC pensions in the future. This is because almost 70% of members in DB schemes in the private sector are in schemes that are closed to new members or are closed to future accrual. It is anticipated that most new pension savers will be automatically enrolled into a DC pension.

³ Sources: TPR (2011); ONS (2011a); PPI analysis of the 2009/10 Family Resources Survey (DWP 2011c) for individual personal pensions; ONS (2012c). See Appendix 1 for more details. Totals may not add up due to rounding.

PPI projections suggest that if current trends continue then, following the introduction of automatic enrolment into private pensions, there could be over 16 million active members of DC pension schemes, compared to less than 1 million active members of DB pension schemes in the private sector by 2020 (Chart E).





If Solvency II requirements were extended to apply to DB pension schemes, the schemes would be required to hold an increased amount of capital to meet requirements designed to improve the likelihood they remain solvent under prospective stress environments.

The objective of the IORP Directive, introduced in 2003 (of which Solvency II could potentially form a part), is to provide a prudential framework for pension funds operating in EU member states based on minimum harmonisation and mutual recognition. It enables the establishment of pan-European pension funds that manage the pension schemes of employees in different member states.

However, the potential capital requirement implied by extending Solvency II to DB pensions could put a further strain on the funding of DB pension schemes.

⁴ PPI analysis based on data from BIS Business Population Estimates for the UK and Regions 2011, DWP Pension Provision Survey 2009, Pension Trends and the DWP Labour Market Database. For those individuals auto-enrolled, an opt-out rate of 33% has been assumed. There is assumed to be a decline in active membership of private sector DB schemes consistent with an 80% reduction in the number of open private sector DB schemes between 2007 and 2020. See Appendix 1 for more details.

The Government is proposing to introduce a single-tier state pension above the Guarantee Credit level (for example £140 per week in 2010 earnings terms) for new pensioners. The full details about how the single-tier state pension would operate are expected in a Government White Paper to be published in 2012. The introduction of a single-tier state pension could have significant effects on private sector pension provision and, especially, on DB schemes.

Currently, members of DB schemes can be contracted out of the State Second Pension (S2P), and employers receive a rebate on their National Insurance Contributions. Under a single-tier state pension S2P would be abolished and there would be no contracting-out. The removal of contracting-out rebates would put further pressure on the sponsors of DB schemes, as this would require an increase in funding from other sources or a reduction in the benefits offered to keep costs constant.

The Government has recently discussed the possibility of introducing a new form of pension provision, described as 'Defined Ambition'. Although full details have yet to be announced, the aim of Defined Ambition is to allow for more risk sharing to be used in private sector pensions.

Risk-sharing refers to a pension arrangement in which the different risks of pension provision may not be borne completely by the employer or the employee. Defined Ambition pensions could therefore be a new type of pension in the UK, potentially operated under a different regulatory regime than either DB or DC pensions are presently.

There are international examples of risk-sharing schemes that might be used in the UK. For example, Collective Defined Contribution schemes, and Conditional Indexation schemes are used in the Netherlands, while in Denmark there is widespread use of Deferred Annuities among DC schemes.

Introduction

This report brings together the latest data on the state of private pensions in the UK. The report examines the main factors that have played a role in shaping recent trends in private sector pension provision. It also highlights how employers sponsoring DB schemes are responding to the challenges of providing workplace pensions and considers the future of pensions in the private sector in the UK.

The Government has confirmed that automatic enrolment into private pensions will start from October 2012. Automatic enrolment will impact on the evolution of DB and DC pensions in the private sector as a large number of employees will be automatically enrolled into a workplace pension in the UK.

The Government has also promised to reinvigorate occupational pension provision and further policy changes may be expected in the future. It is therefore timely to analyse recent developments in pension provision in the private sector and their impact on employees and employers.

Chapter one analyses the current pension landscape in the private sector using data from a variety of Government sources and industry-wide publications. The chapter highlights how pension provision has changed in the private sector over the years in terms of membership and the type of pension provided.

Chapter two discusses the challenges that have affected pension schemes in the private sector. The chapter examines the impact of longevity, investment returns, inflation, sponsor default risk, changes in regulation and legislation and broader social factors on the provision of DB pensions in the private sector.

Chapter three illustrates the different strategies that employers and trustees have been adopting in response to the challenges in pension provision. These strategies range from improving the scheme funding position, changing benefit structures, changing investment strategy to transferring risks to insurers.

Chapter four discusses the future of private sector pension provision in light of policy changes such as the introduction of automatic enrolment; further state pension reform and the potential introduction of 'Defined Ambition' pensions.

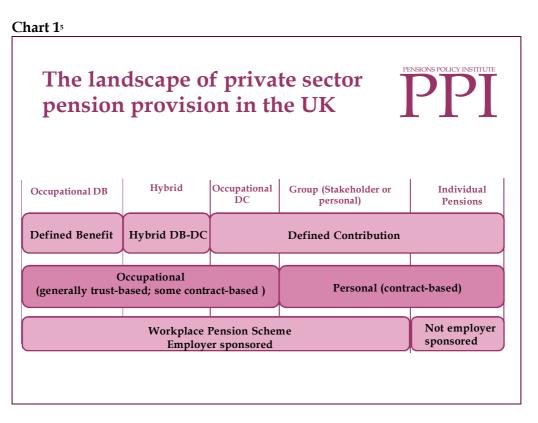
Chapter one: the current pension landscape in the private sector

This chapter reviews the latest data on private sector pension provision in the UK. It then analyses trends in provision in Defined Benefit (DB), Defined Contribution (DC) and hybrid schemes in recent years.

As the data in this chapter is drawn from a wide range of sources, care should be taken in comparing figures in different parts of the chapter.

Types of private sector pension provision

Private sector pension provision in the UK includes all non-state provided pension benefits. These pensions can take the form of Defined Benefit (DB), Defined Contribution (DC) or hybrid schemes. Provision can then be divided between occupational pensions provided by the employer and personal pensions, in which the employee enters into a contract with an insurance company. All occupational pension schemes and some personal schemes are employer sponsored, where the employer is involved in the choice of the pension arrangement, or makes contributions on behalf of an employee. Employer sponsored schemes are also known as workplace pension schemes. Pension schemes that are not sponsored by the employer are referred to as individual personal pensions (Chart 1).



⁵ Adapted from Pensions Commission (2004), Table 3.3, p.80

Defined Benefit schemes

In DB schemes pension benefits are related to a measure of the employee's salary, years of service and the rate at which benefits are accrued for each year of service (the accrual rate). DB schemes can provide benefits related to final salary or career-average salary levels. In final salary DB schemes, the benefit is linked to salary in the final year or final few years of membership in the scheme. In career-average DB schemes the benefit is linked to how much was earned in each year of scheme membership. In this paper we include career-average schemes under the umbrella of DB schemes because even though the benefit is not 'defined' in terms of a member's final salary the benefit is still 'defined' in terms of their average salary.

DB schemes are occupational, where the employer organises a scheme to provide a pension for their employees. DB schemes are typically trust-based. This means that there is a board of trustees which runs the scheme in the interest of its beneficiaries.

Defined Contribution schemes

In schemes with a DC benefit structure, a fund is built up with the contributions from the member and/or the employer. The Government incentivises members to contribute by offering tax relief on members' contributions. The pension paid is related to the returns on the assets in which members' funds are invested and, if an annuity is taken, the annuity rate (the factor used to convert the member's fund into an income).

DC schemes can have a trust or contract-based governance structure. In a contract-based arrangement, the scheme is managed and governed by the contract provider, generally an insurance company. In a trust-based DC scheme the board of trustees runs the scheme in the interests of its beneficiaries.

Personal pension plans are individual arrangements (not made through an employer) based on a direct contract between the individual and a pension provider, and are contract-based.

Group Personal Pensions (GPP) and Group Stakeholder Pensions (GSP) are sponsored by the employer but the legal contract is still between the individual and the pension provider. These two types of personal pensions are collective arrangements, made for the employees of a particular employer to participate on a group basis, and so typically obtain lower management fees than individual personal pension plans.

Hybrid schemes

Private sector pension schemes can also have a combination of DB and DC features. These schemes are often called hybrid schemes. There is a wide range of hybrid schemes but they can be broadly classified into two groups:

• A *mixed benefit* scheme offers one set of benefits that has elements of both DB and DC. For example, a scheme may be primarily DC, but with a

guarantee that it will pay out a minimum level of pension that has been set using a DB accrual rate.

• A *dual section* scheme has two sections, one offering DC benefits and the other offering DB benefits. In many cases this may just mean that a DC section has been added to a trust where the DB section is closed to new entrants. However it is also possible, for example, to have a scheme where active members accrue DC benefits for a certain number of years of service and DB benefits thereafter.⁶

There may be other combinations of hybrid schemes. Special care should be taken when analysing hybrid schemes as a whole because of the significant differences between different types of hybrid schemes.

Membership of private pension schemes

Only half of employees in the UK are active members of a pension scheme

In 2011 around 15 million individuals were active members⁷ of a pension scheme, including members of private sector workplace pension schemes, individual personal pensions and also including 5.3 million members of public sector pensions. Overall, around 50% of UK employees were active members of a private pension scheme, down from 55% of all employees in 1997.⁸

Private sector occupational pensions have been supplemented by other workplace and individual pensions

Until the 1960s, there was a steady increase in the active membership of private sector occupational pension schemes, most of which had, at that time, a DB benefit structure. Membership peaked in 1967, around 8 million active members. Active membership of DB schemes in the private sector started to decline from the late 1960s.

However, in recent years there has been growth in DC pensions. Some of these have been other workplace pension schemes, including Group Personal Pensions (GPP) and Group Stakeholder Pensions (GSP). After their introduction in the late 1980s there was also a very rapid growth in individual pension arrangements.

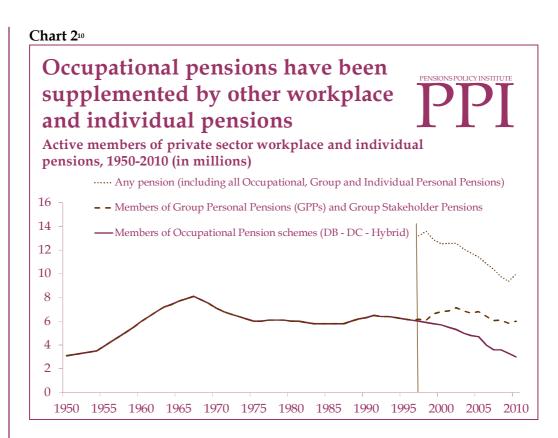
In 1997, over 13 million people in the private sector were either members of a workplace pension scheme or had an individual pension arrangement.⁹ Since then overall pension membership has fallen (Chart 2).

⁶ See TPR (2011) Introduction

⁷ An active member is a member who is still building up a pension in respect of their current employment, or is making contributions into a scheme. See Glossary for further details.

⁸ See ONS (2011b) Figure 7.5. This includes members of non-contributory schemes where the individual does not make any contribution but a pension is being built up on their behalf.

⁹ However some of these individual arrangements will only have been used to contract-out of the second tier of state pension provisions, and so will not have received any contributions other than a National Insurance Rebate. These pensions are not therefore additional pension saving.



Defined Contribution schemes represent a significant proportion of the current private sector pension landscape

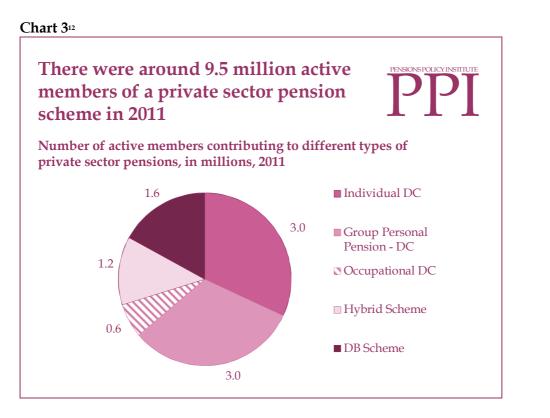
Of almost 9.5 million active members of private sector pension schemes in the UK in 2011 (Chart 3):¹¹

- 3 million members were saving in an individual DC pension (around 30% of all active members);
- 3 million members were saving in a DC Group Personal Pension (around 30% of all active members);
- 0.6 million members were saving in an occupational DC pension scheme (around 5% of all active members);
- 1.2 million members were saving in a hybrid pension scheme (around 15% of all active members);
- 1.6 million members were saving in a DB pension scheme (around 15% of all active members).

The total number of individuals who were contributing to a DC pension in the UK was 6.6 million in 2011. This includes those who were contributing to individual personal pensions, Group Personal Pensions and to occupational DC pensions. Around 65% of the almost 9.5 million active members of private sector pension schemes in 2011 in the UK were saving in a DC pension.

¹⁰ Sources: ONS (2011a), Table 3.6; ONS (2010); PPI analysis of the 2009/10 Family Resources Survey (DWP 2011c); ONS (2012c). Estimates are of membership of private sector pension schemes, and so exclude membership of public sector pension schemes (including the Local Government Pension Scheme).See Appendix 1 for more details.

¹¹ These break-downs are not directly comparable to those in Chart 2 as they are from different sources. Totals may not add up due to rounding.



Membership of Defined Benefit schemes is more concentrated in large schemes than among Defined Contribution and hybrid schemes

Membership of DB schemes in the private sector is heavily concentrated in a small number of employers. In 2011, around 200 DB schemes, or just over 3% of all DB schemes, had 10,000 members or more¹³; however, they had around 65% of all active members in DB schemes. One implication of the concentration of a large number of members in a small number of open DB schemes is that decisions taken by these schemes could have a significant impact on future levels of DB schemes membership (Table 1 and Chart 4).

¹² Sources: TPR (2011); ONS (2011a); PPI analysis of the 2009/10 Family Resources Survey (DWP 2011c) for individual personal pensions; ONS (2012c). See Appendix 1 for more details. Totals may not add up due to rounding

¹³ Total members include active, deferred and pensioner members

Table 1: Percentage distribution of schemes and active members in private sector occupational schemes with 10,000 members or more¹⁴

	All Schemes	Percentage of schemes which have more than 10,000 members	Percentage of active members who are in schemes with more than 10,000 members
DB	6,550	3%	65%
DC	2,907	1%	41%
Hybrid	1,104	1%	54%

Chart 415

The majority of active members in private sector Defined Benefit schemes are in a small number of very large schemes

Percentage distribution of private sector Defined Benefit schemes and active membership by scheme size, in 2011



The status of pension schemes

Not all schemes are open to new members

Pension schemes can be in different states, depending on whether new members can join and/or on whether the benefits of existing members continue to accrue.

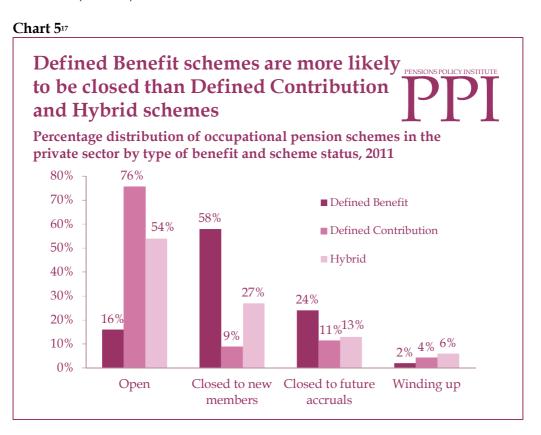
- **Open:** these schemes continue to accept new members into the scheme and the benefits of existing members continue to accrue.
- Closed to new members: these schemes do not admit new members but existing members can continue to accrue benefits.

¹⁴ Based on PPF/TPR (2012), chart 3.7 and TPR (2011), tables 1.2 and 2.4. For DC and hybrid schemes, the figures exclude schemes with less than 12 members ¹⁵ PPF/TPR (2012), appendix tables, p107 and 108

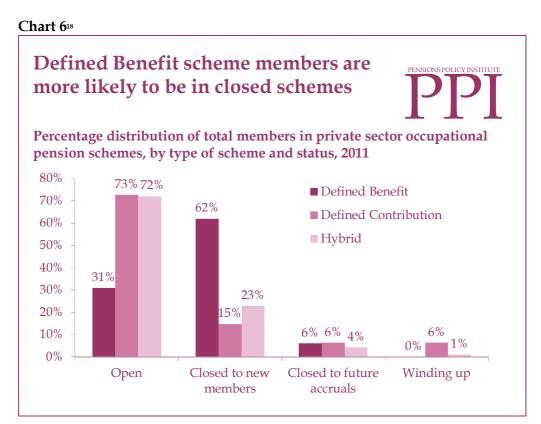
- **Closed to future accruals (or paid-up):** these schemes do not admit new members and in addition, no further benefits accrue.¹⁶ The benefits of existing members for earlier service, however, continue to be held in the scheme.
- Winding-up: these schemes are in the process of settling benefits in order to close permanently.

