

# The Purple Book

DB PENSIONS UNIVERSE RISK PROFILE | 2010

Purple 2010 gives the most comprehensive picture to date of the risks faced by PPF-eligible defined benefit pension schemes.

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# **Executive Summary**

This is the fifth edition of the Pensions Universe Risk Profile (The Purple Book), a joint annual publication by the Pension Protection Fund (the PPF) and the Pensions Regulator (the regulator) which focuses on the risks faced by defined benefit (DB) pension schemes, predominantly in the private sector.

This year, the Purple Book has a new look with less in the way of text than in earlier years. This is in large part the natural outcome of the accumulation of data and a desire to keep the publication to a manageable length. It also reflects the aim to get the publication out sooner after the end of the year to which it relates.

### 1.1 Introduction

The main focus in each year's Purple Book is the position at the end of March for the year in question, and a comparison of how risks have changed over the previous year. The economic and financial market environment improved somewhat over the 12 months to March 2010, for the UK and for most major economies, leading to reduced risks for DB pension schemes:

- The UK economy came out of recession in the fourth quarter of 2009. By the first quarter of 2010, the year-on-year decline in GDP had eased to 0.2 per cent from 5.5 per cent in the first quarter of 2009.
- Insolvency Service statistics showed that the number of company liquidations fell from 4,964 at a quarterly rate in the first quarter of 2009 to 4,060 in the first quarter of 2010, a drop of 18.2 per cent.
- Equity markets recovered strongly after the sharp declines of 2008 and 2009. The FTSE all share index and the S&P 500 both rose by 47 per cent over the year to end-March 2010.
- Government bond yields rose, 10-year gilt yields rising from 3.2 per cent to 3.9 per cent while 10-year AA corporate bond yields rose from 4.8 per cent to 4.9 per cent.
- Meanwhile, the Bank of England kept its policy rate unchanged at 0.5 per cent while the Bank's cumulative asset purchases (so-called Quantitative Easing) rose from £15 billion to £200 billion.

Table 1.1 | Economic and financial environment

Number of members	End of March 2006	End of March 2007	End of March 2008	End of March 2009	End of March 2010	End of September 2010
GDP growth year-on- year	3.2%	2.4%	2.2%	-5.5%	-0.2%	2.8%*
Company liquidation rate – in 12 months to	0.7%	0.6%	0.6%	0.8%	0.8%	0.8%*
Company liquidations	3,505	3,190	3,241	4,964	4,060	3,974*
FTSE all share	3,047	3,283	2,927	1,984	2,910	2,868
10 year gilt yield	4.4%	5.0%	4.4%	3.2%	3.9%	2.9%
10 year AA corporate bond yield	4.9%	5.5%	5.6%	4.8%	4.9%	4.0%
Bank of England policy rate	4.50%	5.25%	5.25%	0.50%	0.50%	0.50%
Quantitative Easing	-	-	-	£15 billion	£200 billion	£200 billion

Source: Office for National Statistics, the Insolvency Service, Bank of England, Bloomberg

The UK economic recovery gained further momentum in the second and third quarters of 2010 with GDP rising by 2.8 per cent year-on-year by the third quarter. The FTSE All-Share Index at the end of September was slightly below the end-March level while 10-year gilt yields were almost one percentage point lower.

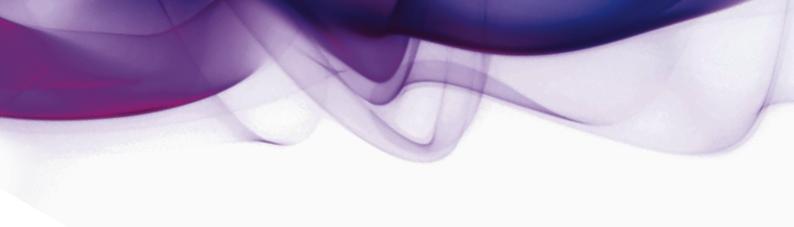
Much of the analysis of the 2010 Purple Book ('Purple 2010') is based on new information from scheme returns issued in December 2009 and January 2010 and returned to the regulator by the end of March 2010.

From this year, it has been decided to remove schemes in the PPF assessment period (376 in total, representing around one per cent of total liabilities) so as to capture accurately the risk presented by DB schemes whose employers had not experienced an insolvency event by 31 March 2010.¹ The PPF's balance sheet, as presented in its Annual Report and Accounts, contains a provision for schemes in the assessment process when their entry to the PPF is probable. By removing schemes in assessment, one gets a more accurate picture of the risks present in the DB population that have not yet been reflected in the PPF's balance sheet. Schemes in assessment also ceased to pay a PPF levy from 2008/09. The dataset excluding schemes in assessment, therefore, gives a better indication of the number of levy payers.

The dataset covers 6,596 PPF-eligible DB schemes. This represents some 96.3 per cent of the estimated total number of schemes and some 99.8 per cent of estimated total liabilities. The 2010 dataset is similar in size (after adjusting for schemes in assessment) to that used for the Purple Books 2008 and 2009 and is significantly larger than the datasets used in the first two Purple Books. The availability of the larger dataset reflects, among other factors, improvements to the design of the scheme return intended to permit better data validation procedures.

<sup>\*</sup>These relate to Q3

<sup>1</sup> The PPF Annual Report and Accounts 2009/10 show there were 376 schemes in assessment or likely to be in assessment at 31 March 2010. See link http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/ARA\_0910.pdf This recognises all segregated parts of schemes as separate schemes. For analytical purposes in Chapter 10 scheme sections and segregated parts have both been amalgamated into one scheme and schemes in surplus removed.



Purple 2010 includes more accurate information on the set of hybrid schemes with open DB parts. Previously, many hybrid schemes with open DC sections and closed DB sections would classify themselves as being open to new members. For Purple 2008 and 2009, the regulator carried out a separate survey of the 100 largest hybrid schemes which showed that over 70 per cent had closed DB sections. For Purple 2010, the scheme return was changed to establish whether the DB provision offered by the scheme was open to new members. This results in a marked reduction in the percentage of open DB and hybrid schemes, but a smaller impact on the percentage of members in such schemes.

Comparisons are made not only with the Purple Books for 2006, 2007, 2008, and 2009 but also with the extended Purple 2006, 2007, and 2008 datasets. These extended datasets more fully reflect the universe of PPF-eligible schemes in each year. Their construction became possible following the submission and cleaning of further scheme information as part of the PPF levy invoicing and collection processes.

The funding comparisons in Purple 2010 are on a somewhat different basis from those in past Purple Books. In past Purple Books, the funding figures for earlier years were derived by 'rolling back' the dataset for the latest year using movements in financial markets. This had the advantage that changes in funding were not affected by changes in the sample. A drawback of this approach, however, is that it potentially overstates past estimates of scheme funding. As a result, the funding estimates used in Chapter 4, Scheme Funding, are taken from the data used for the 2008 and 2009 Purple Books. For 2006 and 2007, when the sample sizes were significantly smaller, we have used the results for the relevant extended Purple datasets.

On 8 July 2010, the Minister of State for Pensions announced the Government intention to use the CPI rather than the RPI for statutory minimum revaluation and indexation for occupational pension schemes and for relevant payments made by the PPF and the Financial Assistance Scheme. Draft regulations providing for this change are subject to consultation. The Purple Book does not take account of any possible impact of the proposed change on scheme funding. All data are based on regulations that were in place at 31 March 2010.

The Purple Books have been based on the most comprehensive datasets extracted from the DB pensions universe to date, representing a step change in available information, particularly for small and medium-sized schemes. The publications have focused on the risk of scheme members not receiving promised benefits and of claims on the PPF. These in turn depend on two key elements, namely the risk of the sponsoring employer becoming insolvent and the extent of scheme underfunding. The main focus of this publication is risk at 31 March 2010.

### 1.2 The data

- The main body of the analysis in Purple 2010 is based on new scheme returns for a dataset of 6,596 defined benefit schemes covering around 12 million memberships.<sup>2</sup> This represents around 96.3 per cent of PPF-eligible schemes and 99.8 per cent of liabilities. Complete information is not available for the remaining schemes and, hence, these have been excluded from the sample.
- In the earlier Purple Books, the dataset included schemes in the PPF assessment process. Schemes were excluded when they transferred into the PPF.
- From Purple 2010 (and the PPF7800 index from May 2010), schemes in assessment have been excluded from the dataset so as to capture accurately the risk presented by DB schemes whose employers had not experienced an insolvency event by 31 March 2010.
- Schemes in assessment also ceased to pay a PPF levy from levy year 2008/09 onwards.
   The dataset excluding schemes in assessment, therefore, gives a better indication of the number of levy payers.
- On a s179 basis, as at end-March 2010, there were 376 schemes in assessment with total assets of £8.4 billion and total liabilities of £9.5 billion.<sup>3</sup> These represent around one per cent of total assets and liabilities, up from around 0.5 per cent in 2007. Given their relatively small size, the implications of their removal for year-on-year comparisons are limited.
- It is estimated that the eligible universe of schemes, excluding those in assessment at end-March 2010, was around 6,850, a reduction from 6,900 in March 2009.
- The dataset represents a slightly higher proportion of total PPF-eligible schemes to that used in the Purple Books for 2008 and 2009 (and much higher than that used in the earlier Purple Books).
- The fact that the dataset accounts for such a large proportion of the universe means that results for the universe would be only slightly different from the results presented in Purple 2010.⁴

<sup>2</sup> A 'membership' is one individual's participation in one scheme. One individual can have multiple memberships. Hence the number of memberships exceeds the number of individuals.

**<sup>3</sup>** The 376 figure for schemes in assessment treats all segregated parts of schemes as separate schemes.

**<sup>4</sup>** This point is illustrated by an examination of Annex A of Purple 2009. The summary statistics differed little between the sample and extended 2008 datasets. The anticipated improvement in coverage suggests a similar outcome in relation to the 2010 sample.

# 1.3 Scheme Demographics

- At March 2010, there were 12.0 million memberships of DB and DB parts of hybrid schemes. Of these, 5.2 million (43.7 per cent) were deferred, 4.3 million (36.2 per cent) were pensioners and 2.4 million (20.1 per cent) were active memberships.
- 18 per cent of DB and hybrid schemes were open to new members and new accrual while 58 per cent were closed to new members and 21 per cent to future accrual.
- Open schemes tend to be relatively large in terms of membership. 34 per cent of DB and hybrid scheme memberships were open to new members, 60 per cent were closed to new members and 5 per cent were closed to future accrual.
- There has been little change in the proportions of schemes by status, excluding hybrid schemes, between 2009 and 2010. 21 per cent were open, down from 22 per cent in 2009 and 33 per cent as recently as 2007. The number closed to new accrual rose from 20 per cent in 2009 to 23 per cent in 2010 while the percentage closed to new members fell from 55 per cent to 54 per cent.
- The number of scheme closures continues to fall, but a higher proportion of closing schemes closed to future accrual in 2009. Of the schemes closing, around 65 per cent closed to new accrual compared with 50 per cent in 2008.
- Improved information on hybrid schemes has allowed a more accurate presentation of their status as regards defined benefit provision. We now have a much better idea of the split between open and closed schemes for the PPF-eligible universe which includes DB parts of hybrid schemes.
- Although this year's figures for DB and hybrid schemes show a shift from open schemes to closed schemes, with the percentage in open schemes falling from 27 per cent to 18 per cent, this movement is strongly influenced by our improved information on hybrid status. A number of schemes which would have been classed as open using last year's methodology are now classed as closed this year. The proportion of members in open DB and hybrid schemes has fallen by 3 percentage points since last year.
- Smaller schemes are more likely to be closed to future accrual.
- The proportion of pensioner member tends to increase with scheme size.
- Schemes with between 1,000 and 4,999 members have the highest proportion of active members per scheme.
- The proportion of active members has fallen approximately 0.6 percentage points between 2009 and 2010 and the proportion of deferred members has risen by the same amount.

### 1.4 Scheme Funding

- The aggregate s179 funding position of the schemes in the Purple 2010 dataset at 31 March 2010 was a surplus of £38.3 billion. This is a marked improvement on the deficit of £200.6 billion for the schemes in the Purple 2009 dataset at 31 March 2009. The aggregate funding ratio for the two datasets rose from 80 per cent at 31 March 2009 to 104 per cent at 31 March 2010.
- The aggregate full buy-out funding level for the two datasets has moved from 58 per cent in 2009 to 68 per cent in 2010.
- The assumptions used for estimating liabilities on a s179 basis changed in October 2009 and reduced liabilities by about 7.5 per cent. This change is responsible for about £75 billion of the £238.9 billion improvement in the funding position on the s179 basis.
- 63 per cent of the liabilities are attributable to the 3 per cent of schemes with more than 10,000 members.
- The highest concentration of schemes with greater than 100 per cent funding on a buyout basis is in the 5 to 99 members category.
- Funding levels tend to increase as the proportion of pensioner liability increases.
- The aggregate s179 funding level is volatile and has varied from 80 per cent to 109 per cent at March 31 dates between 2006 and 2010 on the assumptions used at the time.

# 1.5 Funding Sensitivities

- Changes in estimated market conditions and financial and demographic assumptions since March 2003 have caused the monthly aggregate funding position of pension schemes measured on a s179 basis to vary by around £358 billion (with the greatest surplus in June 2007 at £149 billion and the greatest deficit in March 2009 at £209 billion).<sup>5</sup>
- The funding ratio (total assets divided by total liabilities) peaked at 121 per cent in June 2007 and troughed at 79 per cent in March 2009.
- The estimated number of schemes in deficit on a s179 basis was at its lowest point in June 2007 at around 2,200 schemes (33 per cent of the dataset) and peaked in March 2009 at around 5,600 (85 per cent).
- Since March 2010, the date for the funding estimates in Chapter 4, falls in bond yields have resulted in a worsening in aggregate scheme funding of around £35 billion by the end of October.
- A 0.1 percentage point (10 basis point) reduction in gilt yields raises scheme liabilities by 2 per cent and raises scheme assets by 0.4 per cent. A 2.5 per cent rise in equity markets raises scheme assets by one per cent.
- A 0.1 percentage point (10 basis point) rise in gilt yields raises the end-March 2010 aggregate balance by £12 billion from £38 billion to £50 billion while a 2.5 per cent rise in equity prices raises the aggregate balance by £11 billion.
- If the assumed rate of inflation increases by 0.1 per cent, with nominal interest rates unchanged, then the s179 liabilities for schemes increases by approximately 0.9 per cent or £8 billion.
- An increase in longevity such that the experienced mortality is now equivalent to that
  of an individual two years younger would increase schemes' liabilities by around 4.3 per
  cent, or £38 billion.
- All the model-based funding sensitivities in this chapter are on a s179 basis, taking
  the funding position at 31 March 2010 as the base and using the Purple 2010 dataset.
  The sensitivities do not take into account the use of derivative instruments to hedge
  changes in interest rates, inflation, equities or longevity. The assumptions were
  changed in March 2008 and October 2009. These changes improved scheme funding
  by around £50 billion and £75 billion respectively.<sup>6</sup>

<sup>5</sup> The estimates presented here are a little different from those shown in the PPF 7800 release for end-August: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_7800\_September\_10.pdf
For example, for 31 March 2010 the surplus in Purple 2010 is estimated to be £38.3 billion compared with £52.7 billion in the PPF7800. This is because Purple 2010 is based on a more up-to-date dataset.

**<sup>6</sup>** For more information see PPF7800 January 2009 and PPF 7800 November 2009: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF%207800%20January%2009.pdf http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_7800\_November\_09.pdf

### 1.6 Insolvency risk

- The recession resulted in a large rise in the total level of corporate liquidations in England and Wales: from 3,241 at a quarterly rate in the first quarter of 2008 to a peak of 5,041 in the second quarter of 2009, an increase of 56 per cent.
- Since the second quarter of 2009, economic recovery has resulted in a 19 per cent drop in the level of company liquidations.
- In the 12 months ending June 2010, approximately 0.8 per cent of companies went into liquidation, compared with a recession peak of 0.9 per cent and a pre-recession trough of 0.6 per cent. In the latest recession, the insolvency rate rose by 50 per cent while in the early-1990s recession it more than doubled.
- During the recent recession, the estimated number of schemes (or sections of schemes) entering a PPF assessment period peaked in the first quarter of 2009 at 52 and had fallen to 38 by the first quarter of 2010, a drop of 27 per cent. The level of schemes entering PPF assessment in the year to the first quarter of 2010 was, however, still around 20 per cent higher than in the two years before the recession.
- The number of schemes entering assessment and thought to be in s179 deficit at the time of the insolvency event fell 42 per cent between the first quarters of 2009 and 2010. This represents a greater decline than that observed for the overall number of schemes entering assessment and reflects the fact that scheme funding improved over the year to the first quarter of 2010.
- The weighted average one-year-ahead insolvency probability for the Purple 2010 dataset, derived from Dun & Bradstreet (D&B) failure scores, was 0.4 per cent as at March 2010.
- Over the first six months of 2010, the average insolvency probability of the 500 schemes to which the PPF has the largest exposure (in terms of scheme underfunding adjusted for the volatility of its assets) fell from 0.6 per cent to 0.5 per cent.
- Schemes with sponsoring employers in the communications industry have the highest average insolvency probability (3.8 per cent), followed by construction and retail trade (both 1.9 per cent).
- In Purple 2010, as in previous years, there is a relationship between scheme size and insolvency probability. Smaller schemes (as measured by membership or s179 liabilities) tend to have higher insolvency probabilities.
- For scheme liabilities of more than £50 million, sponsoring employers of schemes in surplus have a higher average insolvency probability than sponsors of schemes in deficit. The reverse was true for schemes of that size in Purple 2009. The composition of the dataset between deficit and surplus schemes was very different in the two years: 2,826 schemes were in surplus in 2010 compared with 978 in 2009.

### 1.7 Asset Allocation

- Purple 2010 data show a continuation of trends seen in recent years: a falling equity allocation and rising allocations to bonds and 'other investments'; within equities, rising overseas and falling UK allocations; and within bonds, rising corporate bond and falling government allocations.
- The equity allocation as a proportion of total scheme assets fell to 42.0 per cent from 46.4 per cent in 2009. Meanwhile, the share of gilts and fixed interest increased to 40.4 per cent from 37.1 per cent in 2009. The share of 'other investments' rose from 4.5 per cent to 5.4 per cent.
- The overseas share in total equities rose from 53.8 per cent in 2009 to 55.3 per cent in 2010, the UK share falling from 44.2 per cent to 40.1 per cent. The share of unquoted equities increased from 1.9 per cent in 2009 to 4.4 per cent in 2010.<sup>7</sup>
- Within gilts and fixed interest, the corporate share rose from 38.3 per cent in 2009 to 42.2 per cent in 2010. Meanwhile, the share of government fixed interest fell from 29.0 per cent to 24.6 per cent. The index-linked share rose slightly after a decline in 2009.
- Looking at simple averages, the allocation to UK equities (55.3 per cent) is still
  considerably bigger than that for overseas equities (43.7 per cent), although this gap
  has continued to narrow.8
- Within gilts and fixed interest on a simple average basis, the allocation to government fixed interest fell sharply from 45.6 per cent to 37.3 per cent while the allocation to corporate fixed interest securities rose from 37.3 per cent to 43.0 per cent. The average allocation to index-linked securities rose from 17.1 per cent to 19.8 per cent.
- Smaller schemes tend to have a higher allocation of equities to UK equities and smaller allocation to overseas equities. Within fixed interest, smaller schemes tend to have a higher allocation to government fixed interest and a smaller allocation to index-linked securities.
- As in the earlier Purple Books, more mature schemes tend to invest more heavily in gilts and fixed interest and less in equities.
- Movements in asset shares reflect both movements in relative asset prices and decisions to allocate more or less to particular asset classes.
- Flow data from the Office of National Statistics show that, since the third quarter of 2003, there have only been three quarters of net investment in equities and only five quarters of net disinvestment in gilts and fixed interest.

<sup>7</sup> These do not sum to 100 per cent in 2009 and 2010 due to rounding.

<sup>8</sup> Simple averages are the means without weighting for scheme size.

## 1.8 Risk Developments

- The Long-Term Risk Model (LTRM) is the key tool that the Board of the Pension
  Protection Fund (PPF) uses to understand and quantify the risks it faces over the long
  term. It helps the Board of the PPF assess the level of resources required to meet
  potential future claims.
- There was a marked fall in long-term risk to the Fund between end-March 2009 and end-March 2010. This was largely attributable to the improvement in scheme funding over the period.
- The PPF published its long-term funding strategy in August 2010. As part of this strategy, the PPF aims to be self-sufficient (i.e. fully funded, with zero exposure to market, inflation and interest rate risk and protection against claims and longevity risk) by 2030.
- Current projections, produced using output from the Long Term Risk Model (LTRM), suggest that the PPF has around an 83 per cent probability of meeting this funding objective.<sup>9</sup>
- Looking at shorter-term risk measures, total weighted deficit (scheme sponsor oneyear-ahead insolvency probability multiplied by scheme deficit) for deficit schemes has fallen to £280 million in 2010 from £480 million in 2009, reflecting improved funding.
- The proportion of weighted deficit attributable to schemes with the worst insolvency probabilities is 55.3 per cent, up from 19.8 per cent in 2009.
- Looking at the industry breakdown, schemes with sponsors in the manufacturing sector have the largest weighted deficit at around 45 per cent of the total.
- The PPF's risk-based levy for individual schemes has so far been based on 12-month
  ahead insolvency probabilities for scheme sponsors provided by D&B and a measure of
  scheme funding at a single point in time (though not necessarily the same point).
- In October 2010, the PPF published a consultation document proposing changes to the levy to take effect from 2012/13.<sup>10</sup>
- In the new framework, funding would be calculated so that market movements
  will be averaged over five years. Allowance for investment risk will be built into this
  new underfunding measure. New insolvency probabilities will be used and there will
  be a narrower range of insolvency probabilities and fewer insolvency bands, with
  measurement averaged over one year.

<sup>9</sup> This probability is sensitive to a range of modelling assumptions. For a description of the modelling methodology and assumptions employed, see http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_Funding\_Strategy\_ Document.pdf

<sup>10</sup> http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/levy\_consultation\_oct10.pdf

# 1.9 Levy Payments

- The PPF has been collecting a levy determined mainly by the risk schemes pose to the Fund, for four years. It is expecting to collect £592 million for the 2009/10 levy year from 6,900 schemes. This compares with £651 million in 2008/09, £585 million in 2007/08 and £271 million in 2006/07.
- The expected collection for 2009/10 is £108 million less than the £700 million estimate, owing to such factors as: schemes appealing the insolvency probabilities upon which their levies are based; and several large schemes entering the PPF assessment period and, therefore, not paying a levy.
- For 2009/10, total levies amounted to 0.07 per cent of total scheme assets, a slight reduction on the 0.08 per cent in the previous year.
- In 2009/10, 340 schemes had their risk-based levy capped at 1 per cent of liabilities. This is five per cent of the total number of schemes. The liabilities of capped schemes equalled £4.6 billion or less than one per cent of total liabilities.
- The top 100 levy payers accounted for £213 million, 36.5 per cent of the total levy, but 42.8 per cent of liabilities.
- The number of schemes paying no risk-based levy in 2009/10 was 363, lower than the 473 in the previous year. The weaker economic climate resulted in lower scheme funding levels and, therefore, fewer schemes obtained the 140 per cent funding level on a s179 basis required to avoid paying a risk-based levy.
- In 2009/10, the number of schemes paying no risk-based levy represented six per cent
  of total schemes and five per cent of total liabilities, compared to seven and 10 per cent
  respectively for 2008/09.
- This chapter also looks at the trends in levy payments by various scheme characteristics over the four-year period from 2006/07 for a set of 6,409 schemes, so as to abstract from changes resulting from different composition of the sample.
- The distribution of levy by industry was broadly similar in 2009/10 to that in the 2008/09 levy year. Manufacturing, services, and finance, insurance and real estate account for around 70 per cent of the eligible DB universe, and also pay around 70 per cent of the total PPF levy.
- The manufacturing industry represents the largest portion of the DB universe and thus
  pays the largest proportion of the total levy. However, wholesale trade, transportation,
  and the mining industries are the leading levy payers on a per member basis.

### 1.10 Schemes in assessment

- All schemes go through an Assessment Period before entering the PPF. The PPF aims to complete assessment for most schemes within two years. During assessment, the PPF wants to ensure that all the data held for the scheme is accurate.
- The PPF's Annual Report and Accounts 2009/10 shows there were 376 schemes in assessment or likely to be in assessment at 31 March 2010 compared with 326 at 31 March 2009.<sup>11</sup> Of these, 317 were recognised in provisions, up from 287 at 31 March 2009. In these figures, all segregated parts of schemes have been counted as separate schemes.
- In this chapter, for analytical purposes, scheme sections and segregated parts
  are amalgamated at a scheme level, and schemes in surplus excluded. After this
  amalgamation, there were 271 schemes (209,000 members) in a PPF assessment
  period as at 31 March 2010, compared with 240 (201,000 members) a year earlier.
- The rise reflects 84 new schemes entering and remaining in assessment, 35 schemes transferring into the PPF and 14 being rescued, rejected or withdrawn. In addition, four sections treated independently in the 2009 assessment dataset have been merged into scheme-level data for 2010.
- On a s179 basis, as at 31 March 2010, the aggregate assets of schemes in assessment totalled £8.4 billion and their liabilities £9.5 billion. Liabilities averaged £34.9 million per scheme and assets averaged £30.9 million.
- The funding estimates for schemes in assessment are calculated in a somewhat different way from the funding estimates in Chapter 4, Scheme Funding. For material schemes the asset value is the actual asset value as at 31 December 2009 rolled forward to 31 March 2010 whereas in Chapter 4 the valuations are generally older. Liabilities have been adjusted for cash flows out of the scheme.
- The more up-to-date valuations for schemes in assessment take account of the derisking that certain material schemes have put in place after discussion with the PPF.
- The funding data that were provided for schemes in assessment for use in Purple was based on the same data as used for the actuarial PPF valuation at 31 March 2010 published in the Annual Report and Accounts.

<sup>11</sup> The PPF recognises provisions for claims in respect of schemes where eventual entry into the PPF is judged probable. See PPF Annual Report and Accounts, Annex S3 p118. http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/ARA\_0910.pdf

- - The Board of the PPF monitors the investment strategies and liabilities of schemes in assessment and considers whether, and how, the investment risks associated with these schemes might be mitigated with the asset strategy of the Fund.<sup>12</sup>
  - Schemes with liabilities below £5 million account for 35.1 per cent of schemes in assessment but only 28.4 per cent of the Purple 2010 dataset.
  - The aggregate funding level (total assets divided by total liabilities) of the schemes in assessment as at 31 March 2010 was 88.4 per cent, below the aggregate funding levels of the schemes in the Purple 2010 dataset (104.3 per cent) but well above the aggregate funding level of the schemes in assessment a year earlier (70.5 per cent).
  - The larger schemes in assessment are, on average, better funded than the smaller schemes. Schemes with over £50 million in assets have an average funding level of 93.4 per cent. Those with less than £50 million in assets have an average funding level of 78.2 per cent.
  - According to the latest scheme return data prior to their entering assessment, schemes invested most heavily in equities (47.5 per cent of total assets) and gilts and fixed interest (26.5 per cent). This equity share is higher than the Purple 2010 dataset share of 42.0 per cent of assets.
  - Where the industry is known, just over half (50.2 per cent) of the companies sponsoring schemes in assessment operated within the manufacturing sector. The service sector accounts for 14.3 per cent of sponsors of schemes in assessment and the retail trade 11.0 per cent.
  - The representation of manufacturing in schemes in assessment is much greater than the sector's share of scheme sponsors in the PPF universe (31.5 per cent), which in turn is greater than the share of manufacturing in the UK economy (12 per cent).

<sup>12</sup> See PPF Statement of Investment Principles, March 2010: 5.3.1 to 5.32. http://www.pensionprotectionfund.org.uk/ DocumentLibrary/Documents/SIP\_Mar2010.pdf

### 1.11 PPF Compensation

- The PPF made its first compensation payments in the 2006/07 financial year following the first scheme transfer in November 2006. A total of £1.4 million was paid out in 2006/07, rising to £17.3 million in 2007/08, £37.6 million in 2008/09 and £81.6 million in 2009/10. These figures include regular compensation and lump sum payments.
- At 31 March 2010, 20,775 members were in receipt of PPF compensation, up from 12,723 the previous year. The average annualised rate of compensation in payment for pensioner members at 31 March 2010 was £3,823 a year. The number of members with compensation not yet in payment (deferred members) as at 31 March 2010 totalled 26,058. For these members, the average annualised compensation accrued was £3,360 a year.
- As of 31 March 2010, males constituted 76 per cent of pensioner and deferred members, down from 78 per cent the previous year.<sup>14</sup>
- Spouses and dependants account for 16 per cent of those currently in receipt of compensation, receiving 10 per cent of compensation in payment.
- Members may have more than one tranche of compensation, reflecting different sections of their compensation coming into payment at different ages (referred to as Normal Retirement Ages or NRAs). The majority of both pensioner and deferred members have an NRA of 65 for their largest tranche of compensation.
- More than 75 per cent of both pensioner and deferred compensation is attributable to former employees of the manufacturing sector.
- As of 31 March 2010, only 73 pensioners were affected by the compensation cap (£29,748.68 a year for those aged 65 in 2010/11 after the 90 per cent scaling).
- The vast majority of members are in receipt of (or have accrued) compensation of less than 25 per cent of the cap.
- When an eligible defined benefit (DB) scheme transfers into the PPF, the PPF pays
  compensation of up to 90 per cent of scheme pension (subject to a compensation
  cap) to members who are yet to reach their normal retirement age (NRA). The PPF will
  generally pay compensation equivalent to 100 per cent of scheme pension to those
  already over their NRA.<sup>15</sup>
- The majority of compensation and liabilities was accrued in relation to service before April 1997 and is therefore not subject to indexation. Compensation accrued on or after 6 April 1997 is increased each year in line with Retail Prices Inflation (RPI) capped at 2.5 per cent with a floor of 0 per cent. In July 2010, the Minister for Pensions announced the Government's intention to move to the use of the Consumer Prices Index (CPI) for the purpose of pension indexation and revaluation. Draft regulations providing for this change are currently subject to consultation. All figures presented in this chapter are, where relevant, based on RPI inflation indexation and revaluation

<sup>13</sup> The annualised average rate of compensation is calculated by scaling up compensation over one month to reflect one year. This measure, which excludes lump sum payments, is used in order to accurately represent compensation in payment at 31 March 2010.

<sup>14</sup> Unless otherwise stated, totals and averages relating to pensioners include dependants.

<sup>15</sup> For full details of the conditions and processes governing the payment of PPF compensation, please visit http://www.pensionprotectionfund.org.uk/Pages/Compensation.aspx

### 1.12 Risk Reduction

- The total number of recognised contingent assets (CAs) in place has risen by 16 per cent, from approximately 620 for the 2009/10 levy year to 720 for 2010/11.
- Schemes in the Purple 2010 dataset (excluding those schemes which were in a PPF assessment period as at 31 March 2010) had by 7 April 2010 certified approximately £29.1 billion of deficit reduction contributions (DRCs) to reduce deficits for the 2010/11 levy year. This represents an increase on the £26.5 billion certified for the previous levy year.
- The DRCs were not only paid by companies sponsoring the largest schemes; around 55 per cent of the £29.1 billion was paid by employers sponsoring schemes with fewer than 10,000 members.
- MQ5 data from the Office for National Statistics (ONS) covering 350 large pension schemes, including 100 local authorities, suggest that employers' special contributions (i.e. those in excess of regular annual contributions) have increased in 2009 and 2010 relative to the levels observed in 2008.
- Analysis of the latest technical provisions and recovery plan data is scheduled to be published in December 2010 as part of the Pensions Regulator's Scheme Funding publication.
- Schemes continue to reduce investment risk by shifting towards gilts and fixed interest and away from equities.
- Schemes continue to diversify their investments. In comparison to previous years, overseas and unlisted equity allocations constitute larger shares of total equity investments. Within gilts and fixed interest, there is an increased allocation to corporate bonds.<sup>16</sup>
- Quarterly surveys by F&C Asset Management suggest that interest rate hedging
  activity has increased in the first half of 2010 following a decline in the second half of
  2009. Inflation hedging activity peaked in the second and third quarters of 2009.
- The volume of scheme liabilities insured as part of pension buy-outs and buy-ins was lower in 2009 (£3.7 billion) than 2008 (£7.9 billion) but has picked up in 2010 with £3.3 billion transacted in the first six months, according to figures from Lane, Clark and Peacock and Hymans Robertson.
- Total scheme liabilities of £7.1 billion were hedged in longevity swap deals in the 12 months to June 2010.17

All the PPF/TPR sourced statistics in this publication are produced in accordance with the UK Statistics Authority Code for official statistics which came into force in January 2009.

All the information contained in the Purple Book is for general interest only and we would like to draw the attention of the reader to the approximate nature of all calculations of an actuarial nature. For more information please see the detailed descriptions of the calculation methodology in each chapter of the text.

**<sup>16</sup>** See Chart 7.3 in Chapter 7, Asset allocation.

<sup>17</sup> Buy-outs, Buy-ins and Longevity Hedging, Hymans Robertson, Q1 Update

2

# The Data

## 2.1 Summary

- The main body of the analysis in Purple 2010 is based on new scheme returns for a dataset of 6,596 defined benefit schemes covering around 12 million memberships. 

  This represents around 96.3 per cent of PPF-eligible schemes and 99.8 per cent of liabilities. Complete information is not available for the remaining schemes and, hence, these have been excluded from the sample.
- In the earlier Purple Books, the dataset included schemes in the PPF assessment process. Schemes were excluded when they transferred into the PPF.
- From Purple 2010 (and the PPF7800 index from May 2010), schemes in assessment
  have been excluded from the dataset so as to capture accurately the risk presented by
  DB schemes whose employers had not experienced an insolvency event by 31 March
  2010. The PPF's balance sheet in its Annual Report and Accounts contains a provision
  for schemes in the assessment process when their entry to the PPF is probable.
  Examining the set of schemes excluding those in assessment places the focus on risks
  that have not been reflected in the PPF's balance sheet.
- Schemes in assessment also ceased to pay a PPF levy from levy year 2008/09 onwards.
   The dataset excluding schemes in assessment, therefore, gives a better indication of the number of levy payers.
- As at end-March 2010, there were  $376^{19}$  schemes in assessment with total assets of £8.4 billion and total liabilities of £9.5 billion. These represent around one per cent of total assets and liabilities, up from around 0.5% in 2007. Given their relatively small size the implications of their removal for year-on-year comparisons are limited.
- It is estimated that the eligible universe of schemes, excluding those in assessment at end-March 2010, was around 6,850, a reduction from 6,900 in March 2009.
- The dataset represents a slightly higher proportion of total PPF-eligible schemes to that used in the Purple Books for 2008 and 2009 (and much higher than that used in the earlier Purple Books).
- The fact that the dataset accounts for such a large proportion of the universe means
  that results for the universe would be only slightly different from the results presented
  in Purple 2010.<sup>20</sup>

**<sup>18</sup>** A 'membership' is one individual's participation in one scheme. One individual can have multiple memberships. Hence the number of memberships exceeds the number of individuals.

<sup>19</sup> Treating all segregated parts of schemes as separate schemes.

<sup>20</sup> This point is illustrated by an examination of Annex A of Purple 2009. The summary statistics differed little between the sample and extended 2008 datasets. The anticipated improvement in coverage suggests a similar outcome in relation to the 2010 sample.

### 2.2 Introduction

The PPF covers certain defined benefit (DB) occupational schemes and DB elements of hybrid schemes. Some DB schemes will be exempt from the PPF, including:

- unfunded public sector schemes;
- some funded public sector schemes, for example, those providing pensions to local government employees;
- schemes to which a Minister of the Crown has given a guarantee; and
- schemes which began to wind up, or were completely wound up, prior to 6 April 2005.

For a more comprehensive list see 'eligible schemes' on the PPF's website at: http://www.pensionprotectionfund.org.uk/About-Us/eligibility/Pages/Eligibility.aspx

The information used in Chapters 3 to 8 of this publication comes from three primary sources, as described below.

### Scheme returns provided to the Pensions Regulator

Most of the analysis in this year's publication is based on new scheme returns issued in December 2009 and January 2010 and returned by 31 March 2010. This year's scheme returns give more accurate information on the number of hybrid schemes with a DB element.

### Voluntary form reporting

Electronic forms are available on the Pensions Regulator's website for pension schemes to provide data regarding contingent assets (CAs), valuation results on a s179 basis, deficit reduction contributions (DRCs) and the s179 valuation results following block transfers. More information on DRCs and CAs is given in Chapter 12, Risk Reduction.

### Sponsor failure scores supplied by Dun & Bradstreet (D&B)

The D&B failure scores (ranging from 1 to 100), which cover all the scheme sponsors of PPF-eligible DB schemes, are designed to predict the likelihood that a sponsor will cease operations without paying all creditors over the next 12 months. Each score corresponds to a probability of insolvency, which is used in the PPF's risk-based levy calculations. A score of 1 represents the businesses with the highest probability of insolvency and 100 the lowest.

The data used in Chapters 9 Levy Payments, 10 Schemes in Assessment and 11 PPF Compensation are not based on the scheme return information but are instead derived from the PPF's business operations.



The Purple 2010 sample covers over 96 per cent of the estimated number of PPF-eligible schemes; the missing schemes are small.

The Purple 2010 sample covers almost all scheme liabilities.

## 2.3 The PPF-eligible DB universe<sup>21</sup>

**Table 2.1** Distribution of schemes excluding those in the PPF assessment process by number of members at 31 March 2010

Number of members	Fewer than 100	100 – 999	1,000 - 4,999	5,000 - 9,999	10,000+	Total Schemes (final estimates)
Estimated Purple 2010 universe	2568	3046	832	184	220	6850
Purple 2010 dataset	2342	3018	832	184	220	6596
Purple 2010 dataset as % of 2010 PPF-eligible DB universe	91.2%	99.1%	100.0%	100.0%	100.0%	96.3%

Source: PPF/The Pensions Regulator

**Table 2.2** Distribution of s179 liabilities (£ billion) excluding those of schemes in the assessment process by number of members at 31 March 2010

Number of members	Fewer than 100	100 – 999	1,000 - 4,999	5,000 - 9,999	10,000+	Total Liabilities
Estimated Purple 2010 universe	11	83	138	100	557	890
Purple 2010 dataset	10	82	138	100	557	888
Purple 2010 dataset as a % of 2010 PPF-eligible universe	91.2%	99.1%	100.0%	100.0%	100.0%	99.8%

Source: PPF/The Pensions Regulator

<sup>21</sup> The universe estimates are based on an assessment of the number of additional schemes for which full data will become available.

**Table 2.3** Purple datasets and universe estimates including schemes in the PPF assessment process

	Number of schemes	Purple sample as a percentage of final universe estimate
Estimated 2006 DB universe	7,800	
Purple 2006 dataset	5,772	74%
Estimated 2007 DB universe	7,500	
Purple 2007 dataset	5,892	79%
Estimated 2008 DB universe	7,300	
Purple 2008 dataset	6,898	94%
Estimated Purple 2009 universe	7,20022	
Purple 2009 dataset	6,885	96%
Estimated Purple 2010 universe	7,200	
Purple 2010 dataset	6,972	97%

Source: PPF/The Pensions Regulator

The declining universe reflects schemes winding up, scheme mergers, schemes transferring into the PPF and block transfers.

<sup>22</sup> This compares with the estimate of 7,100 for the 2009 universe in Purple 2009. Subsequent cleaning of the data for the 2009/10 levy year indicated that there were around 100 extra PPF-eligible schemes. These were small schemes and their inclusion in a fuller 2009 dataset would have had only a marginal impact on the key results.

### 2.4 Funding estimates

In presenting analysis at 31 March 2010, Chapter 4, Scheme Funding, uses data that, as far as possible, reflect the position at that date. This year, the method for calculating historical funding figures differs from that employed in previous years. In the Purple Books for 2007, 2008 and 2009, the funding figures for earlier years were derived by 'rolling back' the dataset for the latest year using movements in financial markets. A drawback of this approach, however, is that it potentially overstates past estimates of scheme funding. In rolling back the assets to previous years, scheme funding is determined solely by market movements. Hence this methodology implicitly assumes that deficit reduction contributions put in place for the current levy year were in place for previous levy years. This may inflate estimates of scheme assets in relation to past levy years and, as a result, downplay any underlying improvement in funding.

This year, for March 2008 and March 2009, we have taken the funding figures published in the 2008 and 2009 Purple Books. In both years very large samples were used, representing 94 per cent and 96 per cent of schemes, 97 per cent and 99 per cent of liabilities respectively. For 2006 and 2007, when the sample sizes were significantly smaller, we have used the results for the extended Purple data sets published in the Annexes to the 2007 and 2008 Purple Books. This approach gives the best record of how overall scheme funding has changed over time.

The bulk of the analysis uses funding estimates on a section 179 (s179) basis. This is, broadly speaking, what would have to be paid to an insurance company to take on the payment of PPF levels of compensation. The PPF uses estimates of scheme funding on a s179 basis in the calculation of individual scheme-based levies.

As in previous years, actuaries at the PPF and the Pensions Regulator have also produced full buy-out estimates of the funding position for the Purple 2010 dataset. Liabilities and deficits have also been estimated using the technical provisions measure. More information on the methodology used in deriving the various estimates is given in Chapter 4, Scheme Funding. From this year, we have ceased to include estimates on the FRS17 basis used in UK company accounts. This is due to concerns over the reliability of such estimates given that information on the relevant discount rates and longevity assumptions is not supplied to the regulator or the PPF.

On 8 July 2010, the Minister of State for Pensions announced the Government intended to use the CPI rather than the RPI for statutory minimum revaluation and indexation for occupational pension schemes and for relevant payments made by the PPF and the Financial Assistance Scheme. Draft regulations providing for this change are subject to consultation. The Purple Book does not take account of any possible impact of the proposed change on scheme funding. All data are based on regulations that were in place at 31 March 2010.

3

# Scheme Demographics

### 3.1 Summary

- At March 2010, there were 12.0 million memberships of DB and DB parts of hybrid schemes. Of these, 5.2 million (43.7 per cent) were deferred, 4.3 million (36.2 per cent) were pensioners and 2.4 million (20.1 per cent) were active memberships.
- 18 per cent of DB and hybrid schemes were open to new members and new accrual while 58 per cent were closed to new members and 21 per cent to future accrual.
- Open schemes tend to be relatively large in terms of membership. 34 per cent of DB and hybrid scheme memberships were open to new members, 60 per cent were closed to new members and 5 per cent were closed to future accrual.
- There has been little change in the proportions of schemes by status, excluding hybrid schemes, between 2009 and 2010. 21 per cent were open, down from 22 per cent in 2009 and 33 per cent as recently as 2007. The number closed to new accrual rose from 20 per cent in 2009 to 23 per cent in 2010 while the percentage closed to new members fell from 55 per cent to 54 per cent.
- The number of scheme closures continues to fall, but a higher proportion of closing schemes closed to future accrual in 2009. Of the schemes closing, around 65 per cent closed to new accrual compared with 50 per cent in 2008.
- Improved information on hybrid schemes has allowed a more accurate presentation
  of their status as regards defined benefit provision. We now have a much better idea
  of the split between open and closed schemes for the PPF-eligible universe which
  includes DB parts of hybrid schemes.
- Although this year's figures for DB and hybrid schemes show a shift from open schemes
  to closed schemes, with the percentage in open schemes falling from 27 per cent to 18
  per cent, this movement is strongly influenced by our improved information on hybrid
  status. A number of schemes which would have been classed as open using last year's
  methodology are now classed as closed this year. The proportion of members in open
  DB and hybrid schemes has fallen by 3 percentage points since last year.
- Smaller schemes are more likely to be closed to future accrual.
- The proportion of pensioner member tends to increase with scheme size.
- Schemes with between 1,000 and 4,999 members have the highest proportion of active members per scheme.
- The proportion of active members has fallen approximately 0.6 percentage points between 2009 and 2010 and the proportion of deferred members has risen by the same amount.

### 3.2 Introduction

This chapter describes the composition of the dataset in this year's Purple Book. It includes figures for the total number of schemes and total scheme membership as well as giving breakdowns by size, maturity, scheme status and industrial classification.

For each edition of the Purple Book, a dataset has been collated including all appropriate schemes where scheme return information has been processed and cleaned. In subsequent months, more scheme returns are processed and cleaned and these are incorporated into the existing dataset to produce an 'extended' dataset. For 2006 and 2007, the increased coverage produced significantly different results to the original datasets. However, for 2008 and 2009 the original Purple datasets were much larger and the increased coverage made only a small difference. Accordingly, comparisons are made with previous publications as follows:

- Purple 2006 extended dataset;
- Purple 2007 extended dataset;
- Purple 2008 original dataset, and
- Purple 2009 original dataset.

### 3.3 Scheme Status

Scheme status in this Purple Book is split between:

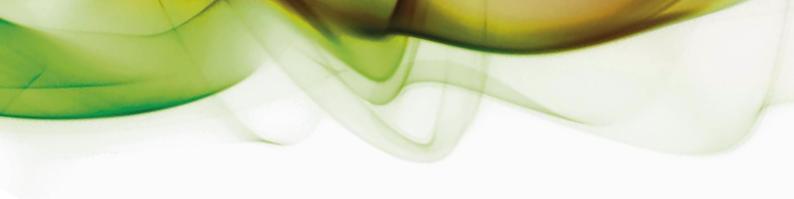
- open schemes, where new members can join the DB section of the scheme and accrue benefits;
- schemes closed to new members, in which existing members continue to accrue benefits;
- schemes closed to future accruals, where existing members can no longer accrue new years of service; and
- schemes that are winding up.

Because many larger employers have adopted the strategy of migrating their pension provision towards defined contribution (DC) by opening a DC section in an existing DB scheme, many hybrid schemes may accept new members but no longer allow new (or existing) members to accrue defined benefits.