Defined Benefit schemes are more likely to be closed to new members

In 2011, more than 58% of DB schemes were closed to new members. In addition, more than 20% were closed to future accrual. In comparison, the vast majority of DC schemes (76%) and hybrid schemes (54%) were open to new members (Chart 5).



¹⁶ However, the value of existing benefits may increase if they are still linked to future salary levels ¹⁷ PPI estimates based on PPF/TPR (2012), chart 3.1 and TPR (2011), table 1.3 and 5.1. This assumes all micro schemes with less than 12 members are DC schemes. In 2010 over 99% of micro-schemes were DC schemes. The breakdown for DC schemes was not available for 2011. As a result, almost 70% of members in DB schemes were in schemes closed to new members and to new accruals. In contrast, more than 70% of members in DC schemes and hybrid schemes were in schemes that remained open to new members (Chart 6).



Hybrid schemes

Interpreting data on hybrid schemes is difficult, as there are different types of hybrid schemes and statistics usually cover all hybrid schemes rather than the different types. For example, it is not clear how many hybrid schemes are simply dual section schemes with a closed DB section and an open DC section, and how many are mixed benefit schemes. If the majority of hybrid schemes are dual section schemes with closed DB sections, then they are much more like DC schemes than DB.

The percentage of closed Defined Benefit schemes has increased in recent years

Over the last five years, the percentage of DB schemes that are closed has increased, and the percentage that are open schemes has declined (Table 2). In 2007, 45% of DB schemes were closed to new members, and this increased to 58% by 2011. In 2007, 16% of DB schemes were closed to future accruals. By 2011 this figure had increased to 24%.

ruble 2 . The year relias in Dennied Denenie Status					
	2007	2008	2009	2010	2011
Open	36%	31%	27%	18%	16%
Closed to new members	45%	50%	52%	58%	58%
Closed to future accruals	16%	17%	19%	21%	24%
Winding-up	2%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%

Table 219: Five-year trends in	Defined Benefit scheme status
--------------------------------	-------------------------------

As a result an increasing proportion of DB scheme members are in closed schemes. In 2007, 50% of DB scheme members were in open schemes (Table 3). By 2011 this figure had reduced to 31%. The percentage of members in DB schemes that have closed to new members or to future accruals increased from 49% in 2007 to 68% in 2011.

Table 320: Percentage	distribution	of members	in Defined	Benefit schemes
by scheme status				

	2007	2008	2009	2010	2011
Open	50%	44%	37%	34%	31%
Closed to new members	46%	52%	59%	60%	62%
Closed to future accruals	3%	4%	4%	5%	6%
Winding-up	0%	0%	0%	1%	0%
Total	100%	100%	100%	100%	100%

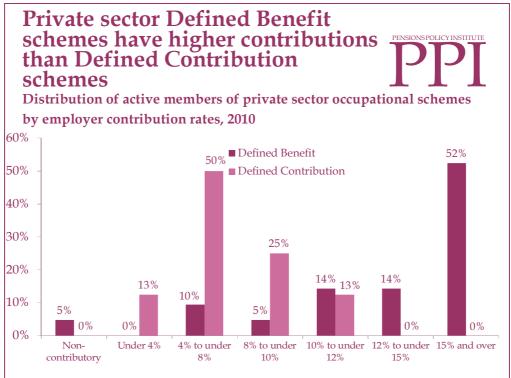
A possible explanation for these trends is that DB scheme sponsors are finding it harder to deal with the increased costs and risks of managing DB schemes. Consequently, they may be replacing DB schemes with DC and hybrid schemes.

Contributions into private sector pension schemes

Private sector Defined Benefit schemes have higher contributions than Defined Contribution schemes

The employer contribution is on average higher in private sector DB schemes than that available in DC schemes (Chart 7).





In 2010, over 50% of active members in DB schemes had an employer contribution of 15% or more of their salary (excluding special contributions). Very few DC schemes offer an employer contribution as high as this. The most common level of employer contribution in occupational DC schemes is between 4% and 8%, with 50% of active members in occupational DC schemes receiving a contribution at this level.

The average employer contribution rate in 2010 was 15.2% of salary in open DB schemes, compared to 6.2% in open DC schemes. Employees in open DB schemes also contributed, on average, a higher percentage of their salaries (5.3%) than members of open DC schemes (2.7%).²²

²¹ ONS (2011a), Tables 4.6 and 4.8. Not including special contributions.

²² ONS (2011a), Table 4.1. Average contribution rates calculated on a weighted-average basis across all schemes, based on the estimates for numbers of active members contributing at each rate, including employees making a zero contribution.

There are some reasons why contributions are, on average, higher among DB schemes:

- Members of DB schemes tend to be older than members of DC schemes. Older members may require higher contributions than younger members if they have accrued pension rights for a longer period.
- Most DB schemes are contracted out from the State Second Pension (S2P), an additional state pension provided by the Government, and so also provide a benefit equivalent to S2P for members. Fewer members of DC schemes are contracted out, and from 6 April 2012, DC schemes cannot be contracted out of S2P.

However, even allowing for this it is likely that the pensions produced by the current level of average DC contributions will be lower than the pensions that would be generated by the average DB scheme.

Changes in pension provision in the private sector may have an impact on individuals' retirement income

The decline of DB schemes and the growth of DC pensions in the private sector may have an impact on future pensioners' income. While a DC pension scheme with the same level of contributions could, in principle, produce the same retirement income as a DB scheme, investment and longevity risks are borne by the employee. This means that even if contribution levels in DB and DC schemes were the same there is likely to be a wide variation in the retirement income received by members of DC schemes.

One of the main determinants of the level of pension paid out from a DC pension is the level of contributions paid into the scheme. However, the level of investment returns and the annuity rates available will also influence the outcome. Members of DC schemes have to convert their pension pot into a retirement income either by purchasing an annuity or by using income drawdown. The Open Market Option (OMO) enables them to shop around for the best annuity rate and not necessarily take the one offered by their provider.²³ Rates for the same annuity products vary widely between providers at any given time and in some cases people could improve their annuity rate by up to 30% by purchasing an annuity from a different provider.²⁴

²³ The Money Advisory Service provides an annuity rate comparison tool: www.moneymadeclear.org.uk
²⁴ HMT (2006)

Summary

This chapter has found that:

- Overall, around 50% of employees in the UK were members of a private pension scheme, down from 55% in 1997. This figure includes individual personal pensions.
- Out of around 9.5 million active members of pension schemes in the private sector in 2011, 6.6 million members (around 65% of all active members) were saving in a Defined Contribution pension compared to 1.6 million saving in a DB pension scheme (around 15% of all active members).
- Around 200 DB schemes, or 3% of all DB schemes, had 10,000 members or more; however they had around 65% of all active members in DB schemes. One implication of the concentration of a large number of members in a small number of DB schemes is that decisions taken by these large schemes may have a significant impact on future levels of DB scheme active membership.
- DB schemes are more likely to be closed than occupational DC and hybrid schemes. In 2011, more than 58% of DB schemes were closed to new members. In addition, more than 20% were closed to future accrual. In comparison, the vast majority of DC schemes (76%) and hybrid schemes (54%) were open to new members.
- In 2007, 50% of DB scheme members were in open DB schemes; by 2011 only 31% of DB scheme members were still in open schemes.
- The average employer contribution rate in 2010 was 15.2% of salary in open DB schemes, compared to 6.2% in open occupational DC schemes. Employees in DB schemes also contributed, on average, a higher percentage of their salaries (5.3%) than members of occupational DC schemes (2.7%).
- It is likely that the pensions produced by the current level of average DC contributions will be lower than the pensions that would be generated by the average DB scheme.

Overall, the number of DB pension schemes and the number of active members of DB pension schemes in the private sector in the UK have been in decline for the last forty years. The following two chapters explore the range of factors that have increased the costs and risks of sponsoring DB pensions, and highlight the range of strategies that sponsors and trustees have pursued to deal with them.

Chapter two: what challenges have affected pension schemes in the private sector?

The previous chapter showed that in the UK many scheme sponsors have moved away from providing Defined Benefit (DB) pensions.

This chapter examines the factors that have contributed to the decline of DB occupational pensions in the UK.

There are various risks faced by Defined Benefit pension scheme sponsors This section analyses the various risks that affect pension schemes in the private sector:

- **Longevity risk:** This is the risk that life expectancy increases are greater than expected, leading to pensioners living longer than assumed, and so pensions remain in payment for longer.
- **Investment risk:** This is the risk that investment returns are lower than expected, leading to higher contributions being needed to pay for pensions.
- **Inflation risk:** This is the risk that prices and wages rise more rapidly than expected, so future levels of benefits are higher than assumed.
- **Sponsor default risk:** This is the risk that accrual or payment of pensions is discontinued due to insolvency of the sponsor.
- **Changes in regulation and legislation:** Changes in the level of protection and security of member benefits, or changes in tax and EU regulations can affect the cost of providing a DB pension.
- **Broader social factors:** For example, changes in work patterns can affect the desirability of DB pensions.

Longevity risk

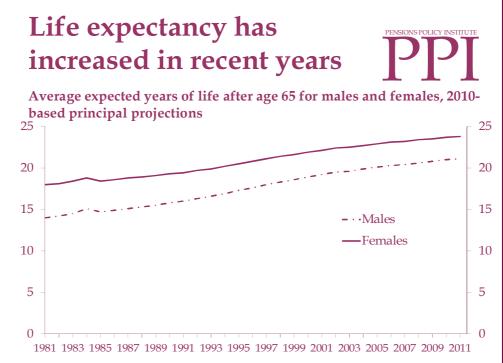
Longevity risk refers to uncertainty about how long current pensioners will live and how future improvements in longevity will affect how long pensioners will live beyond pension age. In a Defined Benefit (DB) pension scheme the risk of increasing longevity is borne by the scheme sponsor.

Increases in life expectancy over the last 30 years due to medical advances and improved lifestyles have meant that people are living longer. For example, in 1981 the average male life expectancy at age 65 was estimated as being 14 years. In 2011 it was estimated to be over 21 years.

More women have joined the labour force, and therefore pension schemes, in the last 30 years. Women tend to live longer than men and their life

expectancy at age 65 has increased from around 18 years in 1981 to almost 24 years in 2011 (Chart 8).





An increase in longevity which led to individuals experiencing the current mortality rates of an individual two years younger would cause the total liabilities of DB schemes to increase by 4.5%, from £970 billion to £1,010 billion.²⁶

In a Defined Contribution (DC) pension scheme this longevity risk is passed on to the scheme member. The scheme member will have a final pension pot based on the level of contributions and investment returns that their fund has achieved. This pension pot will need to be converted into a retirement income. If, on average, people are living longer, then annuity providers will reduce the annuity rates that they are willing to offer.

²⁵ 2010 based cohort expectation of life, 1981 to 2060, principal projection, United Kingdom, ONS
 ²⁶ PPF/TPR (2012), table 5.6

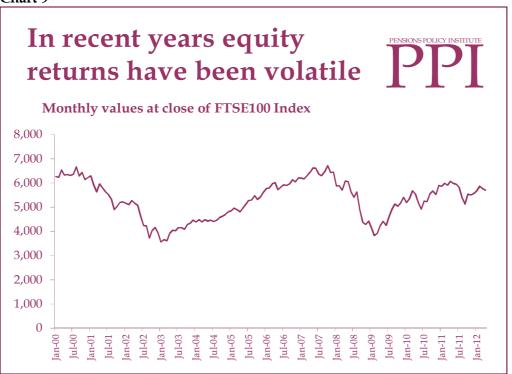
Investment risk

Investment risk is related to uncertainty associated with future investment returns. Funded pension schemes, whether of a DB or DC benefit structure, invest in a range of assets from equities to bonds, whose investment returns will vary.

In a DB scheme the sponsor bears the risk that the performance of the underlying investments is insufficient to meet future pension promises. If the performance is worse than expected, sponsors are required to pay in more money.

Investment risk can therefore be a significant issue for sponsors of DB schemes. Many DB schemes hold equities, with the expectation that they will provide higher investment returns than other assets such as bonds, albeit at a higher risk. However, in recent years equity returns have been volatile (Chart 9) and have not performed as well as in some previous decades.²⁷

Chart 928



In a DC scheme, the investment risk is borne by the scheme member, and the member has the choice of increasing contributions or receiving a lower pension if investment returns are lower than expected.

²⁸ Global financial data "UK FTSE 100 Index 2000-2012" www.globalfinancialdata.com

²⁷ See Chapter 3 for more detail on the asset classes held by DB schemes, and Appendix 3 for further information on the funding position of DB schemes

Inflation risk

The value of the pension received and the cost of providing pensions may be affected by changes in the inflation rate.

Price inflation

In DB schemes revaluation of accrued benefits and indexation of pensions in payment are key parts of scheme design as they protect pension benefits from being vulnerable to inflation. There is a cap on mandatory indexation and revaluation in DB schemes, so in most schemes there is a limit on this protection, although the level of the cap depends on when the benefit was built up. The cap on mandatory indexation and revaluation for benefits earned after 6 April 1997 is 5%. For benefits earned after 6 April 2005, the cap on mandatory indexation is lower at 2.5%, and for benefits earned after 6 April 2009 the cap on mandatory revaluation is also lower at 2.5%. The existence of the cap means that the price inflation risk is reduced for sponsors of DB schemes, although it is not eliminated entirely.

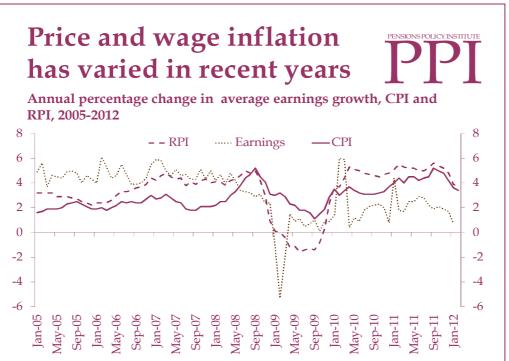
In DC schemes, there is no such indexation requirement either for accrued benefits or pensions in payment; therefore price inflation is borne by the individual member. On retirement the individual is free to choose between a nominal and an inflation-linked annuity in the private annuity market. Therefore, employers who sponsor DC schemes are not exposed to the risk of high levels of price inflation in the future.

Wage inflation

Wage inflation can also affect DB schemes more than DC schemes. For example, if an active member of a final salary DB scheme receives a substantial increase in pay at the end of their career, this can disproportionately increase the cost for the sponsoring employer of providing the resulting annual pension, as the value of all the previous years of scheme membership is also increased. In a DC scheme, the pension contribution would only increase in respect of the higher amount earned in that year.

The extent of inflation risk faced by scheme sponsors has varied in recent years (Chart 10). Average earnings increases have been low and price inflation has been high in recent years, so pensions in payment in many DB schemes have been increasing faster than wages, even with the cap on indexation.





Sponsor default risk

Sponsor default risk is the possibility that accrual or payment of pensions is discontinued due to insolvency of the sponsor. In the case of DB schemes, this is typically because the sponsor is unable to meet its obligations to properly fund the scheme, or becomes insolvent. In such cases there are real risks to the amount of pension that beneficiaries might receive, though in practice the existence of the Pension Protection Fund (PPF), introduced in 2005, mitigates some of this risk.

The goal of the PPF is to provide compensation should an employer with an underfunded pension scheme become insolvent. All DB schemes incur a cost as the PPF is partially funded by a levy paid by all schemes that are not under PPF administration which is based on the perceived risk of the default of each scheme.

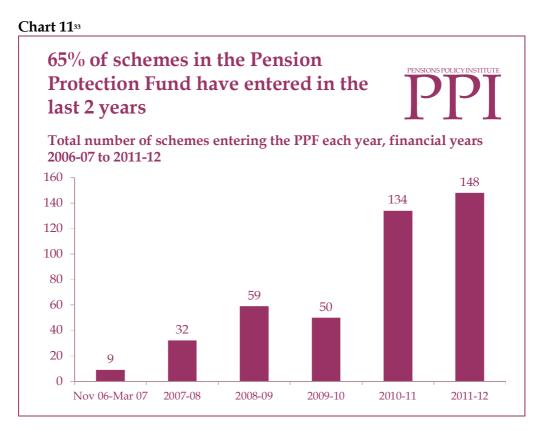
The PPF aims to pay 100% of the current level of pensions already in payment, and 90% for people not yet receiving a pension. Pensions in payment will be increased each year in line with the Consumer Prices Index (CPI), capped at 2.5%.³⁰ Compensation payments are subject to an overall cap, which from April 2012 is £34,050 at age 65 for current pensioners (£30,655 for those not yet receiving a pension), and is adjusted depending on the age that the pension comes into payment.³¹

³⁰ Relates to service made on or after 6 April 1997 only

²⁹ ONS Labour market statistics - Integrated FR tables, MM23 Consumer Prices Indices

³¹The Pension Protection Fund, Actuarial Factors from 1 April 2012, Table 1 - Compensation cap factors for determining PPF compensation and for S143 and S179 valuations www.pensionprotectionfund.org.uk

Since the PPF came into operation in 2006, 432 schemes have entered the Fund as of March 2012 (Chart 11). However the rate of entry has been accelerating, with more than 280 schemes (65% of the total) entering in the last 2 financial years.³²



In DC schemes the key risks are around the solvency strength of the pension provider and of the annuity provider if an annuity is purchased. These risks are mitigated by the existence of solvency requirements on pension providers and by the existence of the Financial Services Compensation Scheme (FSCS).³⁴

The FSCS is the compensation fund of last resort for customers of authorised financial services firms, including DC pension providers. The FSCS may pay compensation if a provider is unable, or likely to be unable, to pay its obligations. This is usually because it has stopped trading or has been declared in default.³⁵

 ³² The Pension Protection Fund www.pensionprotectionfund.org.uk
 ³³ The Pension Protection Fund www.pensionprotectionfund.org.uk
 ³⁴ DWP (2008)

³⁵ www.fscs.org.uk/what-we-cover/about-us/

Changes in regulation and legislation

The initial focus of much of the legislation enacted since the 1970s was to protect the rights of early leavers and spouses, and to make the financial position of pension provision more transparent through tighter regulations regarding DB schemes' funding and accounting rules. The changes in regulation and legislation were often introduced in response to specific issues, such as high levels of inflation, fraud or employer insolvency.

While the intention of many of the individual changes has been to protect members' rights, or to make the risks of DB pension provision more transparent, the combined impact of these changes has been to increase the cost and reduce the attractiveness of providing DB pensions.³⁶

These changes have included:37

- Measures to protect members' rights and the security of pension benefits: For example, provisions legislated in the Social Security Acts of 1973 and 1986 introduced greater protection for early leavers.
- Changes in the taxation of pension funds: For example, the Finance Act 1986 limited the amount of surplus a pension fund could hold to no more than 5% (i.e. a funding level of 105% of liabilities). The advance corporation tax (ACT) dividend tax credit was reduced in 1993, and then removed completely in 1997.
- EU regulations, such as equal treatment of men and women's pensions: For example, in May 1990, the European Court of Justice ruled that occupational pensions had to pay equal benefits to men and women in relation to service from 17 May 1990.
- **Tighter accounting standards for Defined Benefit pensions:** For example, since 2002 companies have been required to report their funding status following the Financial Reporting Standard 17 (FRS17).
- **Revised standard for Defined Benefit pension scheme funding:** For example, The Pensions Act 2004³⁸ introduced tighter regulations for DB scheme funding, which came into effect from September 2005.
- **Indexation and revaluation:** The Government has changed the measure of inflation used for the statutory indexation and revaluation required for DB pensions from the Retail Prices Index to the Consumer Prices Index. Those schemes which are able to use the CPI instead of the RPI for indexation and revaluation are likely to have lower liabilities than if they had to continue to use the RPI.

The combined impact of all the risks associated with DB pension scheme provision has increased the costs and reduced the attractiveness and affordability of providing DB pensions in the private sector.

³⁶ Blake (2003); Clark (2006); Barr and Diamond (2010)

³⁷ See Appendix 2 for more details of these changes

³⁸ www.dwp.gov.uk/mediacentre/pressreleases/2005/mar/pens2205.asp

Changes in the measure of inflation used for annual indexation of benefits accrued and pensions in payment

Defined Benefit (DB) pension schemes have by law to provide yearly increases to pensions in payment, and also to revalue deferred members' pension benefits from the time that they stop active service until the pension comes into payment. This is known as statutory indexation and revaluation. The Government sets which index is used to calculate these increases, and until recently has used the Retail Prices Index (RPI).

From April 2011 statutory indexation and revaluation will increase in line with the Consumer Prices Index (CPI) rather than the RPI.³⁹ This is expected to reduce the costs of providing DB pensions, because CPI typically rises more slowly than RPI, due to the formulae used in its calculation and because it currently excludes housing costs.⁴⁰ In the long-term CPI is assumed to increase annually by 2%, compared to 3.3% for RPI.⁴¹

The Office of National Statistics (ONS) is currently consulting⁴² on a method to incorporate owner occupiers' housing costs⁴³ into a new additional measure of consumer price inflation. A measure of consumer price inflation that incorporates housing costs could narrow the gap between CPI and RPI.

Not all DB schemes will be able to reduce their costs by using CPI rather than RPI for the annual indexation of benefits accrued and pensions in payment. The scheme rules of some DB schemes explicitly state that indexation will be in line with RPI.

It is estimated that between 20% and 40% of private sector DB schemes have a statutory indexation and revaluation definition in their rules that does not refer to RPI, and therefore could switch to using CPI.⁴⁴ For DB schemes that decide to switch to CPI, this move could significantly reduce their liabilities, as payments to deferred and current members are expected to rise more slowly. The Department for Work and Pensions (DWP) estimated that this policy could reduce private sector DB schemes' liabilities by around £73bn over a short-term period of three years. This represents around 6.7% of total liabilities of DB schemes estimated at £1.1tn.⁴⁵

⁴¹ OBR long-term assumptions, November 2011

42 ONS (2012a)

⁴⁵ DWP (2011b) 12 July, page 10

³⁹ The Pension Protection Fund and the Financial Assistance Scheme are also allowed to use CPI in their annual revaluations

⁴⁰ PPI (2011b) During some periods the average price of consumer goods may occasionally rise more quickly than housing costs (e.g., September 2009). During these periods, CPI might rise more quickly than RPI. The ONS is currently considering whether housing costs should be included in the CPI, and how this might be done.

⁴³ Owner occupiers' housing costs are the costs associated with owning and living in one's own home. For many owner occupiers the biggest housing cost is the mortgage payment, as for the tenant it is the rental payment.

⁴⁴ NAPF (2010); DWP (2010a)

While the change of indexation and revaluation from the RPI to the CPI is likely to reduce DB schemes liabilities and may allow sponsors to continue to offer this type of scheme, the change will reduce the level of annual increase to scheme members' pensions. Deferred members can also expect to have lower pensions when they retire.

Broader social factors

There have been significant changes in the labour market since the post-war period which may be relevant to private pension provision. For example, job patterns have changed and there has been an increase in the participation of women in the labour market.

Changes in job patterns mean that it is nowadays more likely for employees to switch jobs a significant number of times during their lifetime. It has been estimated that, on average, an individual starting work at age 16 has 11 different jobs during their lifetime.⁴⁶

Women's participation in the labour force has increased significantly in the last forty years. The employment rate for women has increased from around 53% in the first quarter of 1971 to around 66% in the same quarter of 2011.⁴⁷ In addition to being likely to live longer than men, women have been more likely to be economically inactive during some periods than men, taking career breaks to care for children or other dependants.

Both employer and employee attitudes are important to the provision of a DB scheme. Employers are more likely to remain committed to providing a DB scheme if they see DB schemes as a useful recruitment and retention tool.

For employees who frequently switch jobs or who have career breaks, the portability of a DC scheme may be attractive. However, the level of employer contribution and risk involved in the different types of pension arrangement will also be important factors for the individual to consider.

The cost of providing Defined Benefit pensions has increased

It is difficult to measure the precise effects that each of these factors have had (i.e. longevity risk, investment risk, inflation risk, legislative or regulatory changes and broader social factors). The Pensions Commission estimated that the combined impact of all these changes had increased the combined employer and employee contributions required to sponsor a final salary scheme from approximately 10-14% of salary in the 1950s to 22-26% of salary by 2004.⁴⁸

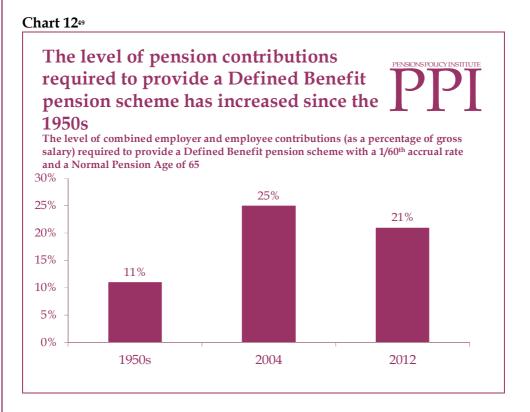
⁴⁶ Johnson et al. (2010) p.103. Based on individuals with full working histories, all individuals aged between 16 and 25 in 2007, the simulation start year.

⁴⁷ Labour Force Survey, seasonally adjusted figures of employment rates for females aged 16 to 64. The corresponding figures for females aged 16 to 59 was 56% in the first quarter of 1971 and 69% in the first quarter of 2011.

 $^{^{48}}$ Pensions Commission (2004) page 123, based on a final salary scheme with a $1/60^{\rm th}$ accrual rate and a Normal Pension Age of 65

PPI analysis to update these estimates suggest that the level of pension contributions required to fund a typical final salary scheme with a $1/60^{\text{th}}$ accrual rate and an Normal Pension Age of 65 increased from around 11% in the 1950s to 25% in 2004. By 2012 the level of pension contributions needed had fallen to 21% of salary (Chart 12).

This recent fall is mainly as a result of changes in indexation requirements (and assumes that CPI indexation can be used within the scheme), even though life expectancy has continued to increase. See Appendix 1 for full details of the calculations.



The different risks associated with Defined Benefit provision may impact the funding position of Defined Benefit schemes

The funding position of a DB scheme is measured as the ratio of the assets held in the scheme to the liabilities owed to current and future pensioners. The funding position provides a snapshot of the financial position of the scheme at a given point in time. There are many different ways of measuring the liabilities of the scheme, and therefore the funding position.⁵⁰

The different risks associated with DB provision may affect the funding position of a scheme. For example, rising longevity will lead to an increase in the estimated liabilities of the scheme. Lower investment returns represented by falling bond yields and low equity returns will increase the estimated value

 $^{^{49}}$ PPI analysis based on a final salary scheme with $1/60^{\text{th}}$ accrual rate and a Normal Pension Age of 65. See Appendix 1 for more details

⁵⁰ See Appendix 3 for further details and definitions of the different liability measures

of the schemes' liabilities. In addition, the market value of the assets of a scheme will vary on a daily basis and this variation will affect a scheme's funding position.

Summary

There are various risks associated with sponsoring Defined Benefit (DB) pension provision in the private sector that affect the cost and attractiveness of providing a DB pension, including:

- **Longevity risk**: Increases in life expectancy over the last 30 years due to medical advances and improved lifestyles have meant that people are living longer. Longer lives increase the cost of providing DB pensions.
- **Investment risk**: In a DB scheme the sponsor bears the risk that the performance of the underlying investments is insufficient to meet future pension promises. If the performance is worse than expected, sponsors need to pay in more money to the scheme.
- **Inflation risk**: In DB schemes, revaluation of accrued benefits and indexation of pensions in payment are key parts of scheme design. Future levels of price and wage inflation will therefore impact on the cost of sponsoring a DB scheme. There is a cap on mandatory indexation and revaluation in DB schemes, which reduces the risk for scheme sponsors, although it does not eliminate it entirely.
- **Default risk**: This can arise when the sponsor is unable to meet its obligations to properly fund the scheme or becomes insolvent. In such cases there are real risks to the amount of pension that beneficiaries may receive, although in practice the existence of the Pension Protection Fund (introduced in 2005) mitigates some of this risk.
- **Increased regulation and legislation**: Many different pieces of legislation have been introduced since the 1970s, predominantly with the aim of protecting individual pension rights. Many of these changes have led to increased cost for DB schemes, or reduced the attractiveness of providing DB pensions.
- **Indexation and revaluation:** The Government has changed the measure of inflation required to be used for the indexation and revaluation required for DB pensions from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI). Those DB pension schemes that are able to make this change will reduce their costs of providing a DB pension.
- **Broader social factors**: In recent years individuals have become more likely to switch jobs and employers during their careers. There has also been an increase in the participation of women in the workforce, who have been more likely than men to take career breaks. For employees who frequently switch jobs or who have career breaks the portability of a DC scheme may be attractive.

As a result of these factors the cost of providing DB pensions has increased significantly. PPI analysis suggests that between the 1950s and the early 2000s, the level of contributions needed to fund a typical final salary scheme increased from approximately 11% of salary to 25% of salary. Since then the

costs have fallen to 21% of salary despite increasing longevity, mainly as a result of changes in the measure of inflation used for indexation and revaluation from RPI to CPI.

The combined impact of all the risks associated with DB pension scheme provision has increased the costs and reduced the attractiveness and affordability of providing DB pensions in the private sector.

The sponsors of DB schemes have responded to these challenges in a variety of ways. The next chapter explores the strategies that scheme sponsors and trustees have pursued to manage the costs and risks of their DB schemes.

Chapter three: what strategies are pension scheme sponsors and trustees pursuing in response to the challenges affecting pensions in the private sector?

This chapter analyses the different strategies that Defined Benefit (DB) pension schemes' sponsors and trustees have been adopting in recent years to address the risks and associated costs in sponsoring DB pension schemes.

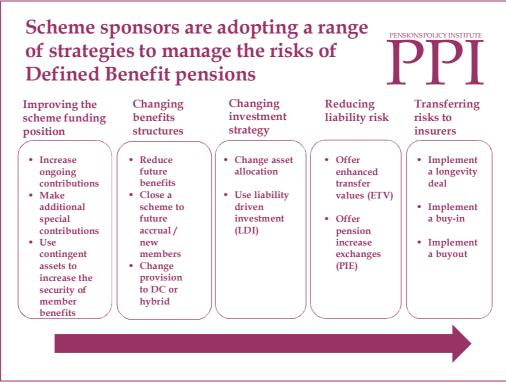
In recent years, sponsors and trustees of DB schemes have adopted a wide range of strategies. These include:

- **Improving the scheme funding position:** one strategy would be to increase ongoing contributions from both employers and employees or increase special additional contributions from employers. However, the extent to which private sector employers can afford additional contributions varies widely. Sponsors may also try to use contingent assets to increase the security of members' benefits.
- Changing benefit structures: another strategy is to reduce scheme liabilities by changing the benefits that would be accrued in the future, for example, by reducing accrual rates, changing the reference salary to calculate pension benefits from final salary to career average salary, changing indexation arrangements or increasing the scheme Normal Pension Age (NPA). Other options include closing the scheme to new members or to future accrual, and changing future provision from DB to Defined Contribution (DC), a hybrid scheme or other risk sharing mechanisms.
- Changing investment strategy: as part of a wider risk reducing strategy, trustees may attempt to improve the financial position of a scheme by changing the allocation of their investments to reduce investment risk. Trustees may also attempt to protect the funding position by adopting techniques to better match schemes' liabilities in order to reduce volatility.
- **Reducing liability risk:** scheme sponsors may offer Enhanced Transfer Values (ETV) to encourage a deferred member to transfer out of a scheme. They may also offer a Pension Increase Exchange (PIE) so a pensioner member can exchange their right to a pension that must be uprated in line with changes in inflation every year for an initially higher but non-increasing or a fixed-increasing pension. Only non-statutory increases can be exchanged minimum statutory increases covered by legislation cannot be exchanged.
- **Transferring risks to insurers:** these strategies allow sponsors of DB schemes to transfer some or all of the pension risks they face to an

insurer.⁵¹ For example, scheme sponsors may buy an insurance policy to offset the risk of members living longer (longevity deals). They may also buy an insurance policy to cover pension payments for some or all of their pensioners (buy-in). Finally, they can transfer assets and liabilities and all of the risks in the pension scheme entirely to an insurer (buyout).

Often, schemes move from one end of the spectrum of strategies to the other to manage the costs and risks of DB pension provision (Chart 13). For example, they may improve the funding position of the scheme, or change the structure of benefits by increasing the scheme's Normal Pension Age (NPA) or lowering accrual rates. They may also change investment strategy or aim to reduce liabilities through Enhanced Transfer Values or Pension Increase Exchanges. Finally, they may decide to transfer risks to an insurer by implementing a buy-in or a buyout.

Chart 13



The chapter analyses the different strategies followed by some DB scheme sponsors and illustrates them by referring to recent case studies. The case studies are discussed purely for illustrative purposes. The PPI is not endorsing any specific type of strategy to deal with the risks of providing occupational pensions.