This has been handled differently across different editions of the Purple Book. In Purple 2006, 40 per cent of memberships were in the open category and 25 per cent were categorised as 'part open'. It was noted that the 'part open' category included a significant number of hybrids for which the DB element was closed.

In Purple 2007, the 'part open' category was removed and the percentage of schemes classified as open increased in comparison with Purple 2006. Many hybrid schemes which had previously identified themselves as 'part open' now identified themselves as 'open'.

In Purple 2008 and Purple 2009, we analysed the largest 100 schemes (by membership) in the hybrid category separately so as to adjust the information provided in the scheme return and remove potential misinterpretation caused by hybrid schemes with closed DB sections declaring themselves as open.

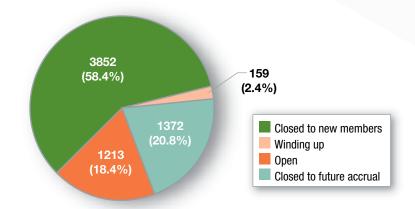


Improved levels of information on hybrid schemes are now available from the scheme return and this year we are able to adjust hybrid statuses to 'closed' where DB provision is not available to new members. A total of 541 open hybrids had their status adjusted to 'closed' covering approximately 1.8 million members. Although the overall proportion of schemes closed to new members and to future accrual has increased by 8 percentage points, the number of members in closed schemes has increased by only 2 percentage points. This indicates that many of the additional schemes which have been classified as closed are in the smaller size bands.

This improved information on hybrid schemes means that the number of closed schemes observed in this year's dataset is more accurate with regard to DB provision. Therefore, care should be taken comparing the level of closed schemes in this year's Purple Book with previous editions. The proportions of schemes by status for non-hybrid schemes has changed very little since last year (Table 3.2)

In 2010, 18 per cent of the 6,596 schemes in the sample were open with 58 per cent closed to new members and 21 per cent to future accrual.

Chart 3.1 | Distribution of schemes by status



Source: PPF/The Pensions Regulator

Improved information on the statuses of hybrid schemes produces a fall in open schemes and a rise in closed schemes. However, the schemes newly classified as closed are generally small.

Table 3.1 | Distribution of schemes by status

Percentage of schemes	Extended Purple 2006	Extended Purple 2007	Purple 2008	Purple 2009	Purple 2010
Open (plus part open in 2006)	43%	36%	31%	27%	18%
Closed to new members	44%	45%	50%	52%	58%
Closed to future accruals	12%	16%	17%	19%	21%
Winding Up	1%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%

Source: PPF / The Pensions Regulator

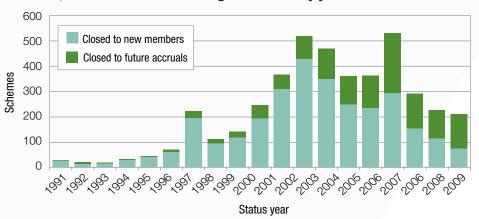
Table 3.2 | Distribution of schemes by status (excluding hybrid schemes)

Percentage of schemes	Extended Purple 2006	Extended Purple 2007	Purple 2008	Purple 2009	Purple 2010
Open (plus part opening 2006)	35%	33%	26%	22%	21%
Closed to new members	49%	49%	52%	55%	54%
Closed to future accruals	15%	17%	19%	20%	23%
Winding Up	1%	1%	3%	3%	2%
Total	100%	100%	100%	100%	100%

Source: PPF / The Pensions Regulator

Proportions of schemes by status show only a small drop in open schemes when hybrids are excluded.

Chart 3.2 | Number of schemes entering closed status by year\*

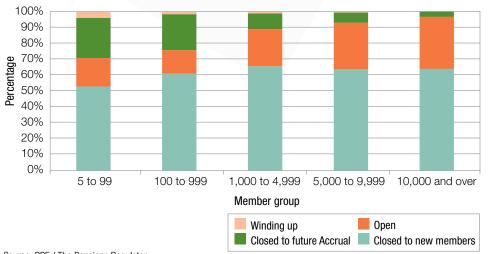


Source: PPF / The Pensions Regulator

schemes closing to new members continues to fall, but a higher proportion of closing schemes closed to future accrual in 2009.

The number of

Chart 3.3 | Scheme status by member group\*



Source: PPF / The Pensions Regulator

Smaller schemes are more likely to be closed to future accrual.

<sup>\*</sup>Hybrid schemes where the status has been amended to closed as described above have been excluded from this chart since the year of the status change is not available.

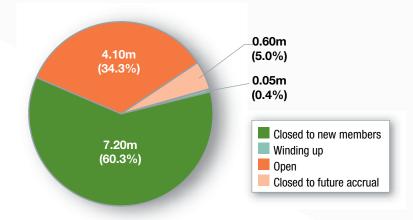
<sup>\*</sup> A small number of schemes with fewer than five members are in the data set (77). These are mostly independently registered sections or schemes which appeared in previous Purple data sets.



The proportion of members in open schemes has fallen by three percentage points since last year.

### 3.4 Scheme status and scheme membership

Chart 3.4 | Percentage distribution of members by scheme status



Source: PPF/The Pensions Regulator

of members by status shows a one percentage point rise in members of schemes closed to new members and a three percentage point fall in the

share of members in

open schemes.

The distribution

Table 3.3 | Distribution of membership by status

Percentage of schemes	Extended Purple 2006	Extended Purple 2007	Purple 2008	Purple 2009	Purple 2010
Open (plus part opening 2006)	66%	50%	44%	37%	34%
Closed to new members	32%	46%	52%	59%	60%
Closed to future accruals	2%	3%	4%	4%	5%
Winding Up	1%	0%	0%	0%	1%
Total	100%	100%	100%	100%	100%

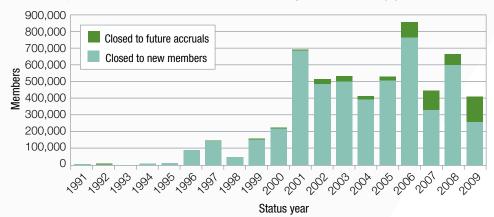
Source: PPF / The Pensions Regulator

Table 3.4 | Distribution of membership by status (excluding hybrid schemes)

Percentage of schemes	Extended Purple 2006	Extended Purple 2007	Purple 2008	Purple 2009	Purple 2010
Open (plus part opening 2006)	64%	55%	46%	38%	38%
Closed to new members	34%	41%	49%	57%	56%
Closed to future accruals	2%	3%	4%	5%	6%
Winding Up	0%	0%	0%	0%	1%
Total	100%	100%	100%	100%	100%

Source: PPF / The Pensions Regulator

Chart 3.5 | Number of members in schemes entering closed status by year\*

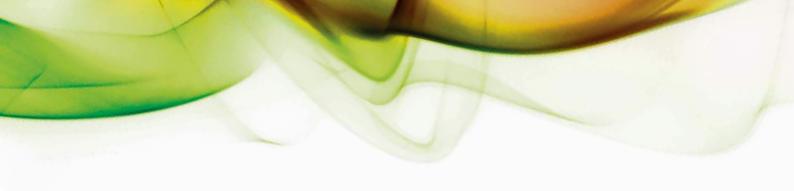


Source: PPF/The Pensions Regulator

Member distribution by status for nonhybrid schemes shows no fall in the share of membership of open schemes.

For 2009, fewer members were in schemes entering closed status but a higher proportion of those members were in schemes which closed to future accrual.

<sup>\*</sup> Hybrid schemes where the status has been amended to closed as described above have been excluded from this chart since the year of the status change is not available.



Out of 12 million memberships 2.4 million are active.

The percentages of member types has changed very little since last year with the percentage of active members falling approximately 0.6 percentage points and the percentage of deferred members rising by the same

amount.

#### 3.5 Scheme membership

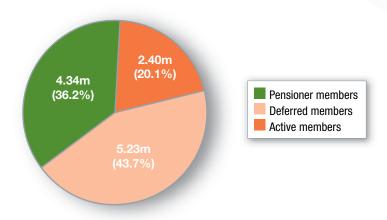
Table 3.5 | Membership by membership type and status as at 31 March 2010

	Open	Closed to new members	Closed to future accrual	Winding Up	Total
Active members (millions)	1.14	1.26	N/A	N/A	2.40
Deferred Members (millions)	1.52	3.31	0.37	0.03	5.23
Pensioner members (millions)	1.44	2.64	0.23	0.03	4.34
Total	4.10	7.20	0.61	0.06	11.97

Source: PPF / The Pensions Regulator

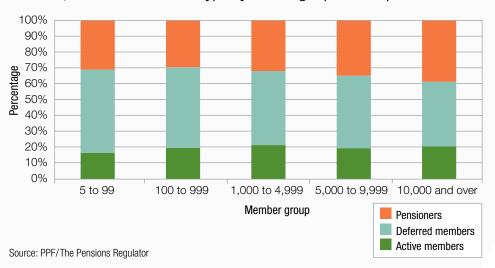
Note that for various reasons a small number of schemes have breakdowns of membership by active, deferred and pensioner types which do not match the total figure for membership. Totals may not, therefore, match figures calculated from the figure given for total members. Where members are listed as active in the information provided by closed schemes they are assumed to be deferred members.

Chart 3.6 | Distribution of member types in the Purple 2010 dataset



Source: PPF/The Pensions Regulator

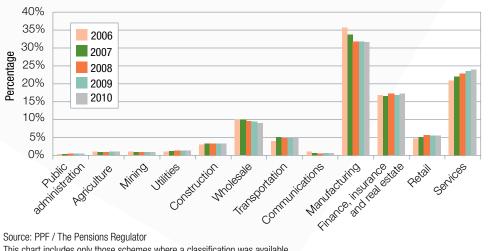
Chart 3.7 | Distribution of member types by member group in the Purple 2010 dataset



The percentage of pensioner members increases as scheme size increases.

Active membership is highest in the group of schemes with between 1,000 and 4,999 members.

Chart 3.8 | Proportion of schemes by industry classification\*



Source: PPF / The Pensions Regulator

This chart includes only those schemes where a classification was available

Schemes sponsored by firms in the manufacturing sector continue to dominate the PPF-eligible DB universe.

<sup>\*</sup> D&B uses the 1972 US Standard Industry Classification (SIC) codes for the purposes of industry classification so for consistency these SIC codes have been used in analysing the PPF's and regulator's data in this document. The codes are strictly speaking not compatible with those used in the UK national accounts.



4

# Scheme Funding

#### 4.1 Summary

- The aggregate s179 funding position of the schemes in the Purple 2010 dataset at 31 March 2010 was a surplus of £38.3 billion. This is a marked improvement on the deficit of £200.6 billion for the schemes in the Purple 2009 dataset at 31 March 2009. The aggregate funding ratio for the two datasets rose from 80 per cent at 31 March 2009 to 104 per cent at 31 March 2010.
- The aggregate full buy-out funding level for the two datasets has moved from 58 per cent in 2009 to 68 per cent in 2010.
- The assumptions used for estimating liabilities on a s179 basis changed in October 2009 and reduced liabilities by about 7.5 per cent. This change is responsible for about £75 billion of the £238.9 billion improvement in the funding position on the s179 basis.
- 63 per cent of the liabilities are attributable to the 3 per cent of schemes with more than 10,000 members.
- The highest concentration of schemes with greater than 100 per cent funding on a buyout basis is in the 5 to 99 members category.
- Funding levels tend to increase as the proportion of pensioner liability increases.
- The aggregate s179 funding level is volatile and has varied from 80 per cent to 109 per cent at March 31 dates between 2006 and 2010 on the assumptions used at the time.

#### 4.2 Introduction

This chapter primarily deals with scheme funding on a s179 basis as at 31 March 2010. Funding information supplied via scheme returns is processed so that scheme funding can be estimated at a common date, allowing comparison between schemes valued at different dates.

Funding is primarily presented on the s179 basis. This is, broadly speaking, what would have to be paid to an insurance company for it to take on the payment of PPF levels of compensation. In addition, full buy-out funding information is estimated from scheme return data. This uses a similar gilts-based discount rate as the s179 basis but covers full scheme benefits. An illustrative Technical Provisions (TP) measure is also provided. With this funding measure, liabilities are calculated using a prudent discount rate which may vary from scheme to scheme.

All s179 valuations with an effective date on or after 31 October 2009 operate on the basis of the published 'A5' assumptions.<sup>23</sup> The processing of s179 results allows for the different assumptions used for those with earlier effective dates. s179 figures form the basis for PPF levy calculations, subject to subsequent adjustments in defined circumstances. Estimates of liabilities on the full buy-out basis have used the same valuation assumptions but allow for the difference between the PPF level of compensation and full scheme benefits. In the case of full buy-out, the calculation is hypothetical, as only small numbers of buy outs actually occur and the terms achieved are confidential and not necessarily obtainable for other schemes.

The TP figures in Table 4.1 should be taken as approximate estimates. They are based on an estimate for the relationship between TPs and s179 liabilities. This estimate uses historical information from analyses of that relationship from the Pensions Regulator's Scheme Funding publications and the estimated impact of changes to market factors on the relative levels of these two liability measures. The ratio of 1.21 for TPs to s179 liabilities was used in Table 4.1

#### 4.3 Overall Funding

**Table 4.1** Key funding statistics as at 31 March 2010

	s179	Full Buy Out	Technical provisions
Total number of schemes	6596	6596	6596
Total assets (£ billion)	926.2	926.2	926.2
Total liabilities (£ billion)	887.9	1359.2	1074.4
Aggregate funding position (£ billion)	38.3	-433.0	-148.2
Total balance for schemes in deficit (£ billion)	-49.1	-436.5	-
Total balance for schemes in surplus (£ billion)	87.4	3.5	-
Funding level	104.3%	68.1%	86.2%

Source: PPF / The Pensions Regulator

The aggregate s179 funding position of the schemes in the Purple 2010 dataset at 31 March 2010 was a surplus of £38.3billion. This is a marked improvement on the deficit of £200.6 billion for the schemes in the Purple 2009 dataset at 31 March 2009.

<sup>23</sup> For more information see: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/Section\_179\_ Assumptions\_Guidance\_vA5\_Oct09.pdf



The aggregate s179 funding level is volatile and has varied from 80 per cent to 109 per cent at March 31 dates between 2006 and 2010 on the assumptions used at the time.

Table 4.2 | Historical funding figures\*

			s179 liabilities								
	No. of schemes	Total assets (£ bn)	Liabilities (£ bn)	Aggregate funding (s179) (£ bn)	Deficit of schemes in deficit (£ bn)	Surplus of schemes in surplus (£ bn)	Funding ratio				
2006	7751	769.5	792.2	-22.7	-76.3	53.5	97%				
2007	7542	837.7	769.9	67.8	-46.8	96.5	109%				
2008	6897	837.2	842.3	-5.1	-67.7	62.6	99%				
2009	6885	780.4	981.0	-200.6	-216.7	16.0	80%				
2010	6596	926.2	887.9	38.3	-49.1	87.4	104%				

		F	ull buy ou	ıt	
	Liabilities (£ bn)		Deficit of schemes in deficit (£ bn)	Surplus of schemes in surplus (£ bn)	Funding ratio
2006	1273.5	-504.0	n/a	n/a	60%
2007	1289.3	-451.6	n/a	n/a	65%
2008	1356	-518.6	-520.4	1.6	62%
2009	1351.6	-571.2	-572.3	1.1	58%
2010	1359.2	-433	-436.5	3.5	68%

Source: PPF/Pensions Regulator

#### 4.4 Analysis of Funding by Scheme Size

Table 4.3 | s179 funding levels by scheme size as at 31 March 2010\*

Scheme size measured by number of members	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level
5 to 99 members	2342	11.1	10.2	0.9	109%	106%
100 to 999 members	3018	81.4	82.3	-0.9	99%	96%
1000 to 4999 members	832	135.6	138.1	-2.5	98%	95%
5000 to 9999 members	184	102.2	100.2	2.1	102%	99%
Over 10,000 members	220	595.9	557.2	38.8	107%	104%
Total	6596	926.2	887.9	38.3	104%	100%

Source: PPF / The Pensions Regulator

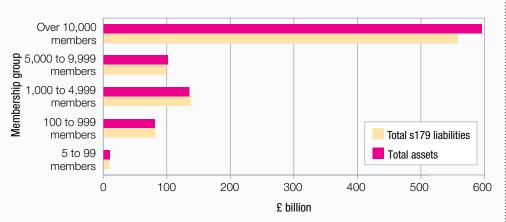
The smallest schemes are on average the best funded.

<sup>\*</sup>The figures shown above are the headline funding figures as presented in Purple Books 2008 and 2009. For 2006 and 2007 the figures are based on the extended Purple datasets published in the Annexes to Purple 2007 and 2008.

<sup>\*\*</sup>Figures before 2010 include schemes in assessment.

<sup>\*</sup>Note that schemes with unusual funding arrangements were excluded from simple averages in this table so as to avoid distortions. Thirty-three schemes were removed on the basis that their buy-out funding level was equal to or greater than 200 per cent.

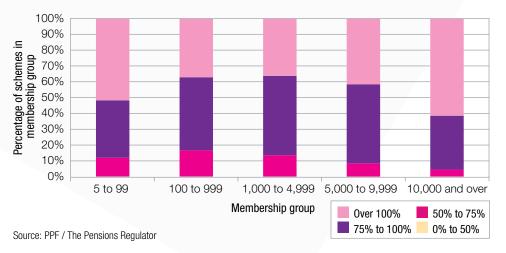
Chart 4.1 Total assets and liabilities on a s179 basis as at 31 March 2010



63 per cent of the liabilities are attributable to 3 per cent of schemes with more than 10,000 members.

Source: PPF / The Pensions Regulator

**Chart 4.2** Distribution of s179 funding levels by size of scheme membership as at 31 March 2010



A high number of the smallest group of schemes are funded above 100 per cent on a s179 basis.



Estimated full buyout funding shows a similar pattern to that found with s179 funding but at lower levels. Once again, funding is best in the smallest scheme category.

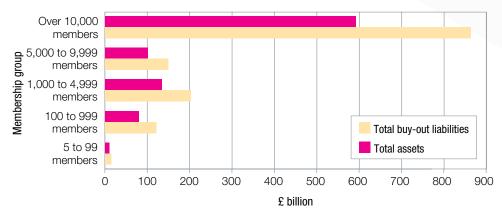
63 per cent of the full buyout liabilities are attributable to 3 per cent of schemes with more than 10,000 members.

**Table 4.4** Estimated full buy-out levels by size of scheme membership as at 31 March 2010\*

Members	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level
5 to 99 members	2342	11.1	15.1	-4	73%	74%
10 to 999 members	3018	81.4	122.2	-40.7	67%	66%
1000 to 4999 members	832	135.6	203.8	-68.3	67%	66%
5000 to 9999 members	184	102.2	150.2	-47.9	68%	67%
Over 10,000 members	220	595.9	868	-272.1	69%	70%
Total	6596	926.2	1359.2	-433	68%	69%

Source: PPF / The Pensions Regulator

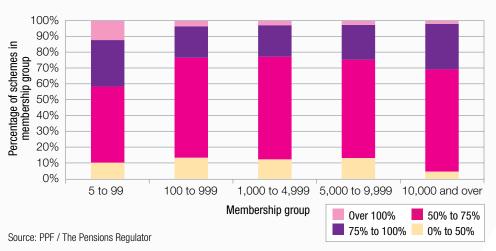
**Chart 4.3** Total assets and liabilities by size of scheme membership on an estimated full buy-out basis as at 31 March 2010



Source: PPF / The Pensions Regulator

<sup>\*</sup>Note that schemes with unusual funding arrangements were excluded from simple averages in this table so as to avoid misleading distortions. Thirty three schemes were removed on the basis that their buy-out funding level was equal to or greater than 200 per cent.

**Chart 4.4** Distribution of buy-out funding levels by size of scheme membership as at 31 March 2010



The highest concentration of schemes with greater than 100 per cent funding on a full buy-out basis is in the smallest membership category.

#### 4.5 Analysis of funding by scheme maturity

Table 4.5 | Analysis of s179 funding levels by scheme maturity as at 31 March 2010\*

Proportion of s179 liabilities relating to pensioners	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level
25% and less	2698	134.8	150.3	-15.5	90%	92%
Between 25% and 50%	2831	513.3	501.6	11.7	102%	100%
Between 50% and 75%	906	255.1	218	37.1	117%	116%
Between 75% and 100%	161	23.0	18.0	5.0	128%	138%
Total	6596	926.2	887.9	38.3	104%	100%

Source: PPF / The Pensions Regulator

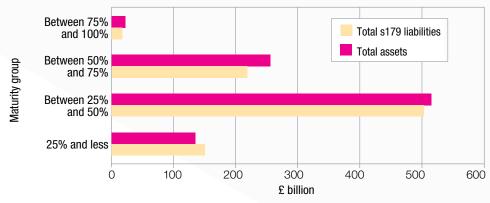
Funding levels increase as maturity increases.

<sup>\*</sup>Note that schemes with unusual funding arrangements were excluded from simple averages in this table so as to avoid misleading distortions. Thirty three schemes were removed on the basis that their buy-out funding level was equal to or greater than 200 per cent.



73 per cent of s179 liabilities are found in schemes with 0 to 50 per cent pensioner liabilities.

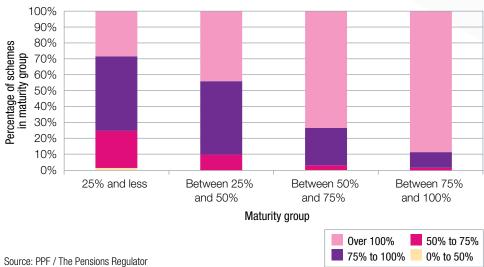
Chart 4.5 | Distribution of s179 assets and liabilities by scheme maturity as at 31 March 2010



Source: PPF / The Pensions Regulator

Nearly 90 per cent of the most mature schemes are funded above 100 per cent on a s179 basis.

Chart 4.6 | Distribution of funding levels on a s179 basis by scheme maturity as at 31 March 2010



#### 4.6 Analysis of funding by scheme status

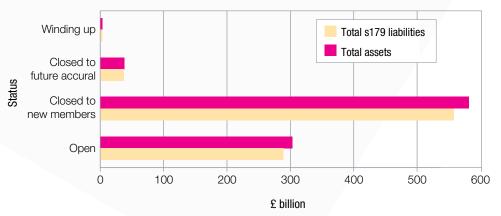
Table 4.6 | Analysis of s179 funding levels by scheme status as at 31 March 2010\*

Status	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level
Open	1213	303.0	289.3	13.7	105%	98%
Closed to new entrants	3852	580.7	556.9	23.8	104%	100%
Closed to future accrual	1372	37.8	37.7	0.1	100%	98%
Winding Up	159	4.6	4.0	0.7	117%	123%
Total	6596	926.2	887.9	38.3	104%	100%

Source: PPF / The Pensions Regulator

\*Note that schemes with unusual funding arrangements were excluded from simple averages in this table so as to avoid misleading distortions. Thirty three schemes were removed on the basis that their buy-out funding level was equal to or greater than 200 per cent.