⁵¹ In return, the scheme sponsor takes on counterparty risk of whether the insurer will be able to cover the risks

Improving the scheme funding position

A Defined Benefit (DB) scheme sponsor can use a number of different strategies to try to improve the scheme funding position. These include:

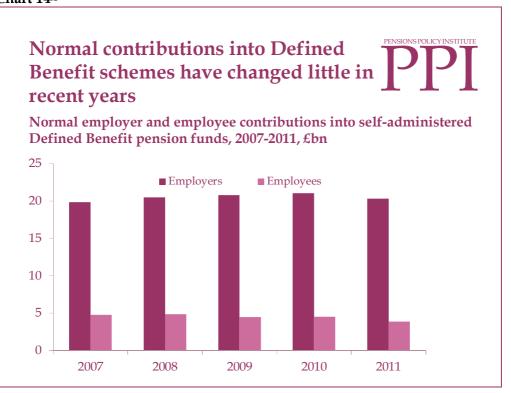
- Increasing normal employer and employee contributions.
- Making special employer contributions.
- Making use of contingent assets to increase the security of member benefits.

Increasing normal employer and employee contributions

A 'normal' contribution is the ongoing contribution made by employers and employees each year in respect of the benefits that are being built up during that year. As highlighted in the previous chapter, the cost of providing a pension is likely to be higher now than in the past. On an individual scheme basis, some employers are looking to share this increased cost by asking employees to contribute if they are not already doing so, or increasing employee contributions.

Recent trends show little change in normal contributions to DB schemes. Employers' normal contributions have only increased from around £19.8bn in 2007 to £20.3bn in 2011. By contrast, employees' normal contributions have decreased from £4.7bn to £3.9bn over the same period (Chart 14). This could be as a result of a reduction in the number of active members of DB schemes.





⁵² Based on ONS (2012b) and previous issues

Making additional special contributions to the scheme

As well as a normal contribution, employers can make a 'special' contribution (also sometimes known as a deficit reduction contribution) to the scheme. Because the contribution is not made in respect of future benefits any deficit payments should improve the funding position of the scheme. A special contribution helps to secure the pension benefits already built up. It is not intended to increase the amount of pension that the scheme will pay in future. Additional contributions paid into a pension scheme are also recognised by the Pension Protection Fund (PPF) through the improved funding position and can reduce a company's PPF levy.

Special contributions can be made on a voluntary basis by the scheme sponsor, but in some cases are also required by regulation. If a scheme is underfunded, it is required to set a recovery plan which is agreed with the Pensions Regulator. The recovery plan sets out what steps the sponsor will take to close the deficit and over what time period, and special contributions can often be part of these plans.

In recent years the use of special contributions to improve the funding position has become more widely used by scheme sponsors as it is an immediate short-term measure to improve the funding position of a scheme. Special contributions to UK private sector DB schemes have increased from around £11.9bn in 2007 to £16bn in 2011.⁵³

HSBC

HSBC made a special contribution of £1.76bn to reduce its pension scheme deficit in 2011. At that time, this was the largest such payment among all FTSE 100 companies.⁵⁴

Many of the special contributions have been made by large employers. In 2010, total employer contributions of FTSE 100 companies to their DB schemes were estimated at around £17bn, of which around £11bn went towards reducing deficits rather than providing future benefit accrual for current employees.⁵⁵ This compares to around £6bn in deficit reduction payments by FTSE 100 companies in 2006.

Using contingent assets

Contingent assets are held by a third party, and are only available to the pension scheme when a specific *contingent event* occurs. A contingent event can be company insolvency or a situation where a scheme does not have sufficient funds to meet its benefit payment obligations. Contingent assets do not necessarily increase the assets of the scheme but they increase the security of members' benefits. This security can be taken into account by the Pensions

⁵³ ONS (2011c)

⁵⁴ ONS (2011c) More recently BT announced a special contribution of £2.0bn in March 2012, followed by nine annual deficit payments of £325m from March 2013 to March 2021 -www.btpensions.net/56/279/bt-andtrustee-announce-ageement-on-the-2011-triennial-funding-valuation-at-30-june-2011 ⁵⁵ LCP (2011a) p.20

Regulator when assessing scheme funding. Contingent assets may also help to reduce the Pension Protection Fund (PPF) levy.

The total number of contingent assets recognised by the PPF has risen by 20 per cent from around 750 in 2010/11 to around 900 in 2011/12.56

Some examples of the forms of contingent assets that are widely used commercially are:⁵⁷

- A letter of credit, which is a guarantee or insurance from a third party such that if the sponsor were to default on payment of contributions to the scheme, money can be drawn against the third party up to a specified amount.
- Sterling cash put aside in a bank account and charged to the fund (also known as an escrow account). Some or all of the cash would be released to the fund on the occurrence of the contingent events. In 2011, Astra Zeneca, BAE Systems, Man Group, Smiths and TUI Travel were all reported to have adopted this approach.⁵⁸
- The provision of a group company guarantee such that the guarantor agrees to make a payment (or series of payments) to the scheme if the contingent event occurs.
- Security over other assets (e.g. tangible assets such as property or intangible ones such as brand royalties).

Intangible assets are typically more difficult to value and may not provide the same level of security as other assets such as property. For example, when an employer is facing insolvency, assets such as the company trademark or its royalty rights may go down in value.

Where security is provided it can be structured in a number of ways, for instance as a separate escrow account, within a trust or in a partnership. Both tangible and intangible assets can be transferred into a Pension Funded Partnership (PFP). For example, Sainsbury's announced in May 2010 that they had set up a property backed partnership.

Sainsbury's

In May 2010, it was announced that Sainsbury's had set up a propertybacked partnership. Under the deal, properties worth £750m were transferred to the partnership. Trustees receive annual income of £35m for 20 years, followed by a bullet payment to remove any remaining deficit up to a maximum of £600m. If the scheme moves into surplus during this time, the partnership funds will be used to satisfy future service contributions.⁵⁹

⁵⁶ PPF/TPR (2012) Chart 12.1

 ⁵⁷ www.thepensionsregulator.gov.uk/guidance/monitoring-employer-support.aspx#s3843
 ⁵⁸ LCP (2011a) p21

⁵⁹www.independent.co.uk/news/business/news/grocer-seeks-to-plug-pension-gap-with-property-1972851.html

TUI Travel

While property has been the most common approach when entering into a partnership with a pension scheme, some companies have also transferred intangible assets to a partnership with the pension scheme. For example, in May 2011 it was announced that TUI Travel would transfer brand rights of Thomson and First Choice to a pension funded partnership (PFP).

TUI UK Limited will pay a royalty to the partnership for the use of the brands. The Britannia Airways Limited Superannuation and Life Assurance Scheme, the TUI Pension Scheme (UK) and the Thomson Airways Pension Scheme in aggregate are entitled to an annual income distribution of approximately £17m.

The PFP has a life of 15 years, after which the schemes will receive a payment equal to their outstanding funding deficit, up to a maximum of £275m in aggregate, in return for their interest in the PFP.⁶⁰

Changing benefit structures

Defined Benefit (DB) schemes can change the structure of the future benefits paid by the scheme in a variety of ways. These include:

- Reducing benefits within the existing scheme for future accrual.
- Closing the scheme to new members and/or future accrual.
- Changing provision to Defined Contribution (DC) or hybrid DB-DC.

Reducing benefits within the existing scheme

The Government has enabled DB pension schemes to use the Consumer Prices Index (CPI) rather than the Retail Prices Index (RPI) for the revaluation and indexation of DB pensions. This change could reduce the amount of pension benefit that needs to be paid out and it could also reduce liabilities and the funding requirement for DB schemes. However, not all schemes can easily make this change as they may have RPI indexation written in their rules.⁶¹

Current legislation does not allow scheme sponsors to reduce accrued benefits in order to reduce the scheme's liabilities. However, sponsors may seek to modify benefits for future service. For example, a company sponsoring a final salary DB scheme with an accrual rate of 1/60th could propose to its employees a reduction in the accrual rate to 1/80th for future service starting from a specific date, or for new entrants to the scheme.

A company could propose to change the way pension benefits are calculated from one based on final salary to one based on Career Average Revalued Earnings (CARE). In a CARE scheme, members earn an amount of pension each year based on their salary in that year and the scheme's accrual rate. The amount of pension earned every year is then revalued, usually in line with prices or earnings growth. At retirement, the pension paid will be equal to the

⁶⁰ TUI Travel (2011) p.91

⁶¹ See Chapter 2 for further information

sum of the revalued pension earned every year. Career Average schemes expose employers to less salary inflation risk than final salary schemes as the pension paid is based on accruals each year rather than the member's final salary.

Implementing career average schemes

Companies such as Capita and GKN have reduced their pension liabilities by \pounds 12.6m and \pounds 68m respectively, by switching from final salary to career average benefit accrual. Morrisons has announced a move to career average benefit accrual for existing members of their final salary schemes.⁶²

Morrisons

Morrisons, which is the UK's fourth largest food retailer with 477 stores, has over 5,000 final salary scheme members in the Safeway Pension Scheme, which the company inherited after the purchase of Safeway Stores in 2004. The scheme is open to around 16,000 employees of Safeway stores. In 2009, a review of Morrisons' two DB final salary schemes was conducted.

The schemes had £2 billion liabilities and Morrisons had a market capitalisation of £8 billion. At the time of the review, there were around 12,000 active members and 40,000 pensioners/deferred members spread across both schemes. The combined membership of both schemes made it one of the largest DB schemes in the UK's private sector. The pension scheme was Morrisons' largest unsecured creditor.

The outcome of the review was to move to a career average revalued earnings scheme (CARE) following consultation with members and the main union. Each year, active members earn a pension benefit based on an accrual rate of 1.5% of their qualifying salary, with part years counting proportionately. This benefit is determined on 5th April each year. This accrued pension is adjusted each year in line with the Retail Prices Index up to the date that the member retires.⁶³

Another option is to raise the Normal Pension Age (NPA) of the scheme, which is the age at which members can retire with a full pension. As with other changes to benefits, this could apply to all future pension accrual (with existing rights protected), or only to new members.

Changes to a scheme's benefits generally need to be negotiated with employees. This may lead to lengthy negotiations, especially in companies where the workforce is highly unionised.

62 LCP (2011a), p.24 and Case Study below

⁶³ DWP (2010b) p.23, www.morrisons.co.uk/Corporate/2010/AnnualReport/performance-review/financial-review/#11

Closing the scheme to new members and/or future accrual

Employers can choose from a range of different strategies to close an existing DB scheme.

- *Closed to new members but still open to future accrual.* In this case existing employees who are members of the scheme continue to build up benefits but new members are offered an alternative scheme often a DC scheme. This can be the first step taken by employers seeking to change all of their pension provision and remove some of the risks associated with DB schemes. In this case, the employer still bears the risks related to those employees in the closed scheme who continue to accrue a pension until they retire or switch jobs, as well as the risks of all the benefits built up to that time.
- *Closed to both new members and to future accrual.* In this case the employer stops the accrual of future benefits for both existing members and for new employees. This approach has become more common in the past 5 years. The employer only bears the risk for past accrual in the scheme. There may be scheme specific rules that require consent from the trustees to implement this action.
- *Fully closed or wound-up.* This is the last stage of a scheme's lifecycle and it means that the scheme is in the process of settling benefits, with no new benefits being accrued. If the scheme is fully closed or wound-up, the employer can continue running the scheme or can transfer the liabilities to an insurer for a specified premium.

Changes in the structure of private pension provision have been significant in recent years. Only 16% of DB schemes were still open to new members in 2011, compared to 36% in 2007.⁶⁴

Changing provision to a Defined Contribution scheme or a hybrid scheme

When an employer decides to close a scheme to new members, regardless of whether existing benefits continue to accrue, it has to decide what type of pension arrangement it will offer as a replacement. An employer may decide to offer membership of a DC scheme.

Employers may decide to make the same level of contributions to a DC pension offered in replacement for a closed DB scheme. However, typically the DC schemes which replace DB schemes are less generous than previous DB schemes offered to employees.⁶⁵

In a DC scheme the pension paid upon retirement depends on the total amount of contributions paid into an employee's account, the returns of the accumulated fund (after charges) and, if an annuity is taken, the annuity rate available in the market. Given all these factors, income from a DC pension is likely to be less predictable than the retirement income from a DB pension and

⁶⁴ PPF / TPR (2012)
 ⁶⁵ Mackenzie (2010)

it is the individual scheme member rather than the scheme sponsor who bears the risks.

However there are alternative mechanisms that allow the sharing of some risks between the employer and the employee. The advantage of such solutions, called risk sharing, is that not all the risks of providing pensions are faced by one party. Also, there may be more certainty regarding the amount of pension paid out than under a typical DC pension scheme.

Risk sharing schemes typically incorporate specific rules to share some risks, such as longevity, between the employer and the employee.

BAE Systems

In 2006 BAE Systems incorporated a risk sharing mechanism in the DB section of its pension scheme. Members bear the risk of unexpected future increases in longevity for newly accrued rights. A longevity adjustment factor reduces the pension payable at retirement in proportion to the impact of any improvements in life expectancy beyond those allowed for in the relevant mortality tables used by the scheme at the time of the risk sharing introduction (6 April 2006).⁶⁶

RS Components

The UK branch of international distributor Electrocomponents, introduced in 2008 a life expectancy risk sharing arrangement to its closed DB pension scheme. At retirement, individual members could see their pension benefits reduced, depending on their age and Office for National Statistics (ONS) longevity forecasts at the time of retirement, compared with the scheme projection. If necessary, a "life expectancy factor" would be applied to reduce the pension, recognising that it is likely to be paid for longer than anticipated. Accrued benefits built up before June 2008 are not affected.⁶⁷

Hybrid pension schemes

Hybrid pension schemes combine elements of DB and DC schemes. These schemes also allow some sharing of risks between employers and employees in a number of ways.

There are many different types of hybrid schemes but they can be classified as either *mixed benefit* or *dual section*. A mixed benefit scheme offers one set of benefits, which has both DB and DC elements. For example, a mixed benefit scheme may be primarily DC, but with a guarantee that it will pay out a minimum level of pension that has been set using a DB accrual rate.

A dual section scheme has two sections, one offering DC benefits and the other offering DB benefits. For example, a dual section hybrid scheme may have a

⁶⁶ DWP (2008) p.41, www.baesystemspensions.com/261/benefits-in-detail

 $^{^{67}} www.occupational pensions.co.uk/index.php?/Analysis/rs-components-risk sharing-plan-saves-db-scheme.html$

DB section that caps the salary used when calculating the final benefit, with a DC top-up section for members who earn above the cap. Unilever introduced such a scheme in 2008 with a cap set at \pounds 35,000.⁶⁸

However, in most hybrid schemes the risks are not really 'shared' between the individual and the scheme sponsor. Depending on which parts of the scheme the individual is in, the risks are either faced by the sponsor (in the DB sections of schemes) or the individual (in the DC sections). Risks are shared in the sense that not all the risks always fall on the sponsor, or on the individual, but an individual who is a member of the DC section of a hybrid scheme will face the same risks as a member of a normal DC scheme.

Hybrid schemes represent an increasing proportion of the private sector pension landscape (see Chapter 1). In 2011, around 15% of active members in the private sector were in such schemes. However, given that this includes dual section schemes it is difficult to interpret this growth, as it may be simply part of the transition from DB to DC as employers open new sections (DC) of schemes as they run down older sections (DB).

Changing investment strategy

In general, the investment strategy followed by the trustees of a Defined Benefit (DB) scheme will depend on the specific situation of the scheme in terms of funding, membership levels and the strength of the sponsor. There are different strategies for changing the level of investment risk, including:

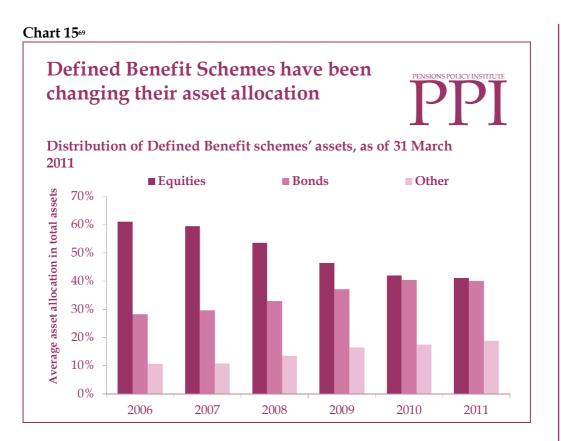
- Changing asset allocation
- Using derivatives-based techniques such as Liability Driven Investment.

Changing asset allocation

DB schemes may change asset allocation as a way to achieve diversification in their portfolios and reduce some of their investment risk. Schemes may also change asset allocation to improve their risk-weighted return, which is a measure of the return that the assets held by the scheme produce taking into account their investment risk. Finally, schemes may also change their asset allocation to better match their liabilities.

Regardless of their funding levels, DB schemes have changed their asset allocation significantly over the past five years and, in particular, DB schemes have been shifting away from equities towards bonds. In 2006 60% of all assets in DB schemes were invested in equities and 30% in bonds. By 2011, DB schemes had reduced their exposure to equities to over 40% of total assets, and had increased the proportion held in bonds to around 40%. Other investments, which include insurance policies, cash, property and other investments such as hedge funds represented around 20% of assets of DB schemes in 2011, up from around 10% in 2006 (Chart 15).

 $^{^{68}} www.professional pensions.com/professional-pensions/news/1434214/hybrid-fund-replaces-db-unilever-staff$



One reason for schemes to switch from equities to bonds is to reduce volatility in funding levels.⁷⁰ In addition, as many schemes close to new members or future accrual, they face an increasing number of deferred or pensioner members compared to active members. This may prompt them to switch from equities and into bonds, which better match the payments that are due. However, switching investment allocation in this way will also increase a scheme's liabilities if the lower expected return lowers the discount rate used to value the liabilities.

Using Liability Driven Investment (LDI)

Liability Driven Investment (LDI) aims to match the cash flows of a pension scheme's future liabilities rather than simply delivering a positive investment return. In practice, this implies diversifying into a wider range of asset classes while controlling the risk relative to liabilities.

This approach allows a pension scheme to more carefully manage investment risk, and to reduce large swings in funding levels due to stock market fluctuation, as well as offering protection against inflation and interest rate changes through swaps. However, it does not protect the scheme from some non-investment factors such as increasing longevity, or other situations where actual experience is different from actuarial assumptions. The total value of LDI assets under management in the UK has increased from \pounds 243bn at the end of 2010 to \pounds 312bn at the end of 2011, an increase of almost 30%.⁷¹

Reducing liability risk

DB schemes may follow various strategies to reduce their liability risk. For example, most schemes offer to members who are retiring a lower pension in exchange for converting part of it into a tax-free lump sum payment. A scheme might also offer retiring members the option of commuting their right to a pension (that is, convert their annual pension into a one-off lump sum payment) if their pension is below a maximum level set by the Government.⁷²

In addition, schemes may offer an Enhanced Transfer Value (ETV). This exercise allows deferred members to transfer out of the scheme in exchange for a statutory amount plus a cash or pension enhancement in respect of the pension given up. Another strategy involves exchanging some of the member's right to a pension that increases in line with changes in prices for a higher but non-increasing or fixed-increasing pension. This is called a Pension Increase Exchange (PIE). Only non-statutory increases can be exchanged.

Providing an Enhanced Transfer Value (ETV)

Due to the increasing costs of running DB schemes, sponsors may opt to offer incentives to some deferred members to transfer out of the scheme. This may reduce the scheme's liabilities and the associated uncertainty about the long-term costs of managing the scheme.⁷³

Pension legislation entitles deferred members of DB schemes to transfer their benefits into an alternative pension arrangement. The statutory amount that is paid is known as a Cash Equivalent Transfer Value (CETV). These transfers are an option for the individual and they cannot be imposed by the scheme or the sponsor.

An Enhanced Transfer Value (ETV) involves offering an enhancement on top of the CETV. This makes an ETV more valuable to a deferred member than the standard CETV. For the scheme sponsor, even if the ETV is higher than the standard CETV it could still be lower in value than the liability held when calculated on a prudent actuarial basis. Guidance issued by The Pensions Regulator says that scheme sponsors must offer advice to employees involved in an ETV exercise through an Independent Financial Advisor (IFA).

ETVs may be an attractive offer for individuals, depending on the enhancement offered. For example, when life expectancy is impaired, when

⁷¹ KPMG (2012)

⁷² This is known as trivial commutation. The trivial commutation limit is currently a lump sum of £18,000 (2102/13). To convert an annual DB pension into a lump sum, the annual income is multiplied by 20. For this purpose the Government deems that each £1 pa of pension to be equivalent to a lump sum of £20, so the limit equates to an annual pension of £900 (or £75 a month). ⁷³ KPMG (2011)

the individual has no spouse or dependants, or when an individual has other investments to provide for a retirement income and is keen to combine them for future flexibility in retirement. However, this may not apply to a significant number of individuals involved in an ETV exercise. Concern has been raised about whether individual members are making the right decisions and are being provided with adequate advice.

The Pensions Regulator issued updated guidance on incentive exercises in December 2010.⁷⁴ The guidance states five principles that should be followed in any ETV offer:

- Be clear, fair and not misleading.
- Be open and transparent.
- Manage conflicts of interest.
- Involve consultation with trustees.
- Provide independent financial advice to members.

ETVs have become more common over the past three years. Based on data from ten IFAs active in the market, a recent report has found that there have been around 80 ETV exercises since 2008, involving around 90,000 members.⁷⁵

Providing a Pension Increase Exchange (PIE)

Current legislation provides for minimum levels of pension increases for members of contracted out DB schemes. Pensions in payment must be uprated by changes in the Consumer Prices Index (CPI) capped at 5.0% pa, on benefits accrued between 6 April 1997 and 5 April 2005 and capped at 2.5% on benefits accrued after 5 April 2005. Statutory increases linked to inflation expose scheme sponsors to inflation risk.

A Pension Increase Exchange (PIE) may help to reduce inflation risk for the employer. However it applies only to non-statutory increases. PIE exercises can be offered both to non-pensioners coming up to retirement or to existing pensioners as a one-off option. Under a PIE exercise:

- Non-pensioners coming up to retirement are offered one further option in addition to a pension or a (reduced) pension plus a tax-free lump sum. This extra offer entails a higher lump sum and a higher initial pension in exchange for giving up future non-statutory pension increases.
- Current pensioners are offered a higher pension in exchange for giving up future non-statutory increases.

As with Enhanced Transfer Values (ETV), members of DB schemes with a life expectancy impairment or with other assets that may provide an income in retirement, may find PIE attractive. However, this may not be the case for many members.

⁷⁴ TPR (2010) ⁷⁵ KPMG (2011) p.5 Although a potentially valuable tool to help employers manage their pension scheme liabilities, the Government has recently expressed concern on the use of incentive exercises such as ETVs and PIEs given that they may not always represent good value for money for members of DB schemes.

A code of conduct on incentive exercises has been published by an industry working group set up by the Government.⁷⁶ The code recommends seven principles to be followed in incentive exercises:

- Not providing cash conditional on the acceptance of the offer.
- Providing advice to members who are offered such exercises.
- Maintaining clear communications with members.
- Keeping good records.
- Allowing enough time for members to make their decisions.
- Observing a vulnerable client policy.
- Ensuring all parties involved act in good faith.

While the Code is not a statutory code, and so would not be considered by the courts, the Pensions Ombudsman and the Financial Ombudsman Service will have regard to the Code, where appropriate, when dealing with a complaint involving an incentive exercise.

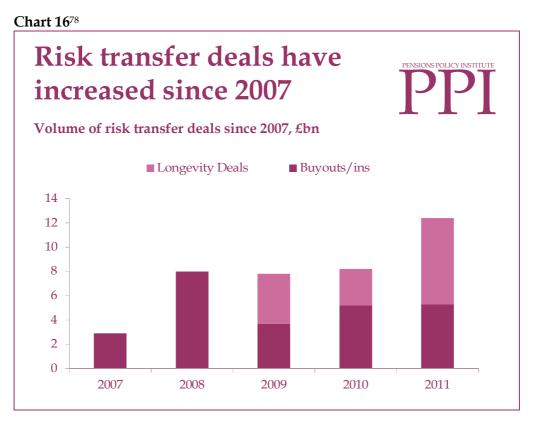
⁷⁶ Incentivexercises.org.uk (2012)

Transferring risks to insurers

Over the last five years there has been a rapid expansion in the risk-transfer market. These include:

- Longevity deals.
- Buy-ins.
- Buyouts.

These deals allow a scheme sponsor to transfer some or all of the risks of pension provision to an insurer. They amounted to £12.4bn in 2011, compared to £2.9bn in 2007 (Chart 16).⁷⁷ In total, around £40bn of scheme liabilities have been insured through these deals since 2007.



Longevity deals

Longevity insurance (also known as longevity swaps) allows scheme sponsors to hedge a pension scheme against longevity increases among all or some of its members.

Under such deals, scheme sponsors pay a fixed premium to an insurer to take on the risk that employees live longer than expected and sponsors have to pay pensions for longer than planned. In exchange, the insurer pays a variable premium matching the actual pension payments made. The first longevity

⁷⁷ Hymans Robertson (2011) p.3⁷⁸ Hymans Robertson (2011) p.3

deal was transacted in 2009, when Babcock secured a deal with Credit Suisse covering around £300 million of the scheme's £1.7bn liabilities.⁷⁹

Longevity deals have tended to cover specific groups of pensioners, as it is easier to estimate life expectancy among older people than among younger ones, due to unforeseeable future developments that may increase or decrease life expectancy significantly. However, more recently some companies have secured deals that cover working-age members. For example, in February 2011 Pall Corporation signed a longevity deal with JP Morgan to cover the scheme against longevity increases among its working-age members aged 25-65.⁸⁰ This was the first so-called longevity index-swap deal.⁸¹

A longevity deal does not protect scheme sponsors against the other risks of DB pension provision, most notably investment and inflation risk. In addition, it adds counterparty risk, which is the risk that the provider of the longevity hedge can no longer meet its liabilities.

Around 19% of DB scheme sponsors surveyed said that they had considered entering into a longevity deal.⁸² Longevity deals have covered around £14bn of pension scheme liabilities from 30 June 2009 to December 2011.⁸³

ITV

In September 2011, it was announced that the ITV pension scheme entered into a £1.7bn longevity swap with Credit Suisse to fully hedge the longevity risk for 12,000 of its pensioner members. Under the contract, ITV Pension Scheme will make fixed monthly payments to Credit Suisse. In return, Credit Suisse will make payments to the scheme that broadly matches the value of benefits being paid out. The fixed payments have a present value of approximately £1.7 billion, making this the third biggest risk-transfer involving a UK pension scheme to date. Benefits due to just under 12,000 retired members and dependants are covered by the transaction.⁸⁴

Buy-in

A buy-in is a single insurance policy covering some or all of the scheme members. The buy-in policy is held by the trustees as an asset together with the other assets of the scheme. Under this transaction, the trustees remain in place and the liabilities still remain on the pension scheme and sponsor's balance sheet. The key aspect is that the buy-in policy generates an income stream that covers the defined payments to the members covered by the policy. Consequently, the sponsors and trustees of the scheme achieve risktransfer without more significant changes to the scheme. Unlike longevity

⁷⁹ www.professionalpensions.com/professional-pensions/news/1442055/babcock-completes-stage-longevity-swap-deal

⁸⁰ www.efinancialnews.com/story/2011-02-25/longevity-deal-breaks-fresh-ground?mod=article-related

⁸¹ Hymans Robertson (2011) p.5

⁸² NAPF (2011) p.38

⁸³ Hymans Robertson (2011) p.5

⁸⁴ www.towerswatson.com/united-kingdom/press/5301

deals, the advantage of buy-ins is that they cover all of the major risks of pension provision for the insured members; for example, investment, inflation, interest rate and longevity.

The buy-in market has seen rapid expansion since 2007, with around £10.3bn of pension scheme liabilities insured through these deals up to the end of $2011.^{85}$

Around 14% of scheme sponsors considered a buy-in during 2011.⁸⁶ There are different reasons why scheme sponsors may purchase a buy-in policy:

- as part of a long-term process towards a buyout;
- as part of an investment strategy;
- as a cheaper alternative to other investment vehicles, matching liabilities more efficiently.

TI Group

Smiths, the engineering group that bought TI Group in 2000, announced in April 2008 a buy-in transaction with Legal & General to insure £250m of the TI Group Pension Scheme, valued at £1.4bn.⁸⁷ In September 2008, a second buy-in was reached with Paternoster, to insure a further £250m of TI Group Pension Scheme.⁸⁸ Finally, in December 2011 another £150m was insured with Rothesay Life.⁸⁹

The latest deal with Rothesay Life will secure the benefits relating to approximately 1,800 pensions in payment. As a consequence of Rothesay Life's purchase of Paternoster, completed in January 2011, Rothesay Life will also insure a separate group of around 4,500 pensions in payment, held in the buy-in policy contracted with Paternoster in 2008.⁹⁰

Buyout

A buyout entails the full transfer of all or part of the scheme liabilities to an insurer in exchange for a premium. Under this type of deal, a closed scheme is fully wound-up. All liabilities are removed from the sponsor's balance sheet and transferred to an insurer. Individual insurance policies are purchased to insure the benefits of scheme members and the trustees are no longer responsible for the management of the scheme.

To enter into a buyout, insurance companies will charge a premium for taking on the liabilities of a scheme. They will typically use more prudent assumptions than those used to determine the ongoing funding basis. This will be reflected in a higher value of schemes' liabilities when considering them on a buyout basis.

⁸⁵ Hymans Robertson (2012) p.3

⁸⁶ NAPF (2011) p.38

⁸⁷ www.ipe.com/news/ti-group-agrees-partial-buyout-with-l-g_27768.php

⁸⁸ www.ipe.com/home/ti-group-agrees-second-buy-in-update_29169.php

⁸⁹ www.efinancialnews.com/story/2011-12-09/rothesay-ti-pensions-buyout

 $^{^{90}\,}www.rothesaylife.co.uk/media-centre/press-releases$

Given that a buyout is generally more expensive than other risk-transfer strategies, most schemes will not be able to afford a full buyout. In general, a buyout may suit small or well-funded schemes.

As of December 2011, around £15bn of DB schemes' liabilities have been insured through buyouts since 2007.⁹¹ With an increasing number of DB schemes closed to new members and to future accrual the administration of those schemes is a legacy issue. Some scheme sponsors may therefore consider buyouts as an opportunity to fully discharge themselves from that legacy.

Buyout providers have also been innovating in this field to make buyouts more affordable to scheme sponsors. For example, by offering solutions that spread out the payment of the buyout premium or by using property and then leasing it back to use the proceeds to pay for the premium.⁹²

The Law Society

It was announced in June 2011 that the Law Society, the professional body for solicitors in England and Wales, had completed a buyout transaction of its DB pension scheme with MetLife Assurance Limited. The deal covers 1,800 members, it will save the organisation £12.5m from 2012 and it was valued at £320m.

The trustees and The Law Society discussed whether a full buyout or a buyin was the best solution. A buy-in would have implied putting in place a recovery plan to fund the scheme while not totally relieving the employer from the responsibility for the schemes' liabilities. The Law Society identified the continuation of the scheme as an unattractive and unsustainable risk. It was felt that the expense of the scheme represented a level of cost that was inappropriate given The Law Society's ambitions for reductions in its costs and the challenges facing the profession in the coming years.

The Law Society concluded that the scheme represented an inequitable bargain between the beneficiaries of the scheme and its ultimate funders and risk-takers, the members of the profession. The trustees and The Law Society agreed that a full buyout would be the best option as it would remove the pension scheme liabilities from The Law Society's balance sheet.

The scheme, which had a net shortfall of £50m, was closed to future accrual on 30 June 2011. Existing staff were given the option of transferring to The Law Society's defined contribution scheme, which was introduced following the closure of the DB scheme to new members in $2005.^{93}$

92 LCP (2011b)

⁹¹ Hymans Robertson (2011) p.3

⁹³ www.lawgazette.co.uk/news/law-society-winds-final salary-pension-scheme

The total value of risk-transfer deals represents a small proportion of total Defined Benefit schemes liabilities

The total value of risk-transfer deals (including buy-in, buyout and longevity deals) from 2007 until the end of 2011 reached around £40bn.⁹⁴ This represents less than 3% of all liabilities of DB schemes, but the volume has increased significantly since 2007 (Chart 17).⁹⁵



As DB schemes continue to close, and dealing with them becomes a legacy issue, risk-transfer deals have the potential to grow in future years, subject to affordability and the capacity of the market.

⁹⁴ PPI calculations based on PPF/TPR (2011) and Hymans Robertson (2011)

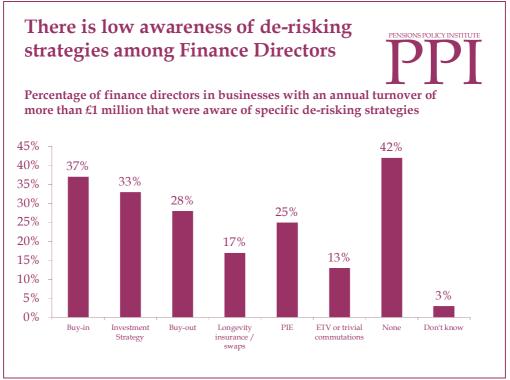
95 PPI calculations based on PPF/TPR (2011)

96 PPI calculations based on PPF/TPR (2011)

Sponsors' awareness of the different de-risking strategies is still low

While risk-transfer deals and other de-risking strategies have been growing in recent years, there is still a low level of awareness of these strategies among scheme sponsors. 42% of finance directors surveyed from businesses with a turnover of more than £1m were not aware of any of the de-risking strategies presented to them. Of those that were aware, the most recognised de-risking strategy was buy-ins (37%), followed by changing investment strategy through asset allocation (33%) and buyouts (28%) (Chart 18).