**Chart 4.7** | Distribution of s179 assets and liabilities by scheme status as at 31 March 2010



Source: PPF / The Pensions Regulator

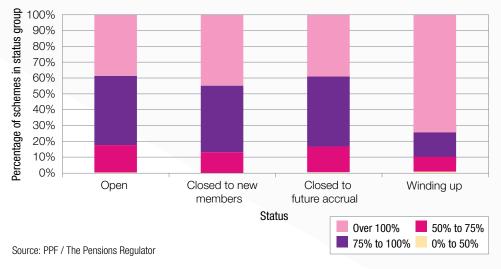
Apart from those schemes which are in the process of winding up, funding levels are relatively consistent across statuses.

63 per cent of \$179 liabilities relate to schemes which are closed to new members.



Nearly 75 per cent of schemes in wind up are funded above the s179 level.

**Chart 4.8** Distribution of schemes by s179 funding levels within scheme status groups as at 31 March 2010



63 per cent of buyout liabilities are in schemes closed to new members.

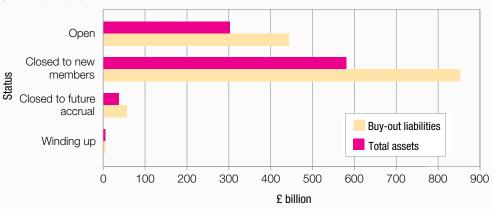
**Table 4.7** | Analysis of estimated full buy-out funding levels by scheme status as at 31 March 2010\*

Status	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level
Open	1213	303.0	443.1	-140.1	68%	68%
Closed to new members	3852	580.7	853.2	-272.5	68%	69%
Closed to future accruals	1372	37.8	56.9	-19.0	67%	68%
Winding Up	159	4.6	6.1	-1.4	76%	86%
Total	6596	926.2	1359.2	-433.0	68%	69%

Source: PPF / The Pensions Regulator

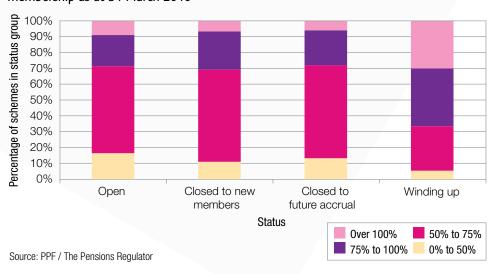
<sup>\*</sup>Note that schemes with unusual funding arrangements were excluded from simple averages in this table so as to avoid misleading distortions. Thirty three schemes were removed on the basis that their buyout funding level was equal to or greater than 200 per cent.

**Chart 4.9** | Distribution of estimated full buy-out assets and liabilities by status as at 31 March 2010



Source: PPF / The Pensions Regulator

Chart 4.10  $\mid$  Distribution of estimated full buy-out funding levels by size of scheme membership as at 31 March 2010



33 per cent of buyout liabilities are attributable to open schemes.

Nearly a third of schemes in wind up are funded greater than 100 per cent on a full buy-out basis.



Pensioner members account for 41 per cent of total s179 liabilities.

Assets and liabilities

are concentrated

in the Finance,

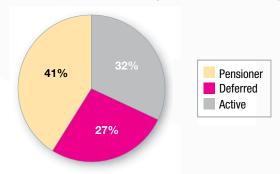
insurance and

real estate, and

Manufacturing

sectors.

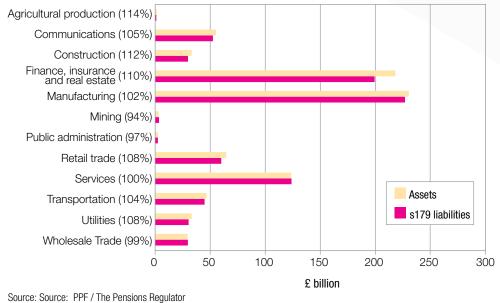
Chart 4.11 | s179 liabilities by active, deferred and pensioner members



Source: PPF/ The Pensions Regulator

#### 4.7 Analysis of funding by employer industry\*

Chart 4.12 | s179 assets and liabilities by industry with overall funding level as at 31 March 2010\*\*



\*Based on US 1972 Standard Industrial Classification.

<sup>\*\*</sup>Note that funding levels by industry are weighted averages.

# Funding Sensitivities

#### Summary

- Changes in estimated market conditions and financial and demographic assumptions since March 2003 have caused the monthly aggregate funding position of pension schemes measured on a s179 basis to vary by around £358 billion (with the greatest surplus in June 2007 at £149 billion and the greatest deficit in March 2009 at £209 billion).<sup>24</sup>
- The funding ratio (total assets divided by total liabilities) peaked at 121 per cent in June 2007 and troughed at 79 per cent in March 2009.
- The estimated number of schemes in deficit on a s179 basis was at its lowest point in June 2007 at around 2,200 schemes (33 per cent of the dataset) and peaked in March 2009 at around 5,600 (85 per cent).
- Since March 2010, the date for the funding estimates in Chapter 4, falls in bond yields have resulted in a worsening in aggregate scheme funding of around £35 billion by the end of October.
- A 0.1 percentage point (10 basis point) reduction in gilt yields raises scheme liabilities by 2 per cent and raises scheme assets by 0.4 per cent. A 2.5 per cent rise in equity markets raises scheme assets by one per cent.
- A 0.1 percentage point (10 basis point) rise in gilt yields raises the end-March 2010 aggregate balance by £12 billion from £38 billion to £50 billion while a 2.5 per cent rise in equity prices raises the aggregate balance by £11 billion.
- If the assumed rate of inflation increases by 0.1 per cent, with nominal interest rates unchanged, then the s179 liabilities for schemes increases by approximately 0.9 per cent or £8 billion.
- An increase in longevity such that the experienced mortality is now equivalent to that
  of an individual two years younger would increase schemes' liabilities by around 4.3 per
  cent, or £38 billion.
- All the model-based funding sensitivities in this chapter are on a s179 basis, taking
  the funding position at 31 March 2010 as the base and using the Purple 2010 dataset.
  The sensitivities do not take into account the use of derivative instruments to hedge
  changes in interest rates, inflation, equities or longevity. The assumptions were
  changed in March 2008 and October 2009. These changes improved scheme funding
  by around £50 billion and £75 billion respectively.<sup>25</sup>

<sup>24</sup> The estimates presented here are a little different from those shown in the PPF 7800 release for end-August: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_7800\_September\_10.pdf For example, for 31 March 2010 the surplus in Purple 2010 is estimated to be £38.3 billion compared with £52.7 billion in the PPF7800. This is because Purple 2010 is based on a more up-to-date dataset.

<sup>25</sup> For more information see PPF7800 January 2009 and PPF 7800 November 2009: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF%207800%20January%2009.pdf http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_7800\_November\_09.pdf

**Chart 5.1** | Estimated s179 aggregate balance (assets less liabilities) of pension schemes in the Purple 2010 dataset



Source: PPF/The Pensions Regulator

**Chart 5.2** | Estimated s179 funding ratio (assets as a percentage of liabilities) of pension schemes in the Purple 2010 dataset



Source: PPF/The Pensions Regulator

Market movements and changes in assumptions have resulted in a variation in the \$179 aggregate balance of around £358 billion, with the largest surplus of £149 billion in June 2007 and the largest deficit of £209 billion in March 2009.

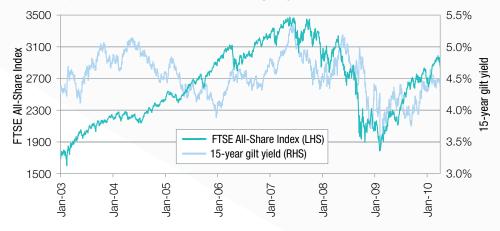
The funding ratio has varied by around 42 percentage points, with the highest ratio of 121 per cent in June 2007 and the lowest ratio of 79 per cent in March 2009.



The largest surplus
(June 2007)
reflected high levels
for both gilt yields
and equity markets,
while the largest
deficit (March 2009)
reflected low levels
for gilt yields and
equity markets.

Total scheme assets are estimated to have risen by £161 billion (21 per cent) in the year to 31 March 2010 while the total liabilities are estimated to have fallen by £86 billion (9 per cent).

Chart 5.3 | Movements in stock markets and gilts yields



Source: Bloomberg

**Chart 5.4** | Estimated movements in assets and s179 liabilities of schemes in the Purple 2010 dataset



Source: PPF/The Pensions Regulator

 $\textbf{Chart 5.5} \mid \textbf{Estimated aggregate assets less aggregate s179 liabilities for schemes in deficit}$ 

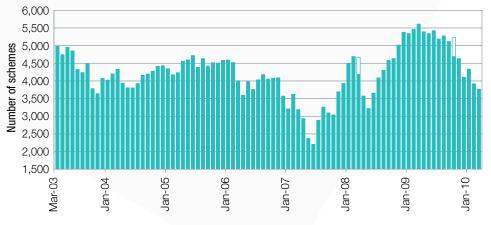


Source: PPF/The Pensions Regulator

funding was at its highest in June 2007, the aggregate deficit of the schemes in deficit was just £11 billion.

When scheme

**Chart 5.6** | Estimated number of schemes in deficit each month in the Purple 2010 dataset\*



Source: PPF/The Pensions Regulator

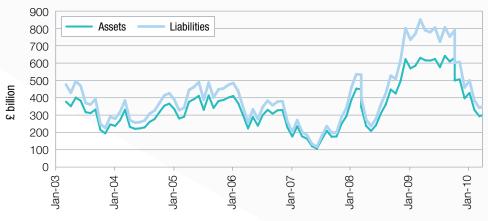
In March 2009, there were estimated to have been around 5,600 schemes in deficit (85 per cent of the total) while in June 2007 there were estimated to have been around 2,200 schemes in deficit (33 per cent).

<sup>\*</sup> The clear parts of the bars in March 2008 and October 2009 reflect the impact of changes in actuarial assumption.



Total assets of schemes in deficit rose between June 2007 and March 2009 despite falling equity markets because of the large rise in the number of schemes in deficit.

Chart 5.7 | Estimated aggregate assets and s179 liabilities for schemes in deficit



Source: PPF/The Pensions Regulator

**Table 5.1** | Impact of changes in gilt yields and equity prices on s179 funding levels from a base aggregate surplus of £38 billion at 31 March 2010

Assets less s179 liabilities (£ billion)														
Movement		Movement in gilt yields												
in equity prices	-0.3pp	-0.2pp	-0.1pp	0.0pp	0.1pp	0.2pp	0.3pp							
7.5%	35.4	47.4	59.5	71.5	83.5	95.6	107.6							
5.0%	24.3	36.4	48.4	60.4	72.5	84.5	96.5							
2.5%	13.3	25.3	37.3	49.4	61.4	73.4	85.5							
0.0%	2.2	14.2	26.3	38.3	50.3	62.4	74.4							
-2.5%	-8.9	3.2	15.2	27.2	39.3	51.3	63.3							
-5.0%	-19.9	-7.9	4.1	16.2	28.2	40.2	52.3							
-7.5%	-31.0	-19.0	-6.9	5.1	17.1	29.2	41.2							

Source: PPF/The Pensions Regulator

A 0.1 percentage point (10 basis point) rise in gilt yields increases the aggregate 31 March 2010 s179 funding level by £12 billion from £38.3 billion (bold) to £50.3 billion (shaded), similar to the impact of a 2.5 per cent increase in equity prices which would result in a balance of £49.4 billion (shaded).

**Table 5.2** | Impact of changes in gilt yields and equity prices on assets from a base of 100 at 31 March 2010

	Assets relative to a base of 100													
Movement	Movement in gilts yields													
in equity prices	-0.3pp	-0.2pp	-0.1pp	0.0pp	0.1pp	0.2pp	0.3pp							
7.5%	105	104	104	104	103	103	102							
5.0%	103	103	103	102	102	102	101							
2.5%	102	102	102	101	101	100	100							
0.0%	101	101	100	100	100	99	99							
-2.5%	100	100	99	99	98	98	98							
-5.0%	99	98	98	98	97	97	97							
-7.5%	98	97	97	96	96	96	95							

Source: PPF/The Pensions Regulator

**Table 5.3** | Impact of changes in gilt yields on s179 liabilities from a base of 100 at 31 March 2010

s179 liabilities relative to a base of 100											
s179 liabilities		ent in gilts	ent in gilts yields								
relative to March level	-0.3pp -0.2pp -0.1pp 0.0pp 0.1pp 0.2pp 0.1										
(=100)	105	103	102	100	98	97	95				

Source: PPF/The Pensions Regulator

**Table 5.4** | Impact of changes in gilt yields and equity prices on s179 funding levels from a base total deficit of £49 billion at 31 March 2010, excluding schemes in surplus

	Assets less s179 liabilities (£ billion)												
Movement		Movement in gilt yields											
in equity prices	-0.3pp	-0.2pp	-0.1pp	0.0pp	0.1pp	0.2pp	0.3pp						
7.5%	-54	-48	-43	-37	-32	-26	-21						
5.0%	-58	-52	-47	-41	-36	-30	-25						
2.5%	-62	-56	-51	-45	-40	-34	-29						
0.0%	-66	-60	-55	-49	-44	-38	-33						
-2.5%	-70	-64	-59	-53	-48	-42	-37						
-5.0%	-74	-68	-63	-57	-52	-46	-41						
-7.5%	-78	-72	-67	-61	-56	-50	-45						

Source: PPF/The Pensions Regulator

A 2.5 per cent increase in equity prices would have raised scheme assets by one per cent, similar to the impact of a 0.3 per cent fall in gilt yields.

A 0.1 percentage point (10 basis point) reduction or increase in gilt yields increases or reduces s179 liabilities by two per cent.

Excluding schemes in surplus, the impact on the aggregate deficit at 31 March 2010 of a 0.1 percentage point rise in gilt yields is similar to that of a 2.5 per cent rise in equity prices.



If the assumed rate of inflation increases by 0.1 percentage point and nominal rates remain unchanged then the s179 liabilities for schemes in the Purple dataset rise by 0.9 per cent or £8 billion.

An increase in longevity such that experienced mortality is now equivalent to that of an individual two years younger would cause total scheme s179 liabilities to increase by £38 billion, or 4.3 per cent.

**Table 5.5** | Impact of changes in the rate of RPI inflation on s179 liabilities at 31 March 2010 (base = £888 billion)

	s179 liabilities										
Change in nominal yields Change in real yields											
	-0.1pp 0.1pp -0.1pp 0.1pp										
s179 liabilities (£ billion)	903.3	872.5	895.9	879.9							
Percentage change											

Source: PPF/The Pensions Regulator

**Table 5.6** | Impact of changes in longevity assumptions on s179 liabilities at 31 March 2010 (base = £888 billion))

	s179 liabilities (£ billion)	% Change from base
Age Rating + 2 years	848	-4.5%
Age Rating - 2 years	926	4.3%

Source: PPF/The Pensions Regulator

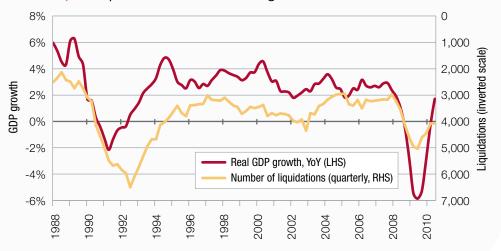
# 6

# Insolvency Risk

#### **Summary**

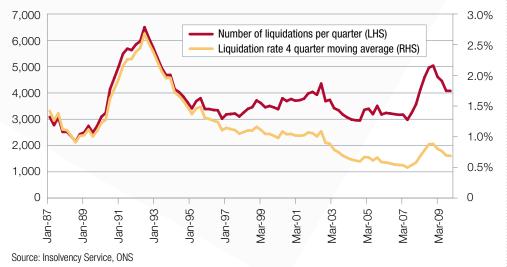
- The recession resulted in a large rise in the total level of corporate liquidations in England and Wales: from 3,241 at a quarterly rate in the first quarter of 2008 to a peak of 5,041 in the second quarter of 2009, an increase of 56 per cent.
- Since the second quarter of 2009, economic recovery has resulted in a 19 per cent drop in the level of company liquidations.
- In the 12 months ending June 2010, approximately 0.8 per cent of companies went into liquidation, compared with a recession peak of 0.9 per cent and a pre-recession trough of 0.6 per cent. In the latest recession, the insolvency rate rose by 50 per cent while in the early-1990s recession it more than doubled.
- During the recent recession, the estimated number of schemes (or sections of schemes) entering a PPF assessment period peaked in the first quarter of 2009 at 52 and had fallen to 38 by the first quarter of 2010, a drop of 27 per cent. The level of schemes entering PPF assessment in the year to the first quarter of 2010 was, however, still around 20 per cent higher than in the two years before the recession.
- The number of schemes entering assessment and thought to be in s179 deficit at the time of the insolvency event fell 42 per cent between the first quarters of 2009 and 2010. This represents a greater decline than that observed for the overall number of schemes entering assessment and reflects the fact that scheme funding improved over the year to the first quarter of 2010.
- The weighted average one-year-ahead insolvency probability for the Purple 2010 dataset, derived from Dun & Bradstreet (D&B) failure scores, was 0.4 per cent as at March 2010.
- Over the first six months of 2010, the average insolvency probability of the 500 schemes to which the PPF has the largest exposure (in terms of scheme underfunding adjusted for the volatility of its assets) fell from 0.6 per cent to 0.5 per cent.
- Schemes with sponsoring employers in the communications industry have the highest average insolvency probability (3.8 per cent), followed by construction and retail trade (both 1.9 per cent).
- In Purple 2010, as in previous years, there is a relationship between scheme size and insolvency probability. Smaller schemes (as measured by membership or s179 liabilities) tend to have higher insolvency probabilities.
- For scheme liabilities of more than £50 million, sponsoring employers of schemes in surplus have a higher average insolvency probability than sponsors of schemes in deficit. The reverse was true for schemes of that size in Purple 2009. The composition of the dataset between deficit and surplus schemes was very different in the two years: 2,826 schemes were in surplus in 2010 compared with 978 in 2009.

Chart 6.1 UK corporate insolvencies and GDP growth



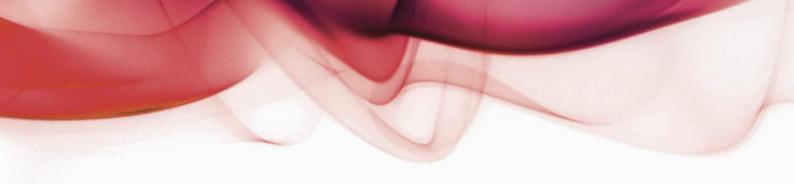
Source: Insolvency Service/ONS

Chart 6.2 | UK corporate insolvencies



Historically, GDP has been a lead indicator of insolvencies. Recent data suggest that this relationship has changed. The peak in insolvencies occurred during the same quarter as the trough in GDP growth.

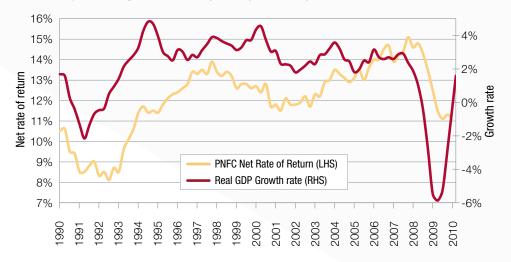
The level of company liquidations in the UK has dropped by almost 20 per cent since the second quarter of 2009. The liquidation rate has edged lower but is still above prerecession levels.



GDP started recovering in the fourth quarter of 2009. Corporate profitability as measured by the net rate of return of private non financial companies (PNFC) has been broadly unchanged since the third quarter of 2009.

The unweighted average insolvency probability rose significantly between Purple 2009 and 2010. The weighted average was unchanged, however, suggesting that sponsors of smaller schemes have experienced a rise in their insolvency probabilities.

Chart 6.3 | UK GDP growth and corporate profitability



Source: ONS, Thomson Datastream

**Table 6.1** Average insolvency probability (using D&B failure scores\*) at end-March 2010 in the Purple Books

	Weighted (by liabilities) average insolvency probability	Unweighted average insolvency probability
Purple 2006	0.4%	0.8%
Purple 2007	0.3%	0.7%
Purple 2008	0.2%	0.7%
Purple 2009	0.4%	0.9%
Purple 2010	0.4%	1.3%

Source: PPF/The Pensions Regulator

<sup>\*</sup> For more information see Chapter 2, section 2.2

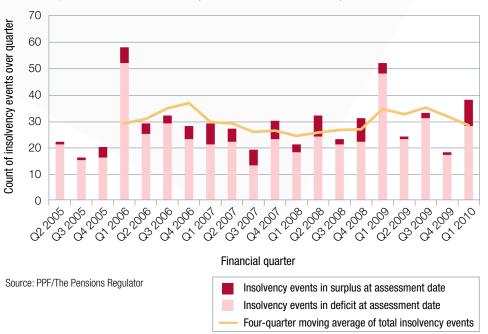
**Chart 6.4** Average insolvency probability of the PPF's 500 largest scheme exposures (as at 31 March 2009)\*



Source: PPF/The Pensions Regulator

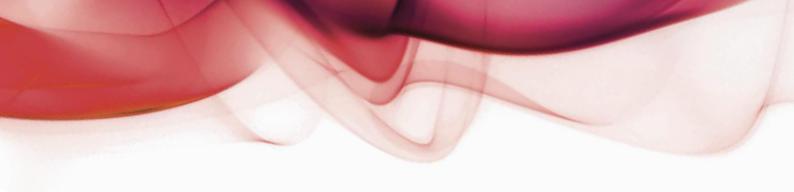
The average insolvency probability of the PPF's 500 largest exposures (in terms of scheme underfunding adjusted for the volatility of its assets) has followed a downward trend since October 2009.

Chart 6.5 | Number of schemes (or parts of schemes) entering PPF assessment



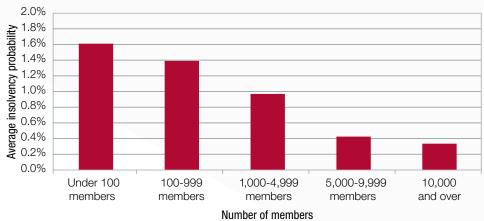
The number of schemes entering PPF assessment in the first quarter of 2010 was 24 per cent lower than a year ago.

<sup>\*</sup> Where available, these insolvency probabilities have been derived from credit ratings, including market-implied ratings, supplied by Moody's and Fitch. Market-implied ratings are constructed on the basis of information from the equity, bond and credit default swap (CDS) markets. For pension fund sponsors which do not have publicly quoted equities or bonds and are not rated by ratings agencies, D&B failure scores are used.



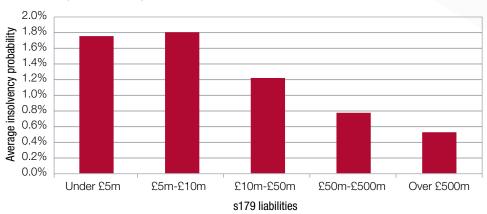
Smaller schemes
(as measured by
membership or
s179 liabilities)
tend to have
higher insolvency
probabilities.