Summary

There are five main strategies that the sponsors of Defined Benefit (DB) schemes can pursue to reduce the costs and risks of sponsoring DB schemes:

- **Improving the scheme funding position:** This can be done by increasing contributions to the scheme or by securing contingent assets that can increase the security of members' benefits. Special contributions from UK private sector DB pension schemes have increased from £11.9bn in 2007 to £16bn in 2011. In addition the total number of contingent assets set to increase the security of DB schemes has risen by 20% from approximately 750 in 2010/11 to 900 in 2011/12.
- **Changing benefit structures.** Changes in the structure of private pension provision have been significant in recent years. Only 16% of DB schemes were still open to new members in 2011, compared to 36% in 2007. While

97 MetLife (2011)

some employers have changed provision to DC, others have offered membership of hybrid schemes (which combine elements of DB and DC provision), or have changed the way pension benefits are calculated from one based on final salary to one based on Career Average Revalued Earnings (CARE).

- Changing investment strategy. DB schemes may change asset allocation as a way to achieve diversification in their portfolios and reduce some of their investment risk. Schemes may also change their asset allocation to better match their liabilities. DB schemes have been moving away from equities towards investing in bonds, which better match the liabilities they face. In 2006, 60% of all assets in DB schemes were invested in equities and 30% in bonds. By 2011, DB schemes had reduced their exposure to equities to over 40% of total assets, and had increased the proportion held in bonds to around 40%. Another strategy to better match liabilities includes using Liability Driven Investment (LDI). The total value of LDI assets under management in the UK has increased from £243bn at the end of 2010 to £312bn at the end of 2011, an increase of almost 30%.
- **Reducing liabilities.** Two strategies increasingly being used to reduce liabilities are the use of Enhanced Transfer Values (ETV) and Pension Increase Exchanges (PIE). Since 2008, there have been around 83 ETV exercises, involving around 90,000 members. An industry working group set up by the Government has published a code of practice involving the use of incentive exercises.
- **Transferring risks to insurers.** Risk-transfer deals such as longevity deals, buy-ins and buyouts have totalled around £40bn since 2007. However, this represents less than 3% of total liabilities in DB schemes and it may indicate that risk-transfer deals could increase in the future as DB schemes continue to close, subject to affordability and the capacity of the market.

Sponsors of DB schemes may follow different strategies over time. For example, they may start by improving the scheme funding position or by changing the structure of the benefits for new members or by changing the asset allocation of the scheme. Later on, they may decide to transfer risks to an insurer by implementing a buy-in or a buyout.

The next chapter examines the future of pensions in the private sector in the UK.

<u>Chapter four: what is the future of pension</u> provision in the private sector?

This chapter analyses how further changes in pensions policy and the regulatory environment could affect private sector pension provision in the future in the UK.

There are a number of forthcoming and potential policy changes that could have an impact on pensions in the private sector in the UK. These include:

- the introduction of automatic enrolment into workplace pensions;
- regulation from the European Union (EU) regarding the potential introduction of new solvency rules for pension funds;
- state pension reform;
- the Government's agenda to reinvigorate occupational pensions.

Automatic enrolment into workplace pensions

From October 2012 employers will begin to automatically enrol their employees into a workplace pension.⁹⁸ Employees will be eligible for automatic enrolment if they are between age 22 and State Pension Age (SPA) and have annual earnings of at least £8,105 (2012/13). By the time automatic enrolment has been fully introduced for all employers, and contributions have been fully phased-in in October 2018, a contribution of at least 8% of band earnings (earnings between £5,564 and £42,475 in 2012/13) will be required, of which employers will need to contribute at least 3%. Employees will have the right to opt-out.

Employers who already operate a qualifying scheme³⁹, which could be either a Defined Benefit (DB) or Defined Contribution (DC) scheme, will have a range of options when they begin to auto-enrol qualifying employees. They could:

- auto-enrol all qualifying employees into the existing scheme;
- retain the existing scheme for current scheme members, but auto-enrol new members into a new scheme;
- use their existing scheme for some employees (for example, managers), but use a new scheme for other employees;
- close their existing scheme and make all future contributions into a new scheme.

Any new scheme would need to meet the minimum contribution level, but would not need to have the same contribution levels as the employer's existing scheme. Investment options and costs could also differ.

⁹⁸ The auto-enrolment process is being introduced gradually, with only the largest employers needing to auto-enrol eligible employees from October 2012, at a minimum employer contribution level of 1% of band earnings. All employers will be required to be operating auto-enrolment by April 2017. Once all employers are operating auto-enrolment, contributions will be increased, reaching 8% of band earnings (with a minimum employer contribution of 3%) by October 2018. See PPI (2012) for further details.

⁹⁹ A scheme that meets the minimum contribution requirement

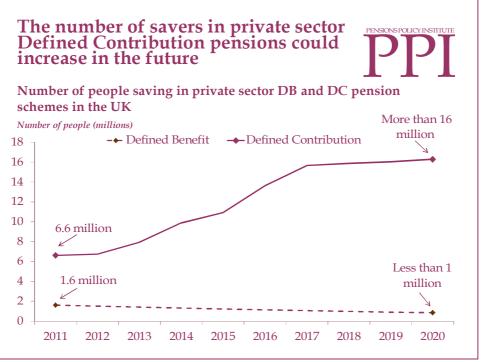
Employers who do not offer an occupational pension or who do not sponsor group or stakeholder personal pension plans must enrol their eligible employees into a new scheme of the employer's choice. To ensure that every employer has access to at least one scheme, the Government has set up the National Employment Savings Trust (NEST), a new pension saving scheme of low-cost, individualised pension savings accounts.

Automatic enrolment will increase the number of Defined Contribution savers

The introduction of automatic enrolment into private pensions is likely to lead to a substantial increase in the number of individuals saving in DC pensions in the future. This is because almost 70% of members in DB schemes in the private sector are in schemes that are closed to new members or to future accruals, so it is anticipated that most new pension savers will be automatically enrolled into a DC pension.

PPI projections suggest that following the introduction of automatic enrolment, and if current trends continue, there could be over 16 million active DC savers by 2020, compared to less than 1 million active DB savers in the private sector at that time (Chart 19).





¹⁰⁰ PPI analysis based on data from BIS Business Population Estimates for the UK and Regions 2011, DWP Pension Provision Survey 2009, Pension Trends and the DWP Labour Market Database. For those individuals auto-enrolled, an opt-out rate of 33% has been assumed. There is assumed to be a decline in active membership of private sector DB schemes consistent with an 80% reduction in the number of open private sector DB schemes between 2007 and 2020. See Appendix 1 for more details. One consequence of the introduction of automatic enrolment is that there are likely to be a very large number of small pension pots (worth less than £5,000) created as individuals leave a pension scheme after relatively short periods of time, or as a consequence of making minimal contributions. The Government has recently estimated there could be up to 4.7 million small pension pots by 2050.¹⁰¹ The Government has launched a consultation in which it is considering options for consolidating small pension pots.

Future levels of private pension saving will depend heavily on how employers who already make contributions into DB and DC pension schemes respond to automatic enrolment. It is not yet clear exactly how employers are likely to respond, and each employer's decision will be based on their own specific circumstances.

Solvency II

Solvency II requirements could make the funding requirement for DB schemes more stringent

In early 2011, the European Commission asked the European Insurance and Occupational Pensions Authority (EIOPA) for advice on the reform of the European Directive for Institutions for Occupational Retirement Provision (IORP).

The objective of the IORP Directive, introduced in 2003, is to provide a prudential framework for pension funds operating in EU member states based on minimum harmonisation and mutual recognition. It enables the establishment of pan-European pension funds that manage the pension schemes of employees in different member states.¹⁰²

The IORP Directive also specifies that pension funds in EU member states should:

- possess professionally qualified governing bodies, sound administrative procedures and adequate internal control mechanisms;
- be transparent by clearly communicating the target level of benefits, risk exposure and investment management costs to plan members;
- protect members against the risk of default by having sufficient assets to cover pension commitments.

One of the issues brought forward by the Commission to EIOPA is whether a reform of the IORP should include extending the accounting regulations used for insurance funds (known as Solvency II) to pension funds. The intention of this would be to make the risks inherent in insured schemes and occupational pension schemes more comparable, harmonise between different institutions

¹⁰¹ DWP (2011a) ¹⁰² FSA (2011) and countries, and to protect members against the risk of insolvency by introducing a risk-based approach.¹⁰³

Solvency II sets up the quantitative and qualitative requirements that insurers must follow in order to reduce the risk of insolvency. In particular, the regulation focuses on:

- the quantitative capital requirement that insurers must hold to reduce the risk of insolvency;
- the requirements for the governance and risk management of insurers, as well as for the effective supervision of insurers;
- other requirements on disclosure and transparency.

If Solvency II requirements were to be extended so as to apply to DB pension schemes, then the schemes would be required to hold sufficient capital to increase the likelihood that they remain solvent under prospective stress environments. Consequently, this requirement could put a further strain on the funding of DB pension schemes and an additional financial burden on the sponsors of DB schemes.

EIOPA submitted its response to the Commission in January 2012 and a White Paper on pensions in the EU was published in February. According to the paper, the Commission will, in 2012, take initiatives to ensure more effective protection of workers' occupational pension rights in the event of insolvency. It will also present a legislative proposal to review the IORP directive. The aim of the review is to maintain a level playing field with Solvency II.¹⁰⁴

State Pension Reform

The Government has recently announced its intention to replace the current state pension system with a single-tier flat rate state pension, set at a level above the Guarantee Credit (for example, £140 a year in 2010 earnings terms) for all people reaching State Pension Age after a specific date in the future (which has yet to be set).¹⁰⁵ The aim of the proposed reform is to simplify the state pension system.

The reform could have significant effects on private sector pension provision and, especially, on DB schemes. Currently, members of DB schemes can be contracted out of the State Second Pension (S2P), and employers and scheme members receive a rebate on their National Insurance Contributions (NICs). Under the proposed reform there would be no rebates as the S2P would be replaced by the single-tier pension.

The removal of contracting-out rebates would put further pressure on the sponsors of DB schemes, as this would require increased funding from other

¹⁰³ European Commission (2011) p.6

¹⁰⁴ European Commission (2012) p.17

¹⁰⁵ Announced in the 2012 Budget

sources or a reduction in the benefits offered to keep the cost to the sponsor of running the pension scheme constant.¹⁰⁶

The Government's agenda to reinvigorate occupational pensions

The Government has expressed its commitment to reinvigorate occupational pensions by encouraging companies to offer high-quality pensions.¹⁰⁷ The Pensions Minister has recently discussed the possibility of introducing a new form of pension provision, described as 'Defined Ambition'.¹⁰⁸

Defined Ambition: Introducing more risk sharing in pension provision

Although full details have yet to be announced, with a Government consultation due to be published in 2012, the aim of Defined Ambition is to allow for more risk sharing to be used in private sector pension provision.

Risk sharing refers to a pension arrangement in which the different risks of pension provision may be shared either between the employer and the employee or between different scheme members. However, it is not yet clear what level of appetite there is among employers to share the risks inherent in pension schemes.

Defined Ambition pensions could therefore be a new type of risk-sharing pension arrangement in the UK, operated under a different regulatory regime than either DB or DC pensions are presently. Although it is not clear what form Defined Ambition pensions may take in the UK, there are some international examples of risk sharing in pension provision that may provide some useful illustrations of how private sector pensions could evolve in the UK.

```
    <sup>106</sup> PPI (2011a)
    <sup>107</sup> Cabinet Office (2010) p.26
    <sup>108</sup> www.telegraph.co.uk/finance/personalfinance/pensions/9193598/A-new-future-for-workplace-pensions.html
```

Case Study 1: The Netherlands¹⁰⁹

As in the UK, the Netherlands has a tradition of final salary DB schemes. However, since the early 2000s sponsors have been switching towards career average DB schemes with conditional indexation and collective DC schemes in response to the increased risks of final salary DB provision.

In schemes with conditional indexation, the contribution rate, the indexation of pensions in payment and the revaluation of benefits accrued by current or deferred members for each year of membership in the scheme depend on the funding position of the scheme.

For example, in years of underfunding, the indexation and revaluation can be lower than the index normally used (inflation and/or wage growth). Once the scheme returns to surplus, the scheme can 'over-index' to make up for previous years of lower indexation and revaluation. The contribution rate can also be adjusted according to the financial position of the scheme.

In the collective DC schemes used in the Netherlands, a fund is built up with the contributions from employers and employees. The pension benefit is calculated as in a DB scheme, following a formula that takes into account years of membership, final or average salary levels and the accrual rate. The key difference with a traditional DB scheme is that the contribution rate is fixed, so the pension benefit is not guaranteed as in a traditional final salary or career average DB scheme. In the Netherlands, collective DC schemes can apply conditional indexation for pensions in payment and benefits accrued.

Case Study 2: Denmark

Denmark has a state pension that provides a flat rate benefit based on citizenship and residency. In addition, DC occupational and personal pensions are well developed.

Whereas in a traditional DC pension the members bear all the risks of pension provision, the Danish system has some risk sharing aspects that help to mitigate some of the risks for members. The most important risk sharing aspect is the use of group-based deferred life annuity contracts among occupational schemes, which are covered by collective labour agreements.¹¹⁰ Occupational schemes can also offer other retirement products such as phased withdrawals and lump sum payments.

Around 42% of contributions into occupational pensions were allocated to deferred life annuities in 2008.¹¹¹ A deferred annuity guarantees a payment at a future point, based on a current minimum conversion factor. In Denmark this factor is based on a guaranteed minimum interest rate, and prudent estimates of future longevity. When the annuity comes into payment it can be boosted by bonus payments if the actual investment performance exceeds the guaranteed return, or if the longevity assumptions have been too prudent. This type of policy provides guaranteed minimum benefits, but also allows participation in any future superior performance. However, its success depends on the equitable distribution of bonuses and requires strong confidence in the integrity of the management of pension institutions.

The use of deferred annuities allows members of DC schemes to have some certainty about future retirement income, thus mitigating investment, longevity and inflation risk. At the same time, those risks are not borne by the employers, as in traditional DB plans.

Summary

There are a number of policy changes that may have an impact on private sector pensions in the UK.

- The introduction of automatic enrolment into workplace pensions is likely to significantly increase the number of members of DC pension schemes to over 16 million by 2020, compared to less than 1 million active members of DB schemes.
- Auto-enrolment could also increase the cost pressure on some existing DB and DC pension schemes, leading to further scheme changes. The overall impact on the number of pension scheme members and the amount saved in pension schemes will depend on the behaviour of both employers and employees in response to automatic enrolment.

¹¹⁰ Andersen, Skjodt (2007)¹¹¹ Rocha et al (2011) Chapter 7

- Possible regulation from the European Union (EU) introducing new solvency rules for pension funds (similar to Solvency II) may help to protect members against the risk of employer default. However, Solvency II requirements could increase capital requirements and put further strain on the funding of DB pension schemes
- The Government's proposed reforms to introduce a single-tier state pension could remove the contracted-out rebates received by DB pension schemes. This would put further pressure on DB pension provision, as schemes would need to change the benefits payable from the scheme or increase contributions from the employer or employee to keep costs constant.
- Introducing 'Defined Ambition' pensions may help scheme sponsors to share some of the risks of pension provision with employees, rather than having most of the risks faced by one party or the other as in pure DB or DC pensions. However the precise form that Defined Ambition pensions could take has yet to be defined, and it is not clear what appetite there is from employers to share risks in this way.

Appendix 1: Technical appendix

Estimates of how the long-term contribution rate required for a 'typical' Defined Benefit scheme has changed over time

Chart A in the Executive Summary (Chart 12 in Chapter 2) provides estimates of the long-term contribution rate required to fund a 'typical' Defined Benefit (DB) scheme at different points in time. These update estimates contained in the first report of the Pensions Commission¹¹², which quantifies the change in the long-term contribution rate required to provide the pension benefits of a typical DB pension scheme between 1950 and 2004.

The estimates are based on a 'typical' DB pension scheme, with the following characteristics:

- An accrual rate of 1/60th of final salary for each year of service
- A Normal Pension Age of 65

The long-term contribution rate required to provide the pension has been estimated based on the present value of benefits accrued from one year's service for a 40 year old man, compared to his salary.

To estimate the change in the long-term contribution rate, this has been performed under scheme rules representative of those in 1950, 2004 and 2012, and also allowing for differences in life expectancy. A 65 year old man in 1950 would have a life expectancy of 12 years, compared with around 19 years for a 65 year old man in 2008, and around 21 years for a 65 year old man in 2012.

The differences in the scheme rules in the different years are shown in Table A1:

Scenario	Scheme rules
40 year old man in 1950	No indexation of benefits in payment
	No indexation of deferred benefits
	No widow benefits
40 year old man in 2008	• Benefits in payment uprated in line with RPI
	• Deferred benefits uprated in line with RPI
	• Widow pension of 50%
40 year old man in 2012	• Benefits in payment uprated in line with CPI
	• Deferred benefits uprated in line with CPI
	• Widow pension of 50%

Table A1: Scheme rules used in calculation

¹¹² Pensions Commission (2004), p123

The estimates are based on a number of economic assumptions, which in turn are based on the latest OBR long-term assumptions¹¹³:

- RPI of 3.2% per year
- CPI of 2% per year
- Average earnings growth of 4.7%
- A discount rate of 5.78% (RPI + 2.5%)

The same assumptions have been used for each year so that the changes seen are purely down to differences in the scheme rules and longevity experience, rather than underlying economic conditions. Changes in these assumptions, in particular in the relative difference between RPI and CPI, would change the required long-term contribution rate.

Estimates of active members of private sector workplace and individual pensions

Chart C in the Executive Summary (Chart 2 in Chapter 1) provides estimates of the number of active members of private sector workplace and individual pensions from 1950 to 2010. These estimates are based on data from the Occupational Pension Schemes Survey¹¹⁴, the Annual Survey of Hours and Earnings¹¹⁵, the 2009/10 Family Resources Survey¹¹⁶ and Labour Market Statistics.¹¹⁷

Within these estimates, some public sector workers who contribute to nonpublic sector pension schemes (such as individual stakeholder pensions) will be included in the chart. Although data for personal pensions is only available in the form used in these charts from 1997, the legislation that made personal pensions available was introduced in 1987.

Chart D in the Executive Summary (Chart 3 in Chapter 1) provides estimates of the number of active members in different types of private sector pensions in 2011. These are PPI estimates based on data from the Pensions Regulator¹¹⁸, the Occupational Pension Schemes Survey, the 2009/10 Family Resources Survey and Labour Market Statistics.

The estimates are meant as a guide to the relative sizes of each type of provision. Some individuals will have individual and workplace pensions, and in these estimates will be counted in the workplace scheme only, and overlaps between the types of provision are not shown. Estimates are of membership of private sector pension schemes, and so exclude membership of public sector pension schemes (including the Local Government Pension Scheme). However, some public sector workers who contribute to non-public

¹¹³ OBR (2011)
 ¹¹⁴ ONS (2011a)
 ¹¹⁵ ONS (2010)
 ¹¹⁶ DWP (2011c)
 ¹¹⁷ ONS (2012c)
 ¹¹⁸ TPR (2011)

sector pension schemes (such as an individual stakeholder pensions) will be included in the chart.

Private sector Defined Benefit and Defined Contribution scheme membership projections

Chart E in the Executive Summary (Chart 19 in Chapter 4) gives a projection of the number of savers in private sector DB and DC pension schemes, based upon PPI analysis.

Membership of DB and DC schemes in 2011 has been estimated using data from the Pensions Regulator¹¹⁹, the Occupational Pension Schemes Survey and the 2009/10 Family Resources Survey. DC saver numbers include all personal and occupational DC pensions and may also contain a small number of public sector savers.

Future membership levels have been estimated using PPI Aggregate Model projections of the labour market¹²⁰, assuming:

- A decline in active membership of private sector DB schemes consistent with an 80% reduction in the number of open private sector DB schemes between 2007 and 2020.
- Automatic enrolment is introduced in stages between October 2012 and April 2017, depending upon employer size. The number of employees eligible to be auto-enrolled at each stage has been estimated using data from BIS¹²¹, DWP¹²² and ONS.¹²³
- 33% of individuals eligible to be auto-enrolled into a workplace pension scheme opt-out.

Due to the variety of data sources used, a number of approximations were required in producing the projections. In addition to this, there is significant uncertainty surrounding the assumptions made, in particular, the opt-out rate under auto-enrolment. For these reasons, the results should be interpreted as a rough estimate, rather than a forecast of future experience.

¹¹⁹ TPR (2011)

¹²⁰ For more information on the PPI Aggregate Model, visit www.pensionspolicyinstitute.org.uk

¹²¹ BIS Business Population Estimates for the UK and Regions 2011

¹²² DWP Pension Provision Survey 2009 and DWP Lifetime Labour Market Database 2008

¹²³ ONS (2010)

Appendix 2: Changes in legislation and regulation

This appendix sets out some examples of the types of changes in legislation and regulation that have increased the costs to sponsors of providing Defined Benefit (DB) pension schemes in the private sector since the 1970s. This is not an exhaustive list, but does give an indication of the range and types of changes that have occurred.

The initial focus of much of the legislation enacted since the 1970s was to protect the rights of early leavers and spouses, and to make the financial position of pension provision more transparent through tighter regulations regarding DB schemes' funding and accounting rules. They were often introduced in response to specific issues, such as high levels of inflation, fraud and employer insolvency.

While the intention of many of the individual changes has been to protect members' rights, or to make the costs of DB pension provision more transparent, the impact of these changes has been to increase the cost and reduce the attractiveness of providing DB pensions.¹²⁴

Measures to protect members' rights and the security of pension benefits

A key change to occupational pension schemes over the last 40 years has been the replacement of discretionary benefits by guaranteed benefits, particularly regarding pensions in payment and deferred pensions.

For example, provisions legislated in the Social Security Acts of 1973 and 1986 introduced greater protection for early leavers. The Social Security Act of 1973 allowed for the preservation of pension rights to those who stayed for 5 years or more with an employer. The Social Security Act of 1986 then reduced this threshold to 2 years. These measures increased the costs of sponsoring DB schemes, as previously early leavers had no right to any benefits they had accrued.

Changes in the taxation of pension fund surpluses

The Finance Act 1986 limited the amount of surplus a pension fund could hold to no more than 5% (i.e. a funding level of 105% of liabilities). The rationale for this legislation was to limit the use of pension contributions to reduce corporate tax liabilities by scheme sponsors in years of high profits. However, this legislation led to employers taking contribution holidays. This contributed to the funding deficits that DB schemes have experienced since the early 2000s.

EU regulations, such as equal treatment of men and women's pensions

From 6 April 1978 a person could accrue entitlement to an earnings-related addition to their Basic State Pension through the State Earnings Related Pension Scheme (SERPS). An employer could contract its scheme out of SERPS if it was designed to provide a pension at least as good as a statutory minimum, known as the Guaranteed Minimum Pension (GMP). Given the different State Pension Age (SPA) for men and women at the time, GMP was accrued differently for men and women.¹²⁵

In May 1990, the European Court of Justice ruled that occupational pension schemes had to pay equal benefits to men and women in relation to service from 17 May 1990. This was formalised into UK law through the Pensions Act 1995 and most schemes equalised pension ages and overall benefit scales between the sexes. With effect from 6 April 1997, Guaranteed Minimum Pensions were no longer accrued. However, schemes are still liable to pay GMP for those members who had accrued it between 1978 and 1997.

The different GMP payment ages for men and women can still result in a difference of GMP entitlements for men and women - there has not been a single method agreed for equalising GMP. However, successive Governments have maintained that schemes are under an obligation to equalise overall scheme benefits accruing from 17 May 1990, including GMPs. The Government has recently proposed a consultation on the relevant method for GMP equalisation.¹²⁶

Advance Corporation Tax changes

Another taxation change was the removal of the Advance Corporation Tax (ACT) dividend tax credit. Between 1973, when advance corporation tax was first introduced, to 1997, pension funds (and charities and non-taxpaying individuals) were able to recover the tax paid by companies on their dividends to shareholders. When first introduced, ACT was set at 30% with pension schemes able to reclaim this in full. The rate was linked to the rate of basic rate income tax between 1973 and 1993 but was reduced by the Conservative Government in 1993 to 22.5% immediately and 20% the following year, resulting in a fall in income for pension schemes.

This reduction was continued by the Labour Government in 1997, which abolished ACT and replaced it with a quarterly instalment scheme for corporation tax for large companies and a reduced rate of corporation tax. The rationale for the reforms was to alter the balance between dividend payments and company re-investment to stimulate growth in the economy. However, it is not clear whether the companies benefiting from the changes were also those whose pension schemes were affected.

¹²⁵ DWP (2012) ¹²⁶ DWP (2012) Pension schemes were no longer able to reclaim corporation tax paid on dividends. The short term impact on pension schemes was a fall in income for both Defined Benefit (DB) and Defined Contribution (DC) pensions, both in the workplace and for individual pensions.

Tighter accounting standards for Defined Benefit pensions

Since 2002 companies have been required to report their funding status following the Financial Reporting Standard 17 (FRS17). Under FRS17 surpluses or deficits are reported in employers' balance sheets. FRS17 prescribes that liabilities are valued using a discount rate set with reference to AA corporate bond yields. Under EU regulations, companies are also required to report their funding position under the International Accounting Standard 19 (IAS19), which is similar to FRS17.

The impact of the tighter accounting standards has been to introduce more transparency to a company's accounts, ensuring that financial statements reflect the true value of a company's assets and liabilities, and that the full costs of providing an employee pension are disclosed by being reflected in employers' balance sheets.

Revised standard for Defined Benefit pension scheme funding

The Pensions Act 2004¹²⁷ introduced tighter regulations for DB scheme funding, which came into effect from September 2005.

Trustees of DB schemes must now adopt a statutory funding objective. This requires the scheme to have sufficient assets to cover an actuarial estimate of the amount needed to pay all of the benefits as they fall due. Trustees must prepare a statement of funding principles specifying how this objective will be met along with a schedule of contributions specifying rates of contributions due to be paid by the employer and by active members.

DB pension schemes are required to make valuations of their assets and liabilities every three years. If the statutory funding objective is not met, the trustees must prepare a recovery plan to correct the shortfall within a specified period. This process is monitored by the Pensions Regulator (TPR), which has powers to seek additional funding for a pension scheme.

The revised standard has different objectives than the standard that it replaced, the Minimum Funding Requirement (MFR) which had been introduced in 1997. The goal of the MFR was not to guarantee that all members' benefits could be secured, but to ensure that a scheme that was fully funded on an MFR basis, could fully protect pensions already in payment. It was also supposed to give younger members a reasonable expectation of achieving benefits equivalent to those due from the scheme at retirement.

Appendix 3: The funding position of DB schemes

The funding position of a Defined Benefit (DB) scheme is measured as the ratio of the assets held in the scheme to the liabilities owed to current and future pensioners. The funding position provides a snapshot of the financial position of the scheme at a given point in time.

There are different ways of measuring liabilities

The liabilities of a DB scheme represent the value of the benefits promised by the scheme to its members. There are different ways of measuring DB schemes' liabilities. These include:

- Scheme specific funding: The Scheme Specific Funding (SSF) regime replaced the Minimum Funding Requirement (MFR) in 2005 and requires the majority of DB schemes to complete an actuarial valuation at least every 3 years. The valuation compares the value of the schemes' assets at the time of the valuation against a funding target (also called 'technical provisions'). The funding target is estimated on the basis that the scheme continues to operate, and uses assumptions agreed by the sponsor and trustees, covering issues such as longevity, investment return, wage and price increases. There is therefore some flexibility in the assumptions used in the calculation, but they must be 'prudent'. In assessing the level of prudence to be adopted, the trustees are required to consider the ability and willingness of the employer to continue to support the scheme (called the 'employer covenant'). The SSF valuation is used to set contribution levels and if the liabilities are valued as being less than assets, the SSF valuation is also used as the basis for a recovery plan to close the deficit that must be submitted to the Pensions Regulator.128
- Section 179 of the Pensions Act 2004 (s179): This is an actuarial valuation, and is a measure of pension liabilities enacted for the purpose of calculating the Pension Protection Fund levy.¹²⁹ The s179 basis is, broadly speaking, what would have to be paid to an insurance company to take on the payment of PPF levels of compensation, which are less than 100% of the promised pension.
- Full buyout / solvency basis measurement: This valuation is done when a company wants to sell a closed pension scheme to a third party; usually an insurance company. This measure is useful to highlight the cost of transferring all risks to an insurer. This measure uses a similar gilts-based discount rate as the s179 basis but covers full scheme benefits.
- The Financial Reporting Standard 17 (FRS17): This is an accounting standard for DB schemes that requires surpluses or deficits to be reported in employers' balance sheets. The standard relates to the recognition of retirement benefits of all kinds within the accounts of a sponsoring employer (as opposed to the accounts of a pension scheme). The required

¹²⁸ www.thepensionsregulator.gov.uk/docs/quick-guide-for-journalists-ssf.pdf

¹²⁹ This is the annual amount that a pension scheme is charged by the Pension Protection Fund to finance the PPF work. It is composed of a scheme-based levy and a risk-based levy. It is similar to an insurance premium.

figures are actuarial estimates of how much the 'intended benefits' are worth and how much they will cost. It prescribes that liabilities are valued using a discount rate set with reference to AA corporate bonds. Alongside this, in a full FRS17 valuation the assets are valued on a mark to market basis¹³⁰. There is an additional standard called Section 19 of the International Accounting Standards (IAS 19), which is similar in nature to the FRS 17.

The funding position depends on which measure of liabilities is used

Depending on the measure used, the aggregate funding position of DB schemes can vary significantly. For example, as of 30 April 2012, the aggregate funding position of DB schemes was a deficit of £217 billion on an s179 basis and a deficit of £816 billion on a full buyout basis (Table A2).

Table A2: Funding position of UK private sector DB schemes according to different measures of schemes liabilities, as of 30 April 2012¹³¹

	s179	Full buyout
Total Assets (£bn)	£1,031bn	£1,031 bn
Total Liabilities (£bn)	£1,248bn	£1,848 bn
Funding Position (£bn)	-£217bn	<i>-£</i> 816 bn
Funding Level (%)	82.6%	55.8%

The figure is higher when measured on a buyout basis because the s179 measure only includes the amount that would be paid by the PPF level of compensation, which is lower than the full pension that would be paid under the normal DB scheme rules.

Valuations of assets and liabilities can vary on a daily basis

The funding position of a DB scheme will depend on the value of assets and liabilities on the date when the valuation is done. The value of assets held by schemes varies on a daily basis due to fluctuations in their market value.

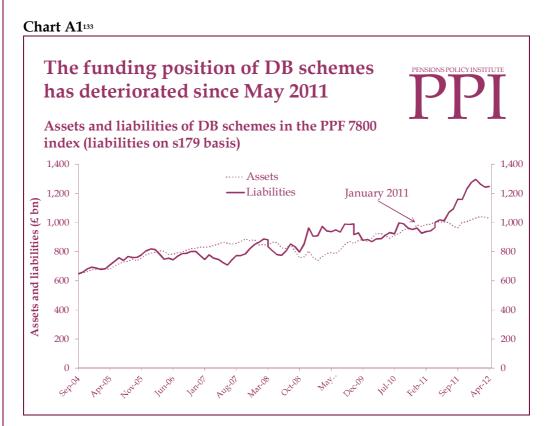
The value of liabilities also changes over time. Most valuation methodologies establish a direct link between pension liabilities and bond yields, which are used to set a discount rate. The discount rate is the assumed investment return in the present value calculation of assets. In recent years, falling long-term interest rates have led to falling bond yields. For example, as of 30 April 2012, the yield of the 10-year UK government gilt was 2.18%, compared to 3.03% as of 31 September 2010.¹³² This, together with other risks, has contributed to an

¹³¹ PPF/TPR (2011), table 4.1.£bn figures rounded to the nearest £1bn, percentages to the nearest 0.1% updated using information from the PPF7800 Index

¹³² Bank of England interactive database

¹³⁰ Mark to market accounting refers to value an asset by its current market price. This approach recognises gains and losses of a pension scheme in the year they occur. This accounting method is promoted by the Financial Accounting Standards Board and the International Accounting Standards Board, in a move toward convergence of global accounting standards.

increase in DB pension schemes liabilities (on a s179 basis) from around £990bn in September 2010 to around £1.2trn in April 2012 (Chart A1).



Liabilities have increased faster than assets, and the funding position of DB schemes has declined from around 105% of liabilities in January 2011 to around 82% in April 2012.

The volatility of a Defined Benefit scheme's funding position depends on the assets held by the scheme

Both assets and liabilities are affected by the returns on investments, so the overall impact of changing investment returns on the funding position of a scheme will depend on the mix of assets held. For example, if bond yields fall:

- The assets of a scheme holding bonds will increase (the value of bonds increase as the yield falls).
- The liabilities will also increase on many measures, as the lower bond yield leads to a lower discount rate being used to value the liabilities.