**Chart 6.6** Average insolvency probability (using D&B failure scores) by scheme size as measured by number of members



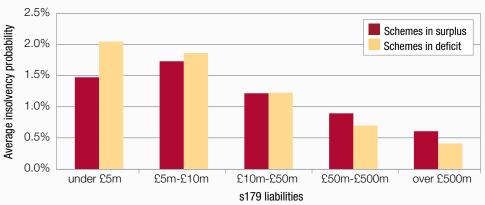
Source: PPF/The Pensions Regulator

**Chart 6.7** Average insolvency probability (using D&B failure scores) by scheme size as measured by s179 liability level



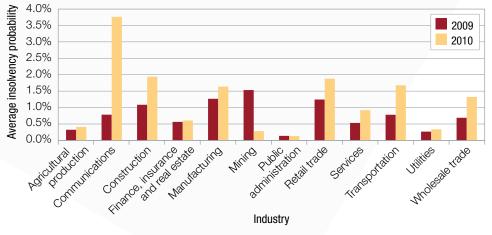
Source: PPF/The Pensions Regulator

Chart 6.8 | Average insolvency probability (using D&B failure scores) by s179 liability level (schemes in deficit and schemes in surplus)



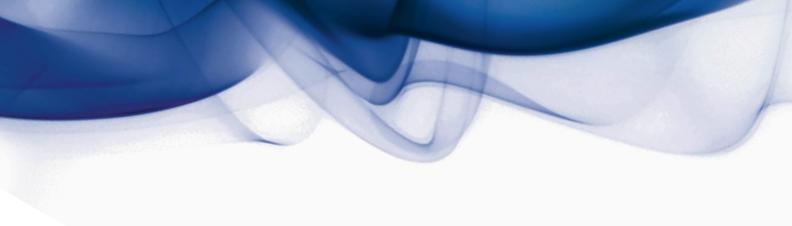
Source: PPF/The Pensions Regulator

Chart 6.9 | Average insolvency probability by industry\*



Source: PPF/Pension Regulator \* Based on US 1972 SIC For schemes with liabilities of more than £50 million, the sponsoring employers of schemes in surplus have a higher insolvency probability than schemes in deficit. This is the reverse of the position in 2009.

Schemes with sponsoring employers in the communications industry have the highest average insolvency probability (3.8 per cent).



# 7

### **Asset Allocation**

#### **Summary**

- Purple 2010 data show a continuation of trends seen in recent years: a falling equity allocation and rising allocations to bonds and 'other investments'; within equities, rising overseas and falling UK allocations; and within bonds, rising corporate bond and falling government allocations.
- The equity allocation as a proportion of total scheme assets fell to 42.0 per cent from 46.4 per cent in 2009. Meanwhile, the share of gilts and fixed interest increased to 40.4 per cent from 37.1 per cent in 2009. The share of 'other investments' rose from 4.5 per cent to 5.4 per cent.
- The overseas share in total equities rose from 53.8 per cent in 2009 to 55.3 per cent in 2010, the UK share falling from 44.2 per cent to 40.1 per cent. The share of unquoted equities increased from 1.9 per cent in 2009 to 4.4 per cent in 2010.<sup>27</sup>
- Within gilts and fixed interest, the corporate share rose from 38.3 per cent in 2009 to 42.2 per cent in 2010. Meanwhile, the share of government fixed interest fell from 29.0 per cent to 24.6 per cent. The index-linked share rose slightly after a decline in 2009.
- Looking at simple averages, the allocation to UK equities (55.3 per cent) is still
  considerably bigger than that for overseas equities (43.7 per cent), although this gap
  has continued to narrow.<sup>28</sup>
- Within gilts and fixed interest on a simple average basis, the allocation to government fixed interest fell sharply from 45.6 per cent to 37.3 per cent while the allocation to corporate fixed interest securities rose from 37.3 per cent to 43.0 per cent. The average allocation to index-linked securities rose from 17.1 per cent to 19.8 per cent.
- Smaller schemes tend to have a higher allocation of equities to UK equities and smaller allocation to overseas equities. Within fixed interest, smaller schemes tend to have a higher allocation to government fixed interest and a smaller allocation to index-linked securities.
- As in the earlier Purple Books, more mature schemes tend to invest more heavily in gilts and fixed interest and less in equities.
- Movements in asset shares reflect both movements in relative asset prices and decisions to allocate more or less to particular asset classes.
- Flow data from the Office of National Statistics show that, since the third quarter of 2003, there have only been three quarters of net investment in equities and only five quarters of net disinvestment in gilts and fixed interest.

<sup>27</sup> These do not sum to 100 per cent in 2009 and 2010 due to rounding.

<sup>28</sup> Simple averages are the means without weighting for scheme size.

#### 7.1 Scheme return data

**Table 7.1** Average asset allocation for all schemes in Purple 2006, Purple 2007, Purple 2008, Purple 2009 and Purple 2010<sup>29</sup>

	Extended Purple 2006	Extended Purple 2007	Extended Purple 2008	Purple 2009	Purple 2010
Equities	61.1%	59.5%	53.6%	46.4%	42.0%
Gilts and fixed interest	28.3%	29.6%	32.9%	37.1%	40.4%
Insurance policies	0.9%	0.8%	1.1%	1.4%	1.4%
Cash and deposits	2.3%	2.3%	3.0%	3.9%	3.9%
Property	4.3%	5.2%	5.6%	5.2%	4.6%
Other investments					
- 'Other'	3.1%	2.5%	3.8%	4.5%	5.4%
- Hedge funds	N/A	N/A	N/A	1.5%	2.2%

Source: PPF/The Pensions Regulator

**Table 7.2** Asset allocation: simple averages for all schemes in Purple 2006, Purple 2007, Purple 2008, Purple 2009 and Purple 2010\*

	Extended Purple 2006	Extended Purple 2007	Extended Purple 2008	Purple 2009	Purple 2010
Equities	52.6%	53.5%	50.2%	46.6%	43.1%
Gilts and fixed interest	22.6%	24.0%	26.5%	29.2%	32.6%
Insurance policies	14.9%	13.7%	13.0%	12.4%	12.3%
Cash and deposits	3.9%	3.7%	4.4%	5.6%	5.7%
Property	2.1%	2.5%	2.9%	2.8%	2.6%
Other investments					
- 'Other'	3.6%	2.6%	2.9%	2.6%	2.8%
- Hedge funds	N/A	N/A	N/A	0.7%	0.9%

Source: PPF/The Pensions Regulator

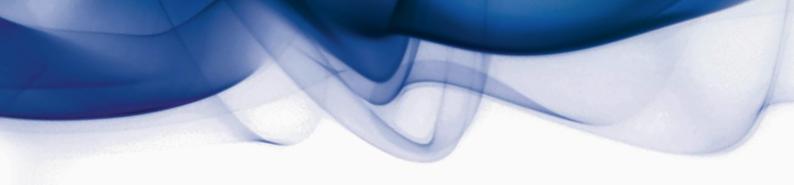
Note: Table 7.1 weights each scheme's asset allocation by the share of its assets in total assets while in Table 7.2 the schemes are equally weighted. As a result, the figures in Table 7.2 put greater weight on the asset allocation of the thousands of smaller schemes.

There was another large fall in the share of equities in total scheme assets in 2010 and rise in the share of gilts and fixed interest.

Simple averages of schemes' asset allocations also show a large decline in the equity share and rise in the share of gilts and fixed interest share.

<sup>\*</sup> Some columns do not sum to 100 per cent due to rounding.

<sup>29</sup> There can be a significant gap between the date of the scheme return and the date at which the asset allocation was taken. This means that the date at which asset allocation data is provided differs between schemes. For 2010, 0.7 per cent of schemes have given their asset allocations at a date before 2005, 1.0 per cent at a date in 2005, 3.7 per cent at a date in 2006, 6.7 per cent at a date in 2007, 31.9 per cent at a date in 2008, 55.8 per cent at a date in 2009 and 0.3 per cent at a date in the first quarter of 2010.



Overseas equities and corporate fixed interest continue to grow as a share of total equity and fixed interest allocations respectively.

Table 7.3 | Equity and gilt and fixed interest splits

	Gilts and fixed interest									
	Government fixed interest securities			Corporate fixed interest securities			Index-linked securities			
	2008	2009	2010	2008	2009	2010	2008	2009	2010	
Simple average share	47.2%	45.6%	37.3%	33.0%	37.3%	43.0%	19.8%	17.1%	19.8%	
Weighted average share	33.2%	33.2% 29.0% 24.6%			38.3%	42.2%	33.9%	32.6%	33.1%	

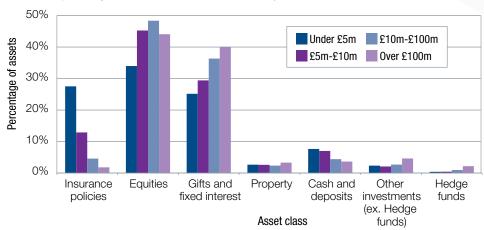
Source: PPF/The Pensions Regulator

		Equities									
	UK Equities			Overseas Equities			Unquoted Equities				
	2008	2009	2010	2008	2009	2010	2008	2009	2010		
Simple average share	60.4%	57.6%	55.3%	39.6%	41.7%	43.7%	N/A	0.7%	1.0%		
Weighted average share	48.0%	44.2%	40.1%	51.6%	53.8%	55.3%	N/A	1.9%	4.4%		

Source: PPF/The Pensions Regulator

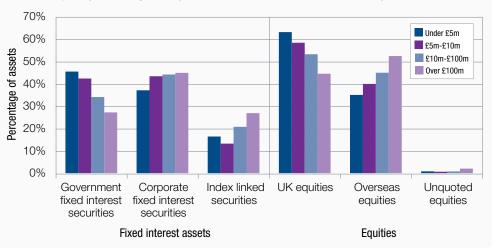
The share of assets held in gilts and fixed interest increases with scheme size.

Chart 7.1 | Average asset allocation of schemes by asset size



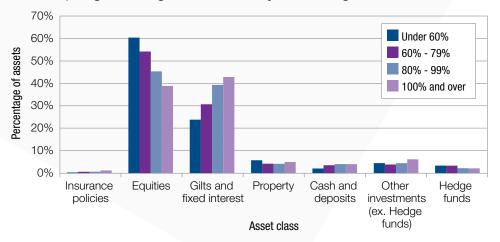
Source: PPF/The Pensions Regulator

Chart 7.2 | Simple average of equities and fixed interest allocations by asset size



Source: PPF/The Pensions Regulator

Chart 7.3 | Weighted average asset allocation by s179 funding level



Source: PPF/The Pensions Regulator

Within total gilts and fixed interest, the average allocation to government fixed interest securities declines with scheme size while, within equities, the allocation to overseas equities increases with scheme size.

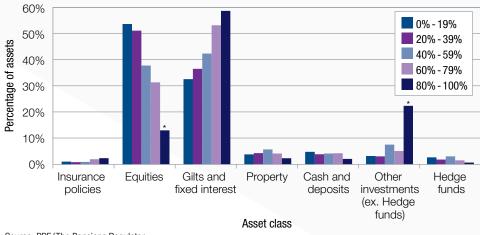
Better-funded schemes tend to have a greater share of their assets invested in gilts, and a smaller share invested in equities.



The share of gilts and fixed interest in total assets increases with scheme maturity (as measured by the percentage of pensioner liabilities in total liabilities) while the share of equities falls.

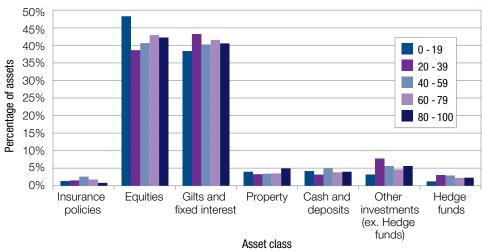
Those schemes with company sponsors having the lowest failure scores (highest chance of insolvency) possess a larger equity share in total assets than schemes with company sponsors with higher failure

**Chart 7.4** | Weighted average asset allocation of schemes by current pensioner liabilities as a percentage of total liabilities



Source: PPF/The Pensions Regulator

Chart 7.5 | Weighted average asset allocation of schemes by D&B failure score

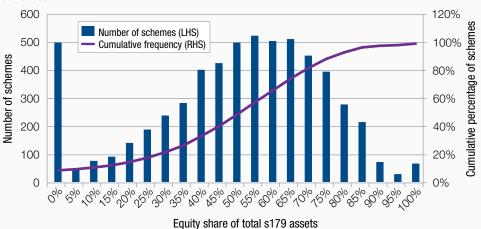


Source: PPF/The Pensions Regulator

scores.

<sup>\*</sup> This is heavily affected by one large scheme which has a high share of assets in "Other investments". Excluding this scheme the overall "Other investments" proportion would be 0.6 per cent and equity share 16.7 per cent.

**Chart 7.6** | Histogram of equities by share of assets and cumulative percentage of schemes

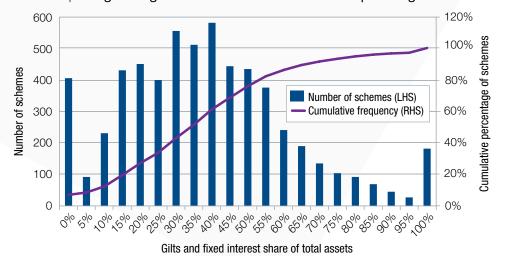


Source: PPF/The Pensions Regulator

of schemes hold at least 50 per cent of assets in equities, down around 10 percentage points from Purple 2009.

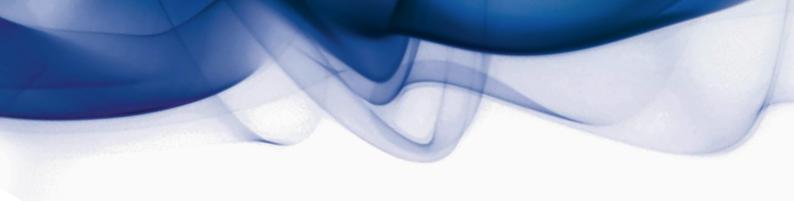
Around 50 per cent

Chart 7.7 | Histogram of gilts and fixed interest and cumulative percentage of schemes



Source: PPF/The Pensions Regulator

Approximately 25 per cent of schemes hold at least 50 per cent of their assets in gilts and fixed interest assets, an increase of five percentage points since Purple 2009.

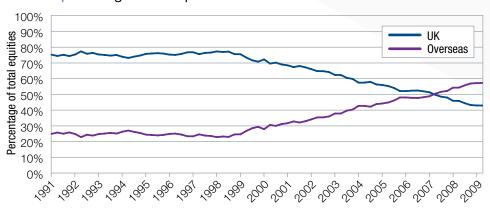


## 7.2 A longer-term perspective and analysis of investment flows from ONS data

The data from the ONS MQ5 enquiry is based on a sample of around 340 pension funds. This is comprised of around 100 local authorities and 240 public and private corporations (the PPF database excludes local authorities and public corporations). The estimated total assets of the ONS population is £1,100 billion, which is somewhat larger than the estimate for the PPF database. All schemes with more than 20,000 members are automatically included and schemes with less than 20,000 members are randomly selected. The sample is made up of a variety of funds including 'superannuation and self-administered pension funds'. A self-administered pension fund is defined as an occupational pension scheme with units invested in one or more managed schemes or unit trusts; a superannuation fund is defined as an organisational pension programme created by a company for the benefit of its employees. The sample may also contain defined contribution schemes.

Over the 10 years to mid-2009, there has been a large shift within equities away from UK and toward overseas.

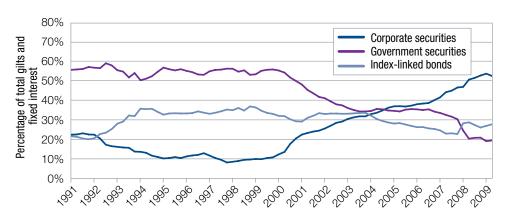
Chart 7.8 | Percentage of total equities held in the UK and overseas



Source: Investment by Insurance Companies, Pension Funds and Trusts, ONS

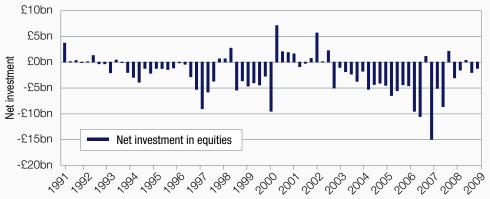
Over the 10 years to mid-2009, within gilts and fixed interest, there was a large rise in the share of corporate bonds and declines in both the government and index-linked shares.

**Chart 7.9** | Percentage of total gilts and fixed interest held in corporate bonds, government securities and index-linked bonds



Source: Investment by Insurance Companies, Pension Funds and Trusts, ONS

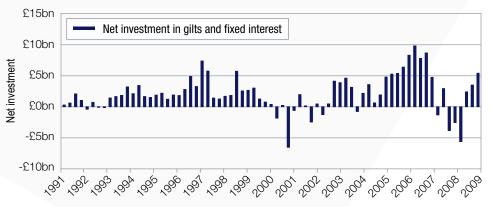
#### Chart 7.10 | Net investment in equities



Source: Investment by Insurance Companies, Pension Funds and Trusts, Office for National Statistics

Since the third quarter of 2003, only three quarters have seen positive net investment in equities.

#### Chart 7.11 | Net investment in gilts and fixed interest



Source: Investment by Insurance Companies, Pension Funds and Trusts, Office for National Statistics

Since the third quarter of 2003, there have been only five quarters of net disinvestment in gilts and fixed interest.

# 8

## Risk Developments

#### 8.1 Summary

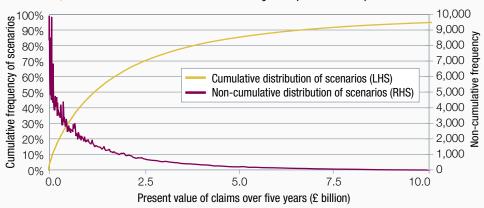
- The Long-Term Risk Model (LTRM) is the key tool that the Board of the Pension
  Protection Fund (PPF) uses to understand and quantify the risks it faces over the long
  term. It helps the Board of the PPF assess the level of resources required to meet
  potential future claims.
- There was a marked fall in long-term risk to the Fund between end-March 2009 and end-March 2010. This was largely attributable to the improvement in scheme funding over the period.
- The PPF published its long-term funding strategy in August 2010. As part of this strategy, the PPF aims to be self-sufficient (i.e. fully funded, with zero exposure to market, inflation and interest rate risk and protection against claims and longevity risk) by 2030.
- Current projections, produced using output from the Long Term Risk Model (LTRM), suggest that the PPF has around an 83 per cent probability of meeting this funding objective.<sup>30</sup>
- Looking at shorter-term risk measures, total weighted deficit (scheme sponsor oneyear-ahead insolvency probability multiplied by scheme deficit) for deficit schemes has fallen to £280 million in 2010 from £480 million in 2009, reflecting improved funding.
- The proportion of weighted deficit attributable to schemes with the worst insolvency probabilities is 55.3 per cent, up from 19.8 per cent in 2009.
- Looking at the industry breakdown, schemes with sponsors in the manufacturing sector have the largest weighted deficit at around 45 per cent of the total.
- The PPF's risk-based levy for individual schemes has so far been based on 12-month ahead insolvency probabilities for scheme sponsors provided by D&B and a measure of scheme funding at a single point in time (though not necessarily the same point).
- In October 2010, the PPF published a consultation document proposing changes to the levy to take effect from 2012/13.<sup>31</sup>
- In the new framework, funding would be calculated so that market movements
  will be averaged over five years. Allowance for investment risk will be built into this
  new underfunding measure. New insolvency probabilities will be used and there will
  be a narrower range of insolvency probabilities and fewer insolvency bands, with
  measurement averaged over one year.

<sup>30</sup> This probability is sensitive to a range of modelling assumptions. For a description of the modelling methodology and assumptions employed, see http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_Funding\_Strategy\_Document.pdf

 $<sup>\</sup>textbf{31} \ \text{http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/levy\_consultation\_oct10.pdf}$ 

#### 8.2 Long-Term Risk

Chart 8.1 | Central scenario LTRM run over five years (March 2010)



Source: PPF/The Pensions Regulator

**Table 8.1** LTRM Projections of five-year claims on the PPF (s179 basis) at March 2009 and March 2010

	Present value of total claim over five years (£ billion)				
	Median	90th percentile	95th percentile		
March 2010 LTRM run	1.2	2.5	3	6.3	9.4
March 2009 LTRM run	2.1	3.5	4.5	8.4	11.9

Source: PPF/The Pensions Regulator

The LTRM projection of expected (mean) claims on the PPF over five years has fallen from £3.5 billion at March 2009 to £2.5 billion at March 2010.



The PPF published its long-term funding strategy in August 2010. The strategy establishes a long-term funding objective and a framework for monitoring the Fund's progress towards this target.

The PPF's long-term funding objective is to be self-sufficient by 2030. Self-sufficiency requires that the PPF be fully-funded with zero exposure to market, inflation and interest rate risk and protection against the risk of future claims and members living longer than expected. Exposure to market, inflation and interest rate risk can be reduced using conventional hedging arrangements and investment in low-risk securities. Analysis of LTRM output suggests that a funding reserve equivalent to 10 per cent of PPF liabilities at 2030 would be sufficient to cover unexpected claims (over five years) and longevity risk (over the lifetime of the Fund) in nine out of 10 scenarios.

Output from the LTRM is used to model the probability of the PPF meeting the funding objective. The LTRM projects a range of PPF balance sheet outcomes at 2030. The probability of meeting the funding objective is calculated as the proportion of outcomes in which PPF funding exceeds the level required by self-sufficiency. As at 31 March 2010, this probability was around 83 per cent. The Board of the PPF has expressed comfort with circumstances in which this probability is greater than 80 per cent.

There is perpetual and non-zero risk of a large PPF deficit occurring as a result of significant claims. In order to measure the dispersion of adverse funding outcomes, the PPF has constructed a 'downside risk' measure. This is calculated by taking the 90th percentile of the largest deficits to develop at any point in each of the 500,000 projected balance sheet scenarios.<sup>32</sup> As at 31 March 2010, the PPF's downside risk to 2030 was £14 billion. Both the probability of meeting the funding objective and the downside risk measure are sensitive to a series of modelling assumptions. Table 8.2 below illustrates the sensitivity to a selection of these.

The long-term funding strategy provides a clear and comprehensive overview of the PPF risk environment, strengthening the basis on which PPF policy is formed and improving communication of the Fund's financial prospects to stakeholders. The Board of the PPF intends to review the strategy on an annual basis.

For a full explanation of the PPF long-term funding strategy, including modelling methodology and assumptions, see: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\_Funding\_Strategy\_Document.pdf

**<sup>32</sup>** It is important to recognise that, in practice, the deficit expressed by the downside risk statistic has a less than 10 per cent chance of occurring, given the PPF's ability to mitigate underfunding through levy and investment strategy.