If the scheme has fully matched assets and liabilities (for example, only holding bonds), the increase in assets and liabilities will be the same, and so the funding position will remain unchanged. However, if the scheme holds some more risky assets (such as equities), only some of the assets increase in value while all of the liabilities are increased by the lower discount rate. The funding position of this scheme is therefore worse than it was before the fall in bond yields.

¹³³ PPF 7800 Index as of December 2011, www.pensionprotectionfund.org.uk

Glossary

Accrual Rate - The factor used to calculate benefits in a defined benefit scheme. For example, a scheme with an accrual rate of 1/60th, will provide 1/60th of pensionable salary for each year of pensionable service.

Accrue - Pension benefits building up in a pension fund.

Active members – Current employees who are contributing (or have contributions made on their behalf) to an occupational pension scheme.

Actuary – A professional advisor who applies financial and statistical theories to solve issues involving longevity probabilities and other contingencies. This includes advice on risk management, assessing how likely an event may be and the costs associated with it and estimating future trends.

Annuity – An insurance product, purchased with an individual pension pot that has been built up in a Defined Contribution pension scheme, to provide a pension that is usually payable for life.

Auto-enrolment – Under the Pensions Act 2008 employers will have a duty to automatically enrol eligible employees into a qualifying workplace pension scheme from October 2012 onwards. Employees will have the option to opt-out.

Bond - A debt investment with which the investor loans money to a borrower (company or government) for a defined period of time at a specified interest rate.

Buy-in – where the pension scheme trustees choose to invest scheme assets in a bulk annuity contract that covers some or all of the liabilities of the scheme. The bulk annuity is held as an asset of the scheme and the liability to pay members' benefits remains a liability of the scheme.

Buyout – The process by which the liability to pay some or all of the benefits under a pension scheme is transferred to another financial entity, such as an insurance company.

Career Average Revalued Earnings (CARE) Scheme – A type of defined benefit scheme that calculates retirement benefits using the average of revalued pay over the member's career.

Closed scheme - A pension scheme that does not admit new members.

Collective Defined Contribution – A type of pension scheme which brings together characteristics of both Defined Contribution and Defined

Benefit schemes. In a Collective Defined Contribution scheme, contributions are paid into a collective fund instead of individual accounts. Collective Defined Contribution schemes allow risk-sharing between scheme members.

Conditional indexation – A type of pension in which the indexation of pensions in payment and the revaluation of benefits accrued by current or deferred members for each year of membership in the scheme depend on the funding position of the scheme.

Contingent asset – Assets which are owned by a scheme sponsor and which may be offered as security to the trustees of a pension scheme. The asset is transferred to the scheme if a contingent event (such as company insolvency) occurs.

Contribution holiday – A period of time in which pension contributions are temporarily suspended.

Deferred annuities – A type of annuity that comes into payment at a specific future point in time.

Deficit – A pension fund has a deficit when the net present value of the pension promises is greater than the market value of the assets of the pension fund.

Defined Benefit – In DB schemes the pension payable is often linked to the final salary of the scheme member in the last year, or the last few years before retirement, and their length of service. The link, however, could be with earnings over the whole career, for example, a career-average pension.

Defined Contribution – In DC schemes the employer usually contributes a specified amount, usually expressed as a percentage of salary. The actual level of pension received by the employee at retirement will depend on the value of the accumulated pension fund and, if an annuity is taken, on annuity rates.

Discount rates – The discount rate is used to calculate the present value of the projected pension benefits.

Employer covenant – This refers to the relationship between a sponsor of a scheme and the scheme. The nature and strength of the employer's covenant will depend on its ability and willingness to meet the costs of members' benefits.

Equity - A share, or any other security, representing an ownership interest.

Enhanced transfer value (ETV) – An offer to deferred members of a DB scheme to transfer out of the scheme in exchange for a statutory amount equivalent to the pension given up plus a cash or pension enhancement.

Gilt – Bonds issued by the UK Government, which have a fixed interest rate. If they are index-linked, the value of the gilts increases each year with inflation, which has the effect of increasing the amount of the interest paid.

Group Personal Pension – A personal pension scheme that is organised through the employer but still takes the form of individual contracts between the employee and the pension provider.

Guaranteed Minimum Pension (GMP) – the minimum pension that an occupational scheme must provide for members contracted out of the State Earnings Related Pension (SERPS) between 6 April 1978 and 5 April 1997.

Hybrid scheme - a pension scheme that offers both DB and DC benefits.

Liability – The calculated amount of money that a scheme may have to pay out to scheme members at the present time or in the future.

Liability Driven Investment (LDI) – An investment strategy that involves managing assets to meet liabilities, rather than simply to maximise returns. For pension funds, this may mean hedging interest rate and inflation risks, often using swaps, since these often represent larger risks than market movements.

Limited Price Indexation – A legal measure that means benefits from an occupational pension scheme must increase by at least a set rate each year. It only applies to benefits earned after 5 April 1997. Benefits earned before this date are covered by the Guaranteed Minimum Pension (GMP).

Longevity swap – A risk-transfer insurance product that covers sponsors of a DB scheme against the risk of rising longevity among the members of the scheme covered by the swap.

Member - A person who has joined a pension scheme.

Member-nominated trustees – Under UK law, one-third of trustees of an occupational Trust must be made up of member-nominated trustees (MNT). A MNT is a trustee that has been voted into position by some or all of the scheme's members.

Normal Pension Age (NPA) – The earliest age at which a member is entitled to receive benefits on his/her retirement from employment to which the scheme relates.

Occupational pension scheme – a pension scheme established by an employer or employers who are then responsible for providing pension benefits to the employees who are members of the scheme.

Open scheme – A scheme that continues to accept new members.

Pension benefits – The pensions and lump sums that members receive from their pension when they retire.

Pension Increase Exchange (PIE) – An offer to a member of a DB scheme to exchange their right to a pension that must be uprated in line with changes in inflation every year for an initially higher but non-increasing or a fixed-increasing pension. Only non-statutory increases can be exchanged.

Pension rights – The pension benefits that have built up for a pension scheme member.

Price indexed - Increasing each year in line with price inflation.

Risk sharing – A pension scheme which shares risks (such as investment risk) between the employer and scheme members or between scheme members.

Risk-transfer – A strategy for DB pension schemes that involves transferring some or all of the risks of pension provision to an insurer through an insurance product. Risk-transfer products can cover some or all the members of a scheme.

Security – General term covering all investments, such as equities and bonds.

Self-administered schemes – An occupational pension scheme where the administration is carried out directly on behalf of the trustees and not handed over to an insurance company.

Single-tier state pension – New state pension proposed by the current Government that would entail a single state pension above the Guarantee Credit level (for example £140 per week in 2010 earnings terms).

Stakeholder pensions – Stakeholder pensions are a type of personal pension, introduced in April 2001 and legislated for in the Stakeholder Pension Schemes Regulations 2000. Stakeholder pensions must meet certain Government standards to ensure they are flexible and have a limit on annual management charges.

State Pension Age (SPA) – The minimum legal age at which a basic state pension can be claimed. The SPA depends on an individual's birth date. It is currently 65 years for men. SPA for women is increasing from April 2010 in

a series of steps to age 65 by November 2018. The SPA for both men and women will increase to 66 between December 2018 and October 2020.

Surplus – A pension fund has a surplus when the market value of the assets is greater than net present value of the liabilities.

Trust – Under this legal arrangement, named people (trustees) hold pension assets on behalf of, and in the best interests of, a separate group of people (beneficiaries).

Trustee – The person(s) or company appointed to carry out the terms of the trust.

Underfunded - A pension scheme's assets are less than its liabilities.

Winding-up – When a pension scheme is discontinued or 'closed' to future accruals, it can begin a process of settling benefits and transfers its obligations to another legal entity.

Wound-up scheme – This is a scheme that has notified the Pensions Regulator that it has completed winding-up procedures

Glossary sources:

Department for Work and Pensions - www.dwp.gov.uk

Eversheds - UK Pensions Law Handbook 2012/13

The Pensions Regulator Glossary www.thepensionsregulator.gov.uk/Glossary.aspx

Acknowledgements and Contact Details

The Pensions Policy Institute is grateful for input from many people in support of this paper, including:

John Adams
Stella Beale
Sally Bridgeland
Wayne Daniel
Adam Davis

Melanie Duffield Richard Edes Maritha Lightbourne Verena Menne Michael Pomery CVO Imran Razvi Daniel Redwood Rhoslyn Roberts Daniela Silcock Emma Watkins

Editing decisions remained with the authors who take responsibility for any remaining errors or omissions.

The Pensions Policy Institute is an educational charity promoting the study of pensions and retirement income policy through research, analysis, discussion and publication. The PPI takes an independent view across the entire pensions system.

The PPI is funded by donations, grants and benefits-in-kind from a range of organisations, as well as being commissioned for research projects. To learn more about the PPI, see: <u>www.pensionspolicyinstitute.org.uk</u>

© Pensions Policy Institute, 2012

Contact: Niki Cleal, Director Telephone: 020 7848 3744 Email: <u>info@pensionspolicyinstitute.org.uk</u>

Pensions Policy Institute King's College 26 Drury Lane 3rd Floor, Room 311 London WC2B 5RL

The PPI is grateful for the continuing support of its Platinum and Gold members:

MetLife The Pensions Regulator Prudential UK & Europe Threadneedle Investments AXA Investment Managers BlackRock Capita Hartshead Department for Work and Pensions Hymans Robertson RPMI

A full list of supporting members is on the PPI's website.

The Family Resources Survey 2009/2010 is funded by the Department of Work and Pensions and was provided by the UK Data Archive, University of Essex. The UK Data Archive and the funders of the surveys bear no responsibility for further analysis and interpretation.

The Nuffield Foundation is an endowed charitable trust that aims to improve social well-being in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded the development of the PPI models.

References

Andersen, C. Skjodt, P. (2007) *Pension Institutions and Annuities in Denmark* The World Bank, elibrary.worldbank.org

Barr, N. Diamond, P. (2008) *Reforming Pensions: Principles and Policy Choices* Oxford: Oxford University Press

Blake, D. (2003) *The United Kingdom Pension System: Key Issues* Discussion paper: UBS Pensions Series 011, 452. Financial Markets Group, London School of Economics and Political Science

Cabinet Office (2010) *The Coalition: our programme for government* www.cabinetoffice.gov.uk

Confederation of British Industry (CBI) (2011) A view from the top: the CBI 2011 pensions survey (CBI) www.cbi.org.uk

Clark, G.L. (2006). "The UK Occupational Pension System in Crisis", In: Pemberton, H. Thane, P. Whiteside, N. (eds) *Britain's Pension Crisis: History and Policy* Oxford: Oxford University Press

Department for Work and Pensions (DWP) (2008) *Risk Sharing Consultation* (DWP) www.dwp.gov.uk

Department for Work and Pensions (DWP) (2010) *The impact of using CPI as the measure of price increases on private sector occupational pension schemes.*

Department for Work and Pensions (DWP) (2010b) *Risk Sharing: information for employers considering making changes to Defined Benefit pension schemes* (DWP) www.dwp.gov.uk

Department for Work and Pensions (DWP) (2011a) *Meeting future workplace pension challenges: improving transfers and dealing with small pension pots* (DWP) www.dwp.gov.uk

Department for Work and Pensions (DWP) (2011b) *Impact of the move to CPI for Occupational Pensions, 12 July* (DWP) www.dwp.gov.uk

Department for Work and Pensions (DWP) (2011c) *Family Resources Survey.* www.dwp.gov.uk.

Department for Work and Pensions (DWP) (2012) *Consultation on draft regulations and possible equalisation method* (DWP) www.dwp.gov.uk

European Commission (EC) (2011) *Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II)* (EC) ec.europa.eu

European Commission (EC) (2012) *White Paper, an agenda for adequate, safe and sustainable pensions* (EC) ec.europa.eu

Eversheds (2012) UK Pensions Law Handbook 2012/13.

Financial Services Authority (FSA) (2011) *Occupational Pensions Fund Directive* (FSA) www.fsa.gov.uk

Her Majesty's Treasury (HMT) (2006) *The Annuities Market* (HMT) www.hm-treasury.gov.uk

Hymans Robertson (2011) *Buy-outs, Buy-ins and Longevity Hedging* 2011 www.hymans.co.uk

Incentiveexercises.org.uk (2012) Incentive Exercises, A Code of Good Practice

Johnson, P. Yeandle, D. Boulding, A (2010) *Making automatic enrolment work, a review for the Department for Work and Pensions* (DWP) ww.dwp.gov.uk

KPMG (2011) Enhanced Transfer Values, KPMG Pensions Survey August 2011 (KPMG) www.kpmg.com

KPMG (2012) 2012 KPMG LDI survey, exploring the Evolution of the LDI Market (KPMG) www.kpmg.com

Lane Clark & Peacock (LCP) (2011a) *LCP Accounting for Pensions* 2011 (LCP) www.lcp.uk.com

Lane Clark & Peacock (LCP) (2011b) *LCP Pension Buyouts 2011* (LCP) www.lcp.uk.com

Mackenzie, G.A. (2010) *The Decline of the Traditional Pension. A comparative study of threats to retirement Security* Cambridge: Cambridge University Press

MetLife (2011) Third Annual Finance Director Survey www.metlife.co.uk

National Association of Pension Funds (NAPF) (2010) Press Release: *Pension funds seek clarity on inflation switch.*

National Association of Pension Funds (NAPF) (2011) *NAPF Annual Survey* 2011 (NAPF) www.napf.co.uk

National Association of Pension Funds (NAPF) (2012) *DWP Select Committee Inquiry into EU pensions policy. Submission by National Association of Pension Funds* (NAPF) www.napf.co.uk

Office of Budget Responsibility (2011) Fiscal Sustainability Report.

Office of National Statistics (ONS) (2010) *Annual Survey of Hours and Earnings* (ONS) www.ons.gov.uk

Office of National Statistics (ONS) (2011a) *Occupational Pension Schemes Survey* 2010 (ONS) www.ons.gov.uk

Office of National Statistics (ONS) (2011b) *Pensions Trends* (ONS) www.ons.gov.uk

Office of National Statistics (ONS) (2012a) Consultation on: the recommended method of reflecting owner occupiers' housing costs in a new additional measure of consumer price inflation; and the strategy for Consumer Price statistics. www.ons.gov.uk.

Office of National Statistics (ONS) (2012b) *MQ5: Investment by Insurance Companies, Pension Funds and Trusts* (ONS) www.ons.gov.uk.

Office of National Statistics (ONS) (2012c) *Labour Market Statistics*. www.ons.gov.uk.

Pensions Commission (2004) *Pensions: Challenges and Choices: The First Report of the Pensions Commission* www.webarchive.org.uk/wayback/archive/20070802120000/http://www.pensionscommission.org.uk/index.html

Pensions Policy Institute (PPI) (2007) *Will Personal Accounts increase pension savings*? (PPI) www.pensionspolicyinstitute.org.uk

Pensions Policy Institute (PPI) (2010) *The impact of tax policy on employer*sponsored pension provision (PPI) www.pensionspolicyinstitute.org.uk

Pensions Policy Institute (PPI) (2011a) *An assessment of the Government's options for state pension reform* (PPI) www.pensionspolicyinstitute.org.uk

Pensions Policy Institute (PPI) (2011b) *Briefing Note:* 57 - *How could CPI indexation affect pension income?* (PPI) www.pensionspolicyinstitute.org.uk

Pensions Policy Institute (PPI) (2011c) *Retirement income and assets: the implications of ending the effective requirement to annuitise by age* 75 (PPI) www.pensionspolicyinstitute.org.uk

Pensions Policy Institute (PPI) (2012) *The Pensions Primer* (PPI) www.pensionspolicyinstitute.org.uk

Pension Protection Fund (PPF) and The Pensions Regulator (TPR) (2012) *The Purple Book* (PPF) (TPR) www.pensionprotectionfund.org.uk

Stewart, F. Yermo, J. (OECD) (2008) *Pension fund governance challenges and potential solutions* (OECD) www.oecd.org

The Pensions Regulator (TPR) (2010) *Incentive Exercises, Regulatory Guidance* (TPR) www.thepensionsregulator.gov.uk

The Pensions Regulator (TPR) (2011) *DC trust: a presentation of scheme return data* (TPR) www.thepensionsregulator.gov.uk

Rocha, R. Vittas, D. Rudolph, H.P. (2011) *Annuities and Other Retirement Products: Designing the Payout Phase* The World Bank, www.oecd.org

TUI Travel (2011) *TUI Travel PLC Annual Report & Accounts* TUI Travel, www.tuitravelplc.com

Crown copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.