Table 8.2 | Modelled probability of the PPF meeting its funding objective

Scenario	Probability of meeting funding objective (%)	Downside risk (£ billion)
Base Case	82.8	14
1 percentage point reduction in asset returns (excluding cash)	76.4	24
Annual levy reduced by £100m	80.8	17
Future inflation reduced by 0.5% (to reflect potential switch from RPI to CPI indexation)	87.4	9

Source: PPF/The Pensions Regulator

8.4 Shorter-term risk: insolvency-probability-weighted deficits

In the analysis below:

Weighted deficit for scheme  $A = \text{deficit in scheme A (in } \pounds s) \times \text{one-year-ahead insolvency probability of sponsoring company}$ 

with each measured at 31 March 2010.

For more information see The Purple Book 2009. page 84

**Table 8.3** Insolvency groups (based on insolvency probabilities implied by D&B failure scores)

Insolvency group	Range of insolvency probabilities	Percentage of total number of schemes
1	Less than or equal to 0.07%	22.8%
2	0.07% to 0.18%	26.2%
3	0.18% to 0.30%	13.5%
4	0.30% to 0.43%	6.9%
5	0.43% to 0.55%	4.5%
6	0.55% to 0.72%	5.1%
7	0.72% to 0.96%	3.9%
8	0.96% to 1.30%	3.9%
9	1.30% to 3.52%	7.9%
10	More than 3.52%	5.3%

Source: PPF/The Pensions Regulator

**Table 8.4** Underfunding groups

Underfunding group	Ratio of assets to s179 liabilities	Percentage of total number of schemes
1	75% to 100%	84.2%
2	50% to 75%	14.9%
3	Less than 50%	0.9%

Source: PPF/The Pensions Regulator

The probability of the PPF meeting its funding objective is around 83 per cent.

To aid analysis, D&B insolvency probabilities, and underfunding levels of deficit schemes have been grouped.



Schemes in the best two insolvency groups account for 65 per cent of the liabilities of deficit schemes.

Chart 8.2 Liabilities of schemes in deficit by insolvency and underfunding group



Source: PPF/The Pensions Regulator

The total weighted deficit for schemes in deficit at end-March 2010 was around £280 million down from around £480 million at end-March 2009. The decline reflects improved funding.

**Table 8.5** Weighted deficit (sum of scheme deficits multiplied by the one year insolvency probability of scheme sponsor) by insolvency and underfunding group for schemes in deficit, 31 March 2010

Weighted deficit (£ million)	Ţ			
Insolvency group	1	2	3	Total
1	5.2	1.5	0.0	6.6
2	11.1	1.7	0.0	12.9
3	15.1	1.1	0.1	16.3
4	8.4	1.5	0.0	9.9
5	10.2	0.8	0.0	11.0
6	6.8	1.2	0.0	8.0
7	4.4	1.2	0.1	5.7
8	10.9	3.3	0.0	14.2
9	30.3	9.9	0.0	40.2
10	79.6	57.6	17.0	154.1
Total	182.0	79.6	17.2	278.9

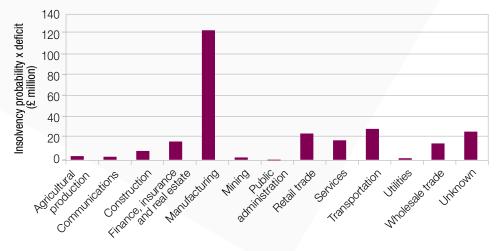
Source: PPF/The Pensions Regulator

Table 8.6 | Average weighted deficit for schemes in deficit, end-March 2010

Insolvency group	Average insolvency probability	Average funding position	Weighted deficit (£ million)	Number of schemes	Average weighted deficit per scheme (£ million)
1	0.0%	82.68%	6.6	830	0.01
2	0.1%	82.36%	12.9	958	0.01
3	0.2%	82.85%	16.3	481	0.03
4	0.4%	82.40%	9.9	272	0.04
5	0.5%	82.03%	11.0	172	0.06
6	0.6%	81.57%	8.0	195	0.04
7	0.8%	82.73%	5.7	154	0.04
8	1.1%	80.12%	14.2	145	0.10
9	2.1%	81.12%	40.2	310	0.13
10	17.3%	78.53%	154.1	213	0.72
Total			278.9	3730	0.07

Source: PPF/The Pensions Regulator

Chart 8.3 | Weighted deficit by industry\* for schemes in deficit



Source: PPF/The Pensions Regulator

\*Based on US 1972 SIC

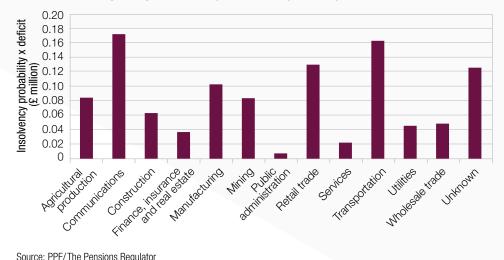
The average weighted deficit per scheme is £0.72 million in insolvency group 10, more than 10 times the overall average, and five times the average in group 9.

Schemes with sponsors in the manufacturing sector have the largest weighted deficit at £125 million, around 45 per cent of the total.



The communications and transportation sectors have the highest average weighted deficit by scheme.

Chart 8.4 | Average weighted deficit per scheme by industry\* (for schemes in deficit)

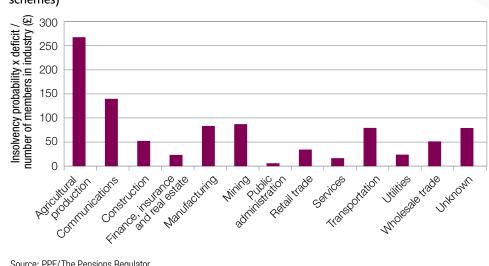


Source: PPF/The Pensions Regulator

\*Based on US 1972 SIC

Agricultural production has the highest weighted deficit per member.

Chart 8.5 | Average weighted deficit per member by industry\* (for underfunded schemes)



Source: PPF/The Pensions Regulator

\*Based on US 1972 SIC

#### 8.5 The Pension Protection Levy: A New Framework

The PPF's risk-based levy for individual schemes has so far been based on 12-month ahead insolvency probabilities for scheme sponsors provided by D&B and a measure of scheme funding both at a single point in time (though not necessarily the same for both).

In October 2010, the PPF published a consultation document proposing changes to the levy to take effect from 2012/13 to make sure the levy the PPF charges individual schemes reflect the risk they pose to the PPF.<sup>33</sup> In the new framework, the formula would be fixed for three years. A new measure of funding would be calculated in such a way that market movements would be averaged over five years to reduce funding volatility in assessed funding levels. Allowance for investment risk would be built into this new underfunding measure in the form of a funding stress to ensure that the levy reflects a scheme's risk to the PPF.

New insolvency probabilities will be used. These are aligned with the market's view of risk and benchmarked against external practice – with a narrower range of insolvency probabilities. There would be fewer insolvency bands, with measurement averaged over one year.

## 9

## Levy Payments

#### Summary

- The PPF has been collecting a levy determined mainly by the risk schemes pose to the Fund, for four years. It is expecting to collect £592 million for the 2009/10 levy year from 6,900 schemes. This compares with £651 million in 2008/09, £585 million in 2007/08 and £271 million in 2006/07.
- The expected collection for 2009/10 is £108 million less than the £700 million estimate, owing to such factors as: schemes appealing the insolvency probabilities upon which their levies are based; and several large schemes entering the PPF assessment period and, therefore, not paying a levy.
- For 2009/10, total levies amounted to 0.07 per cent of total scheme assets, a slight reduction on the 0.08 per cent in the previous year.<sup>34</sup>
- In 2009/10, 340 schemes had their risk-based levy capped at 1 per cent of liabilities. This
  is five per cent of the total number of schemes. The liabilities of capped schemes equalled
  £4.6 billion or less than one per cent of total liabilities.<sup>35</sup>
- The top 100 levy payers accounted for £213 million, 36.5 per cent of the total levy, but 42.8 per cent of liabilities.<sup>36</sup>
- The number of schemes paying no risk-based levy in 2009/10 was 363, lower than
  the 473 in the previous year. The weaker economic climate resulted in lower scheme
  funding levels and, therefore, fewer schemes obtained the 140 per cent funding level on
  a s179 basis required to avoid paying a risk-based levy.
- In 2009/10, the number of schemes paying no risk-based levy represented six per cent of total schemes and five per cent of total liabilities, compared to seven and 10 per cent respectively for 2008/09.
- This chapter also looks at the trends in levy payments by various scheme characteristics over the four-year period from 2006/07 for a set of 6,409 schemes, so as to abstract from changes resulting from different composition of the sample.
- The distribution of levy by industry was broadly similar in 2009/10 to that in the 2008/09 levy year. Manufacturing, services, and finance, insurance and real estate account for around 70 per cent of the eligible DB universe, and also pay around 70 per cent of the total PPF levy.
- The manufacturing industry represents the largest portion of the DB universe and thus
  pays the largest proportion of the total levy. However, wholesale trade, transportation,
  and the mining industries are the leading levy payers on a per member basis.

**<sup>34</sup>** These figures are based on the larger 2009/10 dataset of 6,802 schemes who have paid £584 million in total. This is somewhat smaller than the £592 million expected to be collected because full information is not yet available on the remainder.

<sup>35</sup> These figures are based on the larger 2009/10 dataset of 6,802 schemes.

<sup>36</sup> These figures are based on the larger 2009/10 dataset of 6,802 schemes.

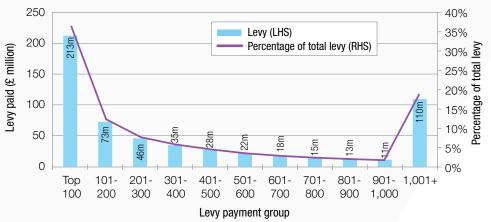
Table 9.1 Levy payments

	2006/07	2007/08	2008/09	2009/10
Total levy payments (£ m)	271	585	651	592
Estimated collection (£ m) <sup>37</sup>	575	675	675	700
Levy as percentage of assets	0.03%	0.07%	0.08%	0.07%
Number of capped schemes	310	411	564	340

Source: PPF/ The Pensions Regulator

PPF expects to collect £592 million for 2009/10 levy year.

Chart 9.1 | Distribution of levy payments by largest levy payers\*



Source: PPF/The Pensions Regulator

The top 100 levy payers accounted for £213 million or 36.5 per cent of the total levy, but 42.8 per cent of total liabilities.

Table 9.2 | Schemes paying no risk-based levy in each levy year\*

	Number of schemes	Percentage of total schemes	s179 liabilities (£ billion)	s179 liabilities as percentage of total
2006/07	345	5%	44.1	6%
2007/08	570	9%	83.0	12%
2008/09	473	7%	71.8	10%
2009/10	363	6%	32.7	5%

Source: PPF/ The Pensions Regulator

Around six per cent of schemes paid no risk-based levy, down from seven per cent in 2008/09.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

**<sup>37</sup>** The estimated collection represents the original expectation of levy to be collected as opposed to expectations formed during the collection process.

In 2009/10, 340 schemes had their risk-based levy capped, with 295 of those schemes in the worst insolvency groups 9 and 10.

Table 9.3 Number of schemes with capped risk-based levies by insolvency group\*

Insolvency group	Number of capped schemes	Percentage of capped schemes in insolvency group
1	0	0.0%
2	0	0.0%
3	0	0.0%
4	0	0.0%
5	0	0.0%
6	1	0.4%
7	6	1.8%
8	38	14.4%
9	211	45.5%
10	84	65.6%

Source: PPF/ The Pensions Regulator

In 2009/10, 202 (59 per cent) of the schemes that had their risk-based levy capped were under

75 per cent funded.

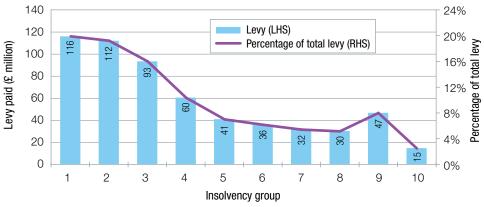
Over 50 per cent of the levy is paid by schemes in the three best insolvency groups, reflecting their large share of total liabilities.

Table 9.4 | Number of schemes with capped risk-based levies by funding level\*

Funding Level	Number of capped schemes	Percentage of capped schemes in funding band
Less than 50%	19	27.5%
50%-75%	183	12.9%
75%-100%	126	4.2%
100%-125%	12	0.7%
Greater than 125%	0	0.0%

Source: PPF/ The Pensions Regulator

Chart 9.2 | Levy distribution by insolvency group<sup>38</sup>



Source: PPF/The Pensions Regulator

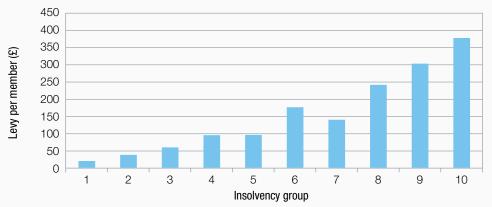
<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

<sup>38</sup> For more information on the insolvency groups see Chapter 8 "Risk developments". Scheme sponsors in Group 1 have the lowest insolvency probabilities while those in Group 10 have the highest.

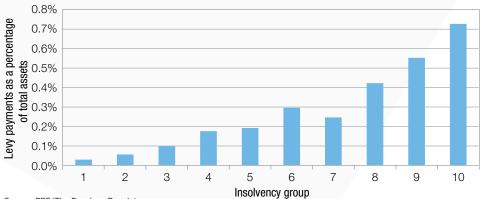
Chart 9.3 | Levy per member by insolvency group



Source: PPF/The Pensions Regulator

Levy per member generally increases as the insolvency risk of the sponsoring employer increases.

Chart 9.4 Levy payments as a percentage of assets by insolvency group



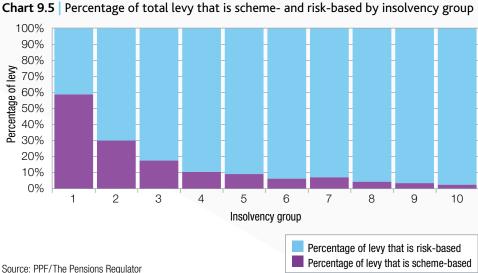
Source: PPF/The Pensions Regulator

The PPF levy is very small compared with the value of total assets, particularly for schemes in the best 3 insolvency groups.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year

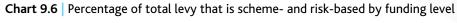
<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year

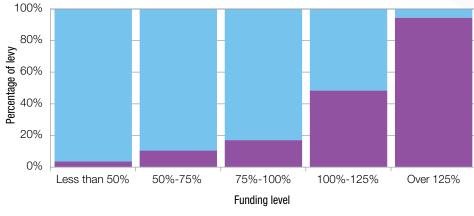
The share of riskbased levy rises and the share of schemebased levy falls, as insolvency risk increases.



Source: PPF/The Pensions Regulator

The proportion of risk-based levy declines as scheme funding improves.





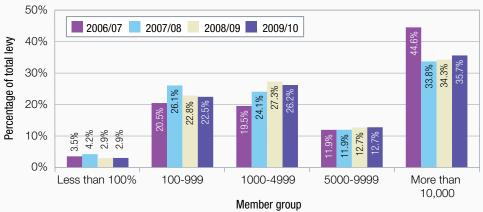
Percentage of levy that is risk-based Percentage of levy that is scheme-based

Source: PPF/The Pensions Regulator

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year.

<sup>\*</sup>Based on a sample of 6,802 schemes for the 2009/10 levy year



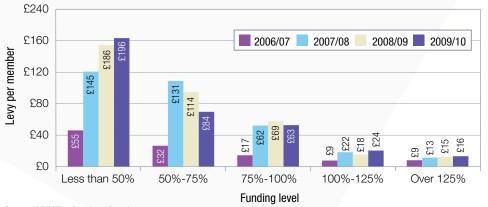


5,000 members) paid 48.4 per cent of total levy in 2009/10, a slight increase on 2008/09.

Large schemes (over

Source: PPF/The Pensions Regulator

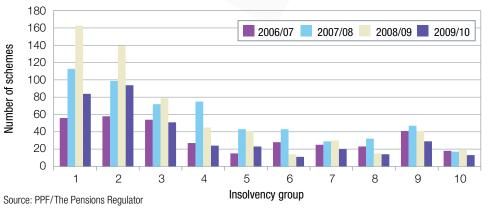
Chart 9.8 | Levy per member by funding level\*



Source: PPF/The Pensions Regulator

Levy per member has increased the most in percentage terms within the 75%–100% funding group between 2006/07 and 2009/10.

Chart 9.9 | Number of schemes paying no risk-based levy\*



\*Based on dataset of the same 6,409 schemes across all years

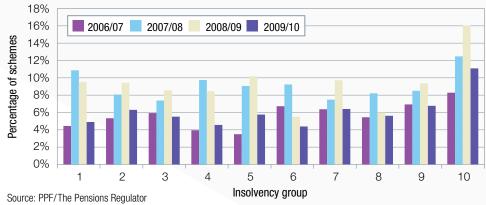
The number of schemes who did not pay a risk-based levy fell across all insolvency groups in 2009/10 as scheme funding deteriorated.

<sup>\*</sup>Based on dataset of the same 6,409 schemes across all years

<sup>\*</sup>Based on dataset of the same 6,409 schemes across all years

A greater proportion of schemes in the worst insolvency group (group 10) paid no risk-based levy during 2009/10.

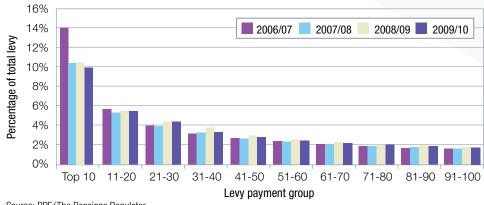
Chart 9.10 | Percentage of schemes in each insolvency group paying no risk-based levy\*



\*Based on dataset of the same 6,409 schemes across all years

The top 10 levy payers accounted for 10 per cent of the total levy in 2009/10, as in the preceding two years.

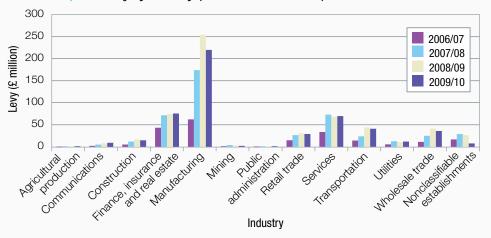
Chart 9.11 | Percentage of total levy paid by the 100 schemes paying the largest levies\*



Source: PPF/The Pensions Regulator

\*Based on dataset of the same 6,409 schemes across all years

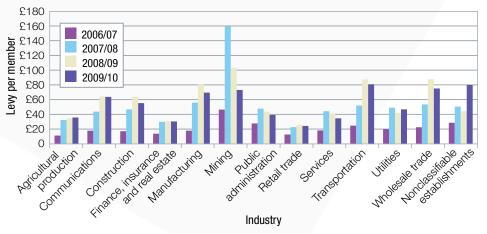
Chart 9.12 Total levy by industry (based on 1972 US SIC)\*



Source: PPF/The Pensions Regulator

Manufacturing, finance, insurance and real estate, and services are the highest levy paying industries, in line with their proportion of the eligible DB universe.

Chart 9.13 | Levy per member by industry (based on 1972 US SIC)\*



Source: PPF/The Pensions Regulator

Levy paid per member declined for all industries in 2010, except agricultural production and utilities.

<sup>\*</sup>Based on dataset of the same 6,409 schemes across all years

<sup>\*</sup>Based on dataset of the same 6,409 schemes across all years

# 10

### Schemes in Assessment

#### 10.1 Summary

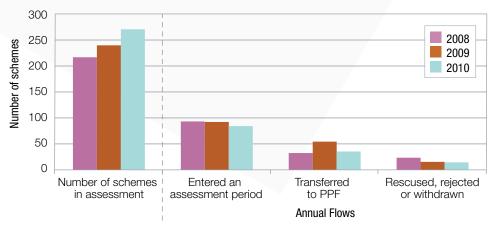
- All schemes go through an Assessment Period before entering the PPF. The PPF aims to complete assessment for most schemes within two years. During assessment, the PPF wants to ensure that all the data held for the scheme is accurate.
- The PPF's Annual Report and Accounts 2009/10 shows there were 376 schemes in assessment or likely to be in assessment at 31 March 2010 compared with 326 at 31 March 2009.<sup>39</sup> Of these, 317 were recognised in provisions, up from 287 at 31 March 2009. In these figures, all segregated parts of schemes have been counted as separate schemes.
- In this chapter, for analytical purposes, scheme sections and segregated parts
  are amalgamated at a scheme level, and schemes in surplus excluded. After this
  amalgamation, there were 271 schemes (209,000 members) in a PPF assessment
  period as at 31 March 2010, compared with 240 (201,000 members) a year earlier.
- The rise reflects 84 new schemes entering and remaining in assessment, 35 schemes transferring into the PPF and 14 being rescued, rejected or withdrawn. In addition, four sections treated independently in the 2009 assessment dataset have been merged into scheme-level data for 2010.
- On a s179 basis, as at 31 March 2010, the aggregate assets of schemes in assessment totalled £8.4 billion and their liabilities £9.5 billion. Liabilities averaged £34.9 million per scheme and assets averaged £30.9 million.
- The funding estimates for schemes in assessment are calculated in a somewhat different way from the funding estimates in Chapter 4, Scheme Funding. For material schemes the asset value is the actual asset value as at 31 December 2009 rolled forward to 31 March 2010 whereas in Chapter 4 the valuations are generally older. Liabilities have been adjusted for cash flows out of the scheme.
- The more up-to-date valuations for schemes in assessment take account of the derisking that certain material schemes have put in place after discussion with the PPF.
- The funding data that were provided for schemes in assessment for use in Purple was based on the same data as used for the actuarial PPF valuation at 31 March 2010 published in the Annual Report and Accounts.
- The Board of the PPF monitors the investment strategies and liabilities of schemes in assessment and considers whether, and how, the investment risks associated with these schemes might be mitigated with the asset strategy of the Fund.
- Schemes with liabilities below £5 million account for 35.1 per cent of schemes in assessment but only 28.4 per cent of the Purple 2010 dataset.

<sup>39</sup> The PPF recognises provisions for claims in respect of schemes where eventual entry into the PPF is judged probable. See PPF Annual Report and Accounts, Annex S3 p118. http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/ARA\_0910.pdf

- The aggregate funding level (total assets divided by total liabilities) of the schemes
  in assessment as at 31 March 2010 was 88.4 per cent, below the aggregate funding
  levels of the schemes in the Purple 2010 dataset (104.3 per cent) but well above the
  aggregate funding level of the schemes in assessment a year earlier (70.5 per cent).
- The larger schemes in assessment are, on average, better funded than the smaller schemes. Schemes with over £50 million in assets have an average funding level of 93.4 per cent. Those with less than £50 million in assets have an average funding level of 78.2 per cent.
- According to the latest scheme return data prior to their entering assessment, schemes
  invested most heavily in equities (47.5 per cent of total assets) and gilts and fixed
  interest (26.5 per cent). This equity share is higher than the Purple 2010 dataset share
  of 42.0 per cent of assets.
- Where the industry is known, just over half (50.2 per cent) of the companies sponsoring schemes in assessment operated within the manufacturing sector. The service sector accounts for 14.3 per cent of sponsors of schemes in assessment and the retail trade 11.0 per cent.
- The representation of manufacturing in schemes in assessment is much greater than the sector's share of scheme sponsors in the PPF universe (31.5 per cent), which in turn is greater than the share of manufacturing in the UK economy (12 per cent).

#### 10.2 Schemes entering assessment

Chart 10.1 Number of schemes in assessment at 31 March 2008, 31 March 2009 and 31 March 2010



Source: PPF/The Pensions Regulator

The number of schemes in assessment has grown steadily as more schemes have entered assessment than have transferred to the PPF or been rescued, rejected or withdrawn.

At 31 March 2010, schemes in assessment were better funded than in any previous year.

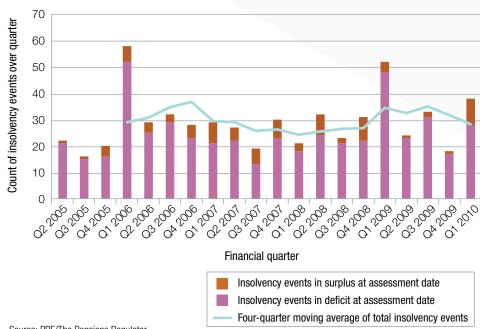
Table 10.1 Funding statistics for schemes in assessment at 31 March 2007, 31 March 2008, 31 March 2009 and 31 March 2010

4.0	4.7	-0.7	85.1%
4.2	5.4	-1.2	77.8%
6.6	9.4	-2.8	70.2%
8.4	9.5	-1.1	88.4%

Source: PPF/The Pensions Regulator

The number of qualifying insolvency events has fallen over the four quarters to Q1 2010.

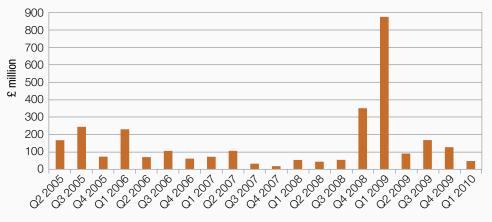
Chart 10.2 | Number of qualifying insolvency events by date of insolvency\*



Source: PPF/The Pensions Regulator

<sup>\*</sup> Sections and segregated schemes not amalgamated

Chart 10.3 | Total s179 deficits for schemes entering an assessment period



Source: PPF/The Pensions Regulator

#### 10.3 Scheme demographics

Chart 10.4 Percentage of schemes in assessment in each liability group



Source: PPF/The Pensions Regulator

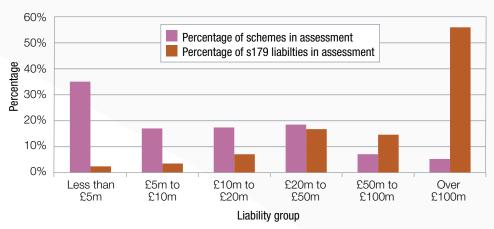
The average quarterly deficit of schemes entering assessment in the year to Q1 2010 was £107 million, down from £330 million in the year to Q1 2009. The Q1 2009 peak reflected both a high number of schemes entering assessment and some large individual scheme deficits.

Schemes with less than £5 million liabilities make up 35.1 per cent of schemes in assessment, compared with 28.4 per cent in the Purple dataset.



Schemes with liabilities of more than £100 million represent 5.2 per cent of schemes in assessment but 56.0 per cent of liabilities.

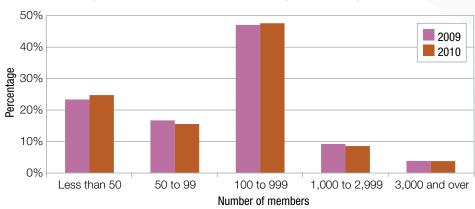
**Chart 10.5** Percentage of schemes and percentage of s179 liabilities by liability group for schemes in assessment



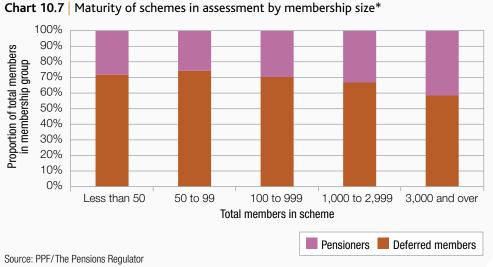
Source: PPF/The Pensions Regulator

Almost half of the schemes in assessment were in the 100-999 membership range.
40 per cent had under 100 members.

Chart 10.6 | Proportion of schemes in assessment by membership size



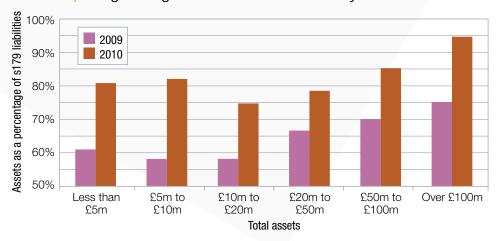
Source: PPF/The Pensions Regulator



The maturity of schemes in assessment increases with size, as measured by the number of members.

#### 10.4 Funding level

Chart 10.8 Average funding level of schemes in assessment by asset size



Source: PPF/The Pensions Regulator

From 2009 to 2010, average funding levels for schemes in assessment have improved in each asset band.

<sup>\*</sup>For the purpose of this chapter only pensioners and deferred members are considered.

There are no active members in the dataset.

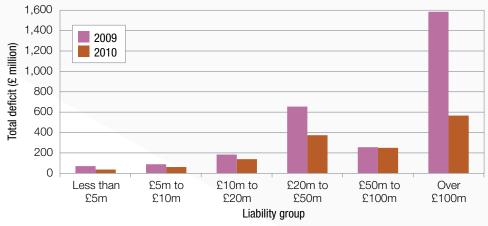


The total deficit of schemes in assessment in 2010 is less than in 2009 for each liability group even though there were additional schemes in assessment.

This reflects the general improvement in scheme funding between the two years.

Prior to assessment, schemes in assessment tended to hold more of their assets in equities and insurance policies and less in gilts and fixed interest than schemes in the Purple 2010 dataset.

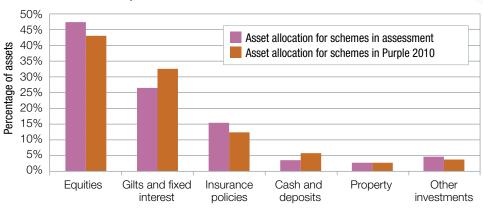
Chart 10.9 Total s179 deficit of schemes in assessment by liability size



Source: PPF/The Pensions Regulator

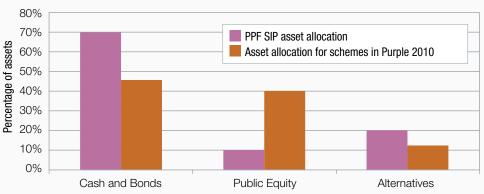
#### 10.5 Asset allocation

Chart 10.10 | Simple average asset allocations prior to assessment for schemes in assessment and the Purple 2010 dataset at 31 March 2010



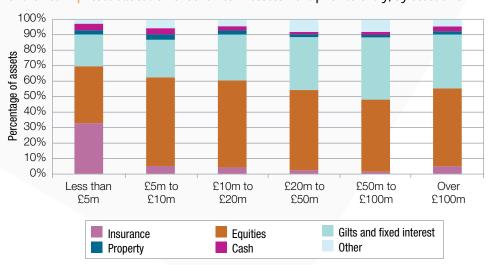
Source: PPF/The Pensions Regulator

Chart 10.11 | Weighted average asset allocations prior to assessment for schemes in assessment at 31 March 2010 and the PPF's SIP asset allocation



Source: PPF/The Pensions Regulator

Chart 10.12 | Asset allocation of schemes in assessment prior to entry, by asset size



Source: PPF/The Pensions Regulator

When schemes transfer into the PPF their assets will be transitioned to fit in with the PPF's asset allocation as set out in its Statement of Investment Principles (SIP).<sup>40</sup>

Larger scheme, by asset size tended to hold a higher proportion of assets in gilts and fixed interest than smaller schemes, prior to entering assessment.

<sup>40</sup> http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/SIP\_Mar2010.pdf

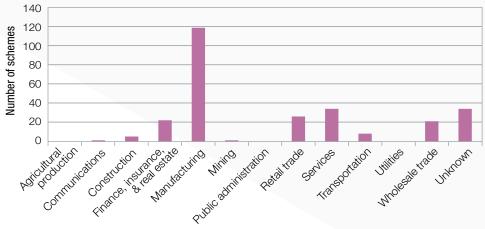


The manufacturing industry contributed 119 of the 237 schemes in assessment (50.2 per cent) for which industry classification is known.

Manufacturing accounts for 50.2 per cent of schemes in assessment with an industry classification compared to 31.5 per cent of schemes with known data in Purple 2010.

#### 10.6 Industry classification

Chart 10.13 | Distribution of schemes in assessment by industry classification\*



Source: PPF/The Pensions Regulator

\*Based on US 1972 SIC

Table 10.2 Distribution of schemes in assessment by industry classification\*

Agricultural Production	0	0.0%	0.0%	1.0%
Communications	1	0.4%	0.4%	0.6%
Construction	5	1.8%	2.1%	3.3%
Finance, Insurance and Real Estate	22	8.1%	9.3%	17.2%
Manufacturing	119	43.9%	50.2%	31.5%
Mining	1	0.4%	0.4%	0.8%
Public Administration	0	0.0%	0.0%	0.5%
Retail Trade	26	9.6%	11.0%	5.4%
Services	34	12.5%	14.3%	24.0%
Transportation	8	3.0%	3.4%	4.7%
Utilities	0	0.0%	0.0%	1.3%
Wholesale Trade	21	7.7%	8.9%	9.7%
Unknown	34	12.5%	n/a	n/a
Total	271	100.0%	100.0%	100.0%

Source: PPF/The Pensions Regulator

\* Based on US 1972 SIC

# 11

## **PPF** Compensation

#### 11.1 Summary

- The PPF made its first compensation payments in the 2006/07 financial year following the first scheme transfer in November 2006. A total of £1.4 million was paid out in 2006/07, rising to £17.3 million in 2007/08, £37.6 million in 2008/09 and £81.6 million in 2009/10. These figures include regular compensation and lump sum payments.
- At 31 March 2010, 20,775 members were in receipt of PPF compensation, up from 12,723 the previous year. The average annualised rate of compensation in payment for pensioner members at 31 March 2010 was £3,823 a year. The number of members with compensation not yet in payment (deferred members) as at 31 March 2010 totalled 26,058. For these members, the average annualised compensation accrued was £3,360 a year.
- As of 31 March 2010, males constituted 76 per cent of pensioner and deferred members, down from 78 per cent the previous year.<sup>42</sup>
- Spouses and dependants account for 16 per cent of those currently in receipt of compensation, receiving 10 per cent of compensation in payment.
- Members may have more than one tranche of compensation, reflecting different sections of their compensation coming into payment at different ages (referred to as Normal Retirement Ages or NRAs). The majority of both pensioner and deferred members have an NRA of 65 for their largest tranche of compensation.
- More than 75 per cent of both pensioner and deferred compensation is attributable to former employees of the manufacturing sector.
- As of 31 March 2010, only 73 pensioners were affected by the compensation cap (£29,748.68 a year for those aged 65 in 2010/11 after the 90 per cent scaling).
- The vast majority of members are in receipt of (or have accrued) compensation of less than 25 per cent of the cap.
- When an eligible defined benefit (DB) scheme transfers into the PPF, the PPF pays
  compensation of up to 90 per cent of scheme pension (subject to a compensation
  cap) to members who are yet to reach their normal retirement age (NRA). The PPF will
  generally pay compensation equivalent to 100 per cent of scheme pension to those
  already over their NRA.<sup>43</sup>
- The majority of compensation and liabilities was accrued in relation to service before April 1997 and is therefore not subject to indexation. Compensation accrued on or after 6 April 1997 is increased each year in line with Retail Prices Inflation (RPI) capped at 2.5 per cent with a floor of 0 per cent. In July 2010, the Minister for Pensions announced the Government's intention to move to the use of the Consumer Prices Index (CPI) for the purpose of pension indexation and revaluation. Draft regulations providing for this change are currently subject to consultation. All figures presented in this chapter are, where relevant, based on RPI inflation indexation and revaluation.
- **41** The annualised average rate of compensation is calculated by scaling up compensation over one month to reflect one year. This measure, which excludes lump sum payments, is used in order to accurately represent compensation in payment at 31 March 2010.
- 42 Unless otherwise stated, totals and averages relating to pensioners include dependants.
- 43 For full details of the conditions and processes governing the payment of PPF compensation, please visit http://www.pensionprotectionfund.org.uk/Pages/Compensation.aspx

#### 11.2 Total compensation and number of members

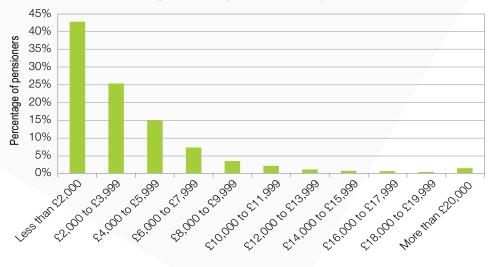
Table 11.1 | Total compensation and number of members

Statistic	Year			
	2007	2008	2009	2010
Total compensation (£ million, year to 31 March)	1.4	17.3	37.6	81.6
Total pensioner members (31 March)	1,457	3,596	12,723	20,775
Total deferred members (31 March)	5,621	8,577	18,009	26,058

Source: PPF/ The Pensions Regulator

#### 11.3 Distribution of Compensation

Chart 11.1 | Distribution of pensioners by annualised compensation level



Annualised compensation

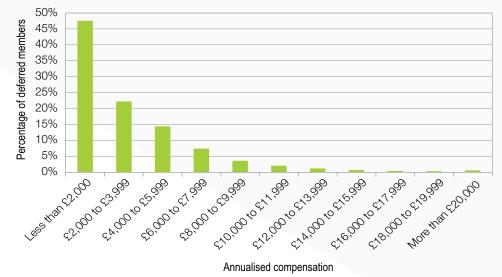
Source: PPF/ The Pensions Regulator

Eighty-three per cent of pensioner members have accrued annualised compensation of less than £6,000 a year.



Eighty-four per cent of deferred members have accrued annualised compensation of less than £6,000 a year.

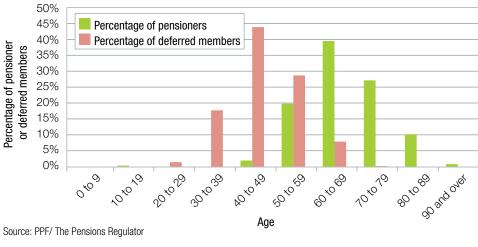
Chart 11.2 Distribution of deferred members by annualised compensation level



Source: PPF/ The Pensions Regulator

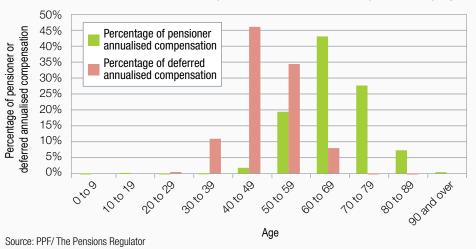
#### 11.4 Age and Gender

Chart 11.3 Distribution of pensioner and deferred members by age



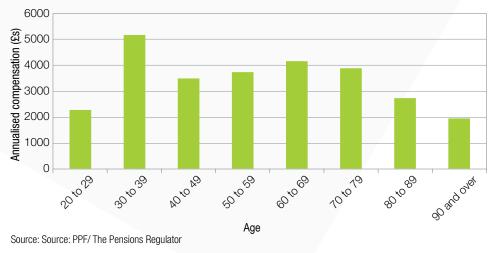
Sixty-two per cent of pensioner members are aged less than 70.

Chart 11.4 Distribution of annualised pensioner and deferred compensation by age



More than 46 per cent of all deferred annualised compensation is attributable to members in the 40 to 49 age range.

Chart 11.5 | Average annualised pensioner compensation by age



Average annualised compensation for pensioner members peaks between 60 and 69 aside from the spike in the 30 to 39 age bracket (due to a small number of people receiving relatively high levels of compensation).



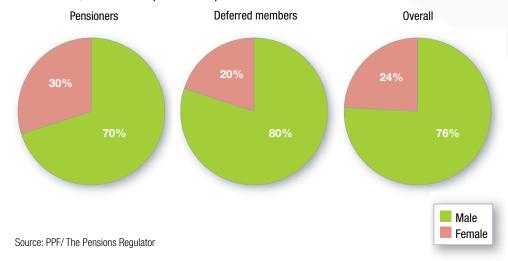
Average annualised compensation accrued by deferred members peaks between 50 and 59.

Chart 11.6 | Average annualised deferred member compensation by age



Overall, males make up 76 per cent of members of transferred schemes (down from 78 per cent last year).

Chart 11.7 Gender composition of pensioners and deferred members



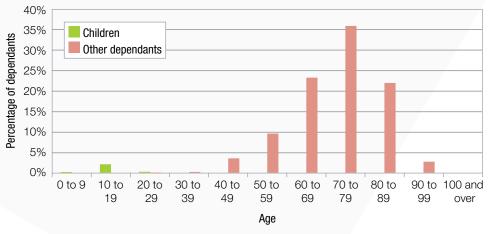
#### 11.5 Spouses and other dependants

**Table 11.2** Proportions of dependants and members within the PPF current pensioner population

	Number within pensioner population	Percentage of total population	Annualised compensation (£000s, pa)	Percentage of total annualised compensation
Dependents	3,305	16%	8,072	10%
Members	17,470	84%	71,355	90%
Total	20,775	100%	79,427	100%

Source: PPF/ The Pensions Regulator

Chart 11.8 Distribution of children and other dependants by age



Source: PPF/ The Pensions Regulator

Dependants constitute only a minor fraction of total pensioners and annualised compensation.

The distribution of dependants shows that dependants tend to be older on average than pensioner members (see Chart 11.3).

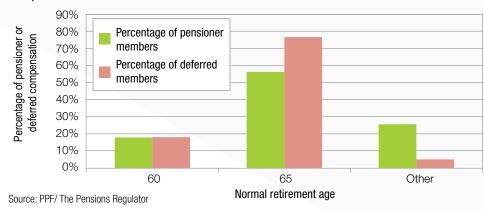


The majority of pensioner and deferred members have an NRA of 65 for their largest tranche of compensation.

The vast majority of PPF compensation is directed towards former employees of the manufacturing sector, reflecting the disproportionately large manufacturing constituency within the PPF sponsor universe.

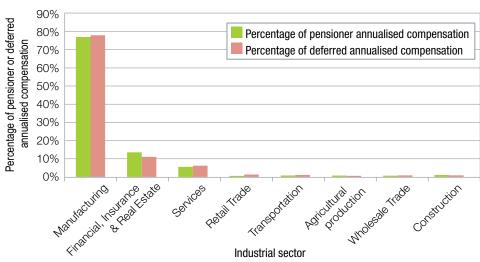
#### 11.6 Normal Retirement Age (NRA)

**Chart 11.9** Distribution of pensioner and deferred members by NRA of largest compensation tranche



#### 11.7 Industry

**Chart 11.10** Pensioner and deferred member annualised compensation by industrial sector\*



Source: PPF/The Pensions Regulator

<sup>\*</sup> Based on US 1972 SIC

#### 11.8 Geography

Chart 11.11 | Pensioner and deferred member annualised compensation by UK region



Source: PPF/ The Pensions Regulator



The majority of liabilities and annualised compensation was accrued in relation to service before April 1997.

#### 11.9 Period of service

 
 Table 11.3
 Pre- and post-April 1997 annualised compensation for pensioners and
 deferred members

	Pensioners		Deferred	
	Annualised compensation (£000s, pa)	Percentage of total	Annualised compensation (£000s, pa)	Percentage of total annualised compensation
Pre April 1997	65,774	83%	53,131	61%
Post April 1997	13,653	17%	34,422	39%
Total	79,427	100%	87,553	100%

Source: PPF/ The Pensions Regulator

Table 11.4 | Value of liabilities<sup>44</sup> attributable to pre- and post-April 1997 compensation for pensioners and deferred members

	Pensioners		Deferred	
	Liabilities (£000s)	Percentage of total	Liabilities (£000s)	Percentage of total
Pre-97	863,839	76%	706,673	55%
Post-97	275,829	24%	586,110	45%
Total	1,139,668	100%	1,292,783	100%

Source: PPF/ The Pensions Regulator

# 1 Risk Reduction

## 12

#### 12.1 Summary

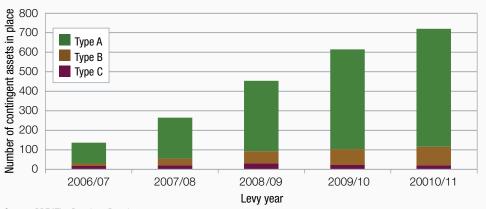
- The total number of recognised contingent assets (CAs) in place has risen by 16 per cent, from approximately 620 for the 2009/10 levy year to 720 for 2010/11.
- Schemes in the Purple 2010 dataset (excluding those schemes which were in a PPF assessment period as at 31 March 2010) had by 7 April 2010 certified approximately £29.1 billion of deficit reduction contributions (DRCs) to reduce deficits for the 2010/11 levy year. This represents an increase on the £26.5 billion certified for the previous levy year.
- The DRCs were not only paid by companies sponsoring the largest schemes; around 55 per cent of the £29.1 billion was paid by employers sponsoring schemes with fewer than 10,000 members.
- MQ5 data from the Office for National Statistics (ONS) covering 350 large pension schemes, including 100 local authorities, suggest that employers' special contributions (i.e. those in excess of regular annual contributions) have increased in 2009 and 2010 relative to the levels observed in 2008.
- Analysis of the latest technical provisions and recovery plan data is scheduled to be published in December 2010 as part of the Pensions Regulator's Scheme Funding publication.
- Schemes continue to reduce investment risk by shifting towards gilts and fixed interest and away from equities.
- Schemes continue to diversify their investments. In comparison to previous years, overseas and unlisted equity allocations constitute larger shares of total equity investments. Within gilts and fixed interest, there is an increased allocation to corporate bonds.<sup>45</sup>
- Quarterly surveys by F&C Asset Management suggest that interest rate hedging
  activity has increased in the first half of 2010 following a decline in the second half of
  2009. Inflation hedging activity peaked in the second and third quarters of 2009.
- The volume of scheme liabilities insured as part of pension buy-outs and buy-ins was lower in 2009 (£3.7 billion) than 2008 (£7.9 billion) but has picked up in 2010 with £3.3 billion transacted in the first six months, according to figures from Lane, Clark and Peacock and Hymans Robertson.
- Total scheme liabilities of £7.1 billion were hedged in longevity swap deals in the 12 months to June 2010. $^{46}$

**<sup>45</sup>** See Chart 7.3 in Chapter 7, Asset allocation.

<sup>46</sup> Buy-outs, Buy-ins and Longevity Hedging, Hymans Robertson, Q1 Update

#### 12.2 Contingent assets

Chart 12.1 | Contingent assets by type



Source: PPF/The Pensions Regulator

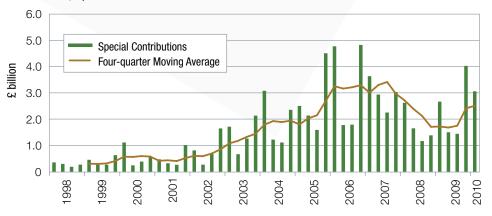
The numbers of recognised contingent assets for each year presented in Chart 12.1 are approximate and may change as a result of, for example, successful appeals.

Type A contingent assets are guarantees provided by the parent/group companies to fund the scheme, most commonly, to a pre-arranged percentage of liabilities. Type B contingent assets comprise security over holdings of cash, real estate and/or securities. Type C contingent assets consist of letters of credit and bank guarantees.

The total number of recognised contingent assets has risen by 16 per cent from approximately 620 for the 2009/10 levy year to 720 for 2010/11.

#### 12.3 Special contributions

Chart 12.2 | Special contributions



Source: Investment by Insurance Companies. Pension Funds and Trusts,  $\ensuremath{\mathsf{ONS}}$ 

Special contributions have increased in 2009 and 2010 relative to the levels observed in 2008.

<sup>\*</sup> These figures are approximations only



Analysis of the latest technical provisions and recovery plan data will be included in the regulator's Scheme Funding publication scheduled for December 2010.

> Schemes continue to reduce investment risk by shifting towards gilts and fixed interest and away from equities.

#### 12.4 The scheme funding regime

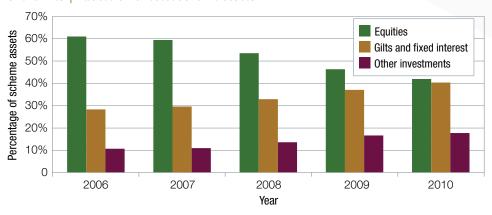
Table 12.1 Unweighted- and weighted-average Technical Provision and Recovery Plan lengths\*

	Unweighte	ed average	Liability-weighted average			
Tranche	Technical provisions as a proportion of s179 liabilities	Recovery plan lengths	Technical provisions as a proportion of s179 liabilities	Recovery plan lengths		
1	105.0%	7.7	107.6%	8.9		
2	114.6%	7.3	119.4%	6.2		
3	112.4%	8	113.1%	8.2		

Source: The Pensions Regulator

#### 12.5 Asset allocation

Chart 12.3 | Allocation of total scheme assets<sup>47</sup>



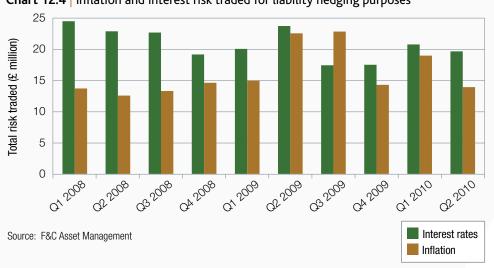
Source: PPF/The Pensions Regulator

<sup>\*</sup> Based on recovery plans received up to 31 July 2009. Analysis of more recent data will be made available as part of the regulator's Scheme Funding publication, scheduled for December 2010.

<sup>47</sup> This chart is constructed from the data presented in Table 7.1. The date at which schemes specify their asset allocation often differs from the date of scheme return. See Chapter 7, Asset allocation, for more details. The conclusion that schemes continue to disinvest from equities and invest in gilts is supported by ONS flow data, presented in charts 7.11 and 7.12.

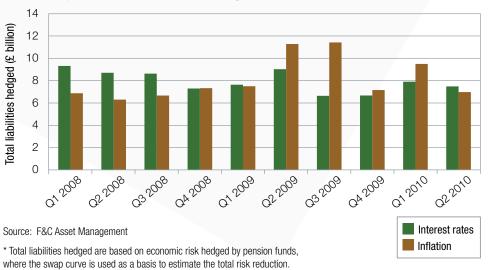
#### 12.6 Liability Driven Investment

Chart 12.4 Inflation and interest risk traded for liability hedging purposes



The volume of interest rate and inflation risk traded each quarter has continued to fluctuate between £10 million and £25 million.

Chart 12.5 | Total estimated liabilities hedged\*



The quarterly flow of liabilities being hedged against inflation and interest rate movements remains more than £6 billion for each type of risk.



Total scheme liabilities of £7.1 billion were hedged in longevity swap deals in the 12 months to June 2010.

Buy-out and buy-in transactions provide schemes with the opportunity to remove risk relating to all or part of their liability. Under a buy-out deal, a scheme transfers its entire liability to an insurer in exchange for all scheme assets. Insurers tend to require assets significantly in excess of scheme liabilities to compensate for the risk transferred. Buy-in deals are effectively partial buy-outs where the insurance policy is a scheme investment.

The value of liabilities insured in buy-out and buy-in deals was lower in 2009 (£3.7 billion) than 2008 (£7.9 billion), in part due to poorer scheme funding. 48 Volumes appear to have picked up in 2010, however, with £3.3 billion transacted in the first six months. 49

While both longevity swaps and buy-in/buy-out can mitigate the risk of greater than expected life expectancy, under the former there is no transfer of the underlying scheme assets to a counterparty. Longevity swaps entail the pension scheme exchanging fixed payments for cashflows that vary in accordance with the longevity experience of a reference population (either the named scheme members or a wider sample).

Interest and participation in the longevity market have grown significantly in 2009 and 2010. Total liabilities of £7.1 billion were hedged in the year to June 2010, with the majority of deals relating to larger schemes and pensioner liabilities.<sup>50</sup> The set of providers, including both banks and insurers, has grown simultaneously.

<sup>48 &#</sup>x27;Pension Buyouts 2010', Lane Clark & Peacock, May 2010

<sup>49 &#</sup>x27;Buy-outs, Buy-ins and Longevity Hedging: Q2 2010 Update', Hymans Robertson, August 2010

<sup>50 &#</sup>x27;Buy-outs, Buy-ins and Longevity Hedging: Q2 2010 Update', Hymans Robertson, August 2010

### Chapter 3 appendix

#### Schemes by size band

Schemes	Open	Closed	Paid Up	Winding Up	All
Member Group					
5 to 99 members	407	1,226	615	94	2342
100 to 999 members	476	1,833	658	51	3018
1,000 to 4,999 members	199	538	83	12	832
5,000 to 9,999 members	54	116	12	-	184
Over 10,000 members	77	139	-	-	220
Total	1,213	3,852	1,368	157	6,596

#### Members by size band

		Status								
Members	Open	Closed	Paid Up	Winding Up	All					
Member Group										
5 to 99 members	15,580	55,210	29,970	2,481	103,241					
100 to 999 members	166,139	679,140	193,240	13,310	2 025 222					
1,000 to 4,999 members	472,788	1,212,127	173,111	25,368	2,935,223					
5,000 to 9,999 members	383,721	827,998	87,710	16,029	0.000.007					
Over 10,000 members	3,090,249	4,433,946	121,214	-	8,960,867					
Total	4,128,477	7,208,421	605,245	57,188	11,999,331					

#### Membership by member type

	Active Members	Deferred Members	Pensioner Members
5 to 99 members	16,991	54,231	31,883
100 to 999 members	206,431	535,263	309,750
1,000 to 4,999 members	401,590	879,663	597,520
5,000 to 9,999 members	254,247	598,802	454,373
Over 10,000 members	1,562,726	3,120,653	2,943,211
Total	2,424,994	5,134,381	4,304,854

Note that for various reasons a small number of schemes have breakdowns of membership by Active, deferred and pensioner types which do not match the total figure for membership. Totals may not therefore match figures calculated from the figure given for total members

#### Schemes, membership, and s179 Liability by Industry

Industry	Agricultural Production	Communications	Construction	Finance, Insurance and Real Estate	Manufacturing	Mining	Public Administration	Retail Trade	Services	Transportation	Utilities	Wholesale Trade	Total
Total number of schemes	63	38	206	1,062	1,948	49	30	333	1,483	292	83	599	6,186
Total % of schemes	0	4	4	23	29	0	0	12	15	5	3	4	99
Total number of memberships	40,569	461,045	393,873	2,496,505	3,262,334	38,083	29,207	1,336,897	1,672,845	576,708	300,934	471,638	11,080,638
Total % of memberships	1	1	3	17	31	1	0	5	24	5	1	10	99
s179 Liability (£ Bns)	1.86	53.32	30.25	199.89	227.49	4.28	3.19	60.74	124.34	45.53	31.24	30.55	813
Total % s179 Liability	0	7	4	25	28	1	0	7	15	6	4	4	100

Note - this chart shows the aggregate data for those schemes for which an industry classification was available.

## Chapter 4 appendix

#### **Scheme Size**

		5 to 99	100 to 9999	1000 to 4999	5000 to 9999	10000 and over
	Assets	11.1	81.4	135.6	102.2	595.9
£ bn	s179 Liabilities	10.2	82.3	138.1	100.2	557.2
	Buy Out Liability	15.1	122.2	203.8	150.2	868.0
	0% to 50%	20	14	-	-	-
Schemes by	50% to 75%	278	519	112	16	10
s179 funding group	75% to 100%	836	1374	422	92	75
	Over 100%	1208	1111	296	76	135
	0% to 50%	238	403	103	24	10
Schemes by buy	50% to 75%	1120	1903	539	115	142
out funding group	75% to 100%	688	597	166	40	63
	Over 100%	296	115	24	-	-

Results indicating five or less schemes have been suppressed to preserve confidentiality.

#### **Scheme Maturity**

		25% and less	Between 25% and 50%	Between 50% and 75%	Between 75% and 100%
£ bn	assets	134.8	513.3	255.1	23.0
	s179 Liabilities	150.3	501.6	218.0	18.0
	0% to 50%	29	-	-	-
Schemes by	50% to 75%	638	271	24	-
s179 funding group	75% to 100%	1265	1307	211	16
	Over 100%	766	1250	667	143

Results indicating five or less schemes have been suppressed to preserve confidentiality.

#### **Scheme Status**

		Open	Closed to new entrants	Closed to future accrual	Winding Up
	Assets	303.0	580.7	37.8	4.6
£ bn	s179 Liability	289.3	556.9	37.7	4.0
	Estimated Buy Out Liability	443.1	853.2	56.9	6.1
	0% to 50%	8	15	11	-
Schemes by	50% to 75%	210	496	221	8
s179 Liability Group	75% to 100%	529	1631	608	31
	Over 100%	466	1710	532	118
	0% to 50%	192	402	176	8
Schemes by Estimated Buy	50% to 75%	679	2277	819	44
Out Liability Group	75% to 100%	237	953	304	60
	Over 100%	105	220	73	47

Results indicating five or less schemes have been suppressed to preserve confidentiality.

#### Industry

		Agricultural Production	Communications	Construction	Finance, Insurance and Real Estate	Manufacturing	Mining	Public Administration	Retail Trade	Services	Transportation	Utilities	Wholesale Trade
	Open	13	-	34	164	306	16	18	67	352	67	19	71
Schemes by	Closed to new members	32	32	118	656	1113	28	11	185	836	171	55	382
Status	Closed to future accruals	17	-	50	218	493	-	-	64	251	50	9	137
	Winding Up	-	-	-	24	36	-	-	17	44	-	-	9
£ bn	assets	2.1	56.0	34.0	219.1	230.9	4.0	3.1	65.3	124.2	47.3	33.9	30.2
	s179 Liabilities	1.9	53.3	30.3	199.9	227.5	4.3	3.2	60.7	124.3	45.5	31.2	30.5

Includes only those schemes for which a classification was available. Results indicating five or less schemes have been suppressed to preserve confidentiality.

# Glossary

#### Active member

In relation to an occupational pension scheme, a person who is in pensionable service under the scheme.

#### Acronyms

- LDI Liability-driven investment
- ONS
   Office for National Statistics

#### Administration

See Company: trading status.

#### Aggregate funding position

Sum of assets less sum of liabilities, or sum of scheme funding positions. In a pool of schemes where schemes in deficit outweigh schemes in surplus there is an aggregate deficit.

#### Assessment period

The time when a scheme is being assessed to see if the Pension Protection Fund can assume responsibility for it.

#### Buy-out basis

The level of coverage the current assets will provide if all benefits were to be bought out in the name of the individual member with an insurance company. See also full buy-out.

#### Closed (to new members)

The scheme does not admit new members. Existing members can continue to accrue pensionable service/benefits.

#### Company: business types

• Limited liability partnerships

These are a type of alternative corporate business vehicle that gives the benefits of limited liability but allows its members the flexibility of organising their internal structure as a traditional partnership.

#### Partnership

The relationship that exists between individuals who run a business together with a view to making a profit. The rights of each partner are governed by a partnership agreement or the Partnership Act 1980.

#### Private company

A company registered under the Companies Act 1985 that is not a public limited company. A private company may be registered as a limited or unlimited liability company. It must have at least one member and at least one director. There is no minimum share capital requirement.

#### Public limited company

A company registered under the Companies Act 1985. It must have at least two members and two directors and a share capital that complies with the authorised minimum amounts. It can offer its shares to the public and may be among the public companies that trade on the Stock Exchange.

#### Registered charity

An institution (corporate or not) which is established for exclusively charitable purposes and which is registered with the Charity Commission.

#### Sole trader

An individual who carries on a business on his or her own account. The individual is fully liable for any losses of the business and pays income tax on any taxable profits of the business

#### Company: trading status

#### • Active/currently trading

The company is continuing to trade.

#### Administration

One of the main corporate insolvency rescue procedures. It can be a precursor to a company voluntary arrangement under which the company is restructured and passed back to its directors. In an administration, the insolvency practitioner, as officer of the court, takes over powers of management of the business (but is able to delegate these back to management) with the objective of rescuing the company or (if that is not possible, or if the result would be better for creditors) rescuing the business as a going concern and providing protection from actions by creditors while doing so. A partnership can also be subject to administration as a prelude to a partnership voluntary arrangement.

#### Dissolved

The company has ceased trading. All assets of the company have been disposed of and/ or it has been taken off the register at Companies House.

#### Dormant

The company is not currently trading but remains a corporate entity and/or remains on the register at Companies House.

#### • In liquidation

Either a creditor or the company can apply to the courts to put the company into liquidation. It is the process which eventually brings a company's existence to an end after distributing its assets to creditors/shareholders.

#### Liquidated

Following the liquidation process, the company has ceased trading. All assets of the company have been disposed of and/or it has been taken off the register at Companies House.

#### Receivership

(Also known as administrative receivership or Law of Property Act (LPA) 1925 receivership.) Non-court procedure whereby an insolvency practitioner takes control of the whole of a company's assets under the terms of a charge or mortgage.

#### Default risk

The risk that the borrower will be unable to satisfy the terms of its borrowing obligations with respect to the timely payment of interest and repayment of the amount borrowed.

#### Deferred member

In relation to an occupational pension scheme, a person (other than an active or pensioner member) who has accrued rights under the scheme.

#### Deficit reduction contribution

A one-off (or irregular) contribution made by a scheme sponsor to a pension scheme to reduce the level of deficit.

#### Defined benefit

Benefits are worked out using a formula that is usually related to the members pensionable earnings and/or length of service. These schemes are also referred to as final salary or salary related pension schemes.

#### Defined contribution

Benefits are based on the amount of contributions paid, the investment returns earned and the amount of pension this money will buy when a member retires. These schemes are also referred to as money purchase pension schemes.

#### Dun & Bradstreet (D&B)

A provider of insolvency scores.

#### FRS17

In November 2000, the UK Accounting Standards Board released a new financial reporting standard, numbered 17 ('FRS17'). This sets out the accounting treatment for retirement benefits such as pensions and medical care during retirement. It replaces SSAP 24 ('Accounting for pension costs') and UITF Abstract 6 ('Accounting for post-retirement benefits other than pensions').

#### Full buy-out

The cost of insuring a pension scheme in the private market. The discount rate applied to liabilities would be more prudent in general than the discount rate applied to section 179 and MFR valuations. The benefit assumed in private insurance is usually non-capped and thus could be greater than Pension Protection Fund coverage.

#### Gilt yield

The yield, if held to maturity, of a government (non-indexed) bond.

#### Hybrid scheme or partial defined benefit scheme

A scheme that can provide defined benefits and defined contribution benefits. A scheme providing benefits on a defined contribution basis but that is or was contracted out of the state scheme on either a GMP or Reference Scheme test basis is a common example of a hybrid scheme.

#### IAS19

An international accounting standard equivalent of FRS17.

#### Insolvency events

These are the insolvency triggers set out in the Pension Protection Fund legislation.

#### Insolvency risk

The risk that a borrower will have to close business due to its inability to service either the principal or interest of its debt. This is a more extreme event than a default. See also Insolvency events.

#### Insurance company

Insurance companies provide a range of services to pension schemes, including:

- asset investment;
- asset management;
- investment advice and expertise;
- custodian facilities; and
- scheme administration services.

#### Insurance managed funds

A unitised fund invested in multiple investment categories managed by an insurance company.

#### Insurance policy

Investment class: an annuity or a deposit administration contract purchased from an insurance company.

# **LTRM**

The Pension Protection Fund's Long-Term Risk Model, which is based on stochastic simulations of economic scenarios and their respective impacts on assets and liabilities of pension schemes under coverage and the credit quality of the sponsoring employers.

#### MQ5 data

The data from the ONS MQ5 enquiry is based on a sample of 350 pension schemes. This is comprised of around 100 local authorities and 250 public and private corporations (the PPF database excludes local authorities and public corporations). The sample has total assets of £1,100 billion, which is much higher than the PPF database. All schemes with more than 20,000 members are automatically included and schemes with less than 20,000 members are randomly selected. The sample is made up of what are known as 'superannuation and self-administered pension funds'. A self-administered pension fund id defined as an occupational pension schemes with units invested in one or more managed schemes or unit trusts; a superannuation pension fund is defined as a an organisational pension programme created by a company for the benefit of its' employees. The sample may also contain defined contribution schemes.

#### Open

The scheme continues to accept new members, and benefits continue to accrue.

#### Paid up (or frozen)

All contributions to the scheme have stopped and no further pensionable service accrues. Members' benefits for earlier service continue to be held and invested in the scheme.

#### Participating employer

An employer that has some (or all) employees who can join an occupational pension scheme. This term is usually used where there is more than one employer participating in a single scheme.

#### Pensioner member

A person who is currently receiving a pension from the scheme or from an annuity bought in the trustee's name.

#### Pension Protection Fund (PPF)

A statutory corporation run by the Board of the Pension Protection Fund, established under the Pensions Act 2004.

#### Pension protection levy

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

#### The Pensions Regulator

The UK regulator of work-based pension schemes, an executive non-departmental public body established under the Pensions Act 2004.

#### Principal employer

The employer named in the trust deed and rules of the scheme which usually has powers such as those to appoint trustees, amend the scheme rules or wind the scheme up. This is often the employer who set up the scheme, or its successor in business.

#### Risk-based levy

See pension protection levy. Calculated on the basis of a pension scheme's deficit and insolvency risk of the sponsoring employer.

#### Scheme actuary

The named actuary appointed by the trustees of a defined benefit occupational pension scheme to carry out specific duties set out in the Pensions Act 1995.

#### Section 179 (s179) valuation

To calculate the risk-based pension protection levy the Pension Protection Fund Board must take account of scheme underfunding. To obtain a consistent basis for determining underfunding, schemes can complete a Pension Protection Fund valuation (section 179). This valuation will be based on the level of assets and liabilities for the scheme. The liabilities will be based on the scheme benefits taking into account key features of the levels of compensation paid by the Board of the Pension Protection Fund as set out in Schedule 7 of the Pensions Act.

#### Scheme-based levy

See pension protection levy. Calculated on the basis of section 179 liabilities and the number of members participating in the pension scheme.

#### Scheme funding position

The difference between the assets and liabilities of a pension scheme (scheme deficit if negative, scheme surplus if positive).

## Scheme funding valuation

New legislation on scheme funding came into force on 30 December 2005. The new requirements, introduced by the Pensions Act 2004, replace the minimum funding requirement and apply to occupational pension schemes providing defined benefits.

#### Scheme member

In relation to an occupational pension scheme, a scheme member is any person who:

- is an active member:
- is a deferred member;
- is a pensioner member;
- has rights due to transfer credits under the scheme; or
- has pension credit rights under the scheme.

This includes scheme members whose only entitlements are equivalent pension benefits (EPBs) as those rights were earned through pensionable employment. Members (for occupational and personal schemes) do not include dependants of members. Those whose only entitlements are lump sum benefits payable on death are also not included.

#### Scheme return notice

The Pensions Act 2004 set out the requirement to send occupational pension schemes a scheme return to complete. The information collected in the scheme return will further enable the regulator to perform its new role and responsibilities. The scheme return notice is issued to schemes to inform them that it is time to complete a scheme return.

#### Sectionalised scheme

A multi-employer scheme which is divided into two or more sections where:

- any contributions payable to the scheme by an employer in relation to the scheme, or by an employee of that employer, are allocated to that employer's section; and
- a specified proportion of the assets of the scheme is attributable to each section of the scheme and cannot be used for the purposes of any other section.

#### Some sections open/some sections closed

A scheme that has sections with different status types. For example the scheme may have a defined benefit section closed to new entrants, and a defined contribution section open to new entrants.

#### Swap

A contract calling for the exchange of payments over time. Often one payment is fixed in advance and the other is floating based upon the realisation of a price or interest rate.

#### Total deficit

Sum of scheme deficits, or sum of scheme funding positions for schemes in deficit only.

#### **Trustees**

#### • Corporate trustee (non-professional)

A company usually related to the employer (or the employer itself) set up to act as trustee for a scheme or a series of related or associated schemes.

#### Member-nominated trustee (MNT)

A person nominated by the members (and sometimes elected) to be a trustee of the scheme. A MNT may be a member of the scheme. A MNT is appointed in accordance with sections 16-21 of the Pensions Act 1995.

#### Pensioneer trustee

A pensioneer trustee is an individual or a company recognised by HMRC (Inland Revenue) as having pensions expertise.

#### • Professional trustee (including corporate)

A professional trustee not connected with the employer and not a scheme member. The trustee could be a corporate trustee company or an individual. A professional trustee provides trusteeship and trustee services to a number of unrelated and non-associated pension schemes.

#### • Statutory independent trustee

A trustee appointed to a scheme where an insolvency practitioner has been appointed over an employer in accordance with sections 22-26 of the Pensions Act 1995.

#### Voluntary form reporting

Electronic forms are available on the Pension Protection Fund's website for pension schemes to provide data regarding sectionalised schemes, contingent assets, participating employers, scheme structure, estimates of pension fund deficits on a section 179 basis, deficit reduction contributions and block transfers.

#### Winding up/wound up

After the wind-up is complete (the scheme is wound up), there will be no assets or liabilities left in the scheme, and the scheme will cease to exist as a legal entity. Winding up describes the process of reaching wind-up from normal ongoing status. To make sure that members will still receive benefits, there are several options:

- transferring pension values to another pension arrangement;
- · buying immediate or deferred annuities; or
- transferring the assets and liabilities of the scheme to another pension scheme.

The scheme must be wound up in accordance with the scheme rules and any relevant legislation.

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