

Scheme funding statistics

Valuations and recovery plans of UK defined benefit and hybrid pension schemes

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Overview

This is an update to The Pensions Regulator's annual funding statistics for UK defined benefit and hybrid schemes. The tables in the appendix are prepared in accordance with the UK code of practice for official statistics. The underlying data are sourced from valuations and recovery plans (RPs) submitted to the regulator (by schemes with surplus and deficit positions).

The update is based on Tranche 7 schemes (with effective valuation dates falling from 22 September 2011 to 21 September 2012 inclusive). These valuations fall within the third triennial cycle of the scheme funding regime; with due dates for receipt falling within the period December 2012 to December 2013.

Relative to Tranche 4, Tranche 7 schemes have a higher funding ratio on a technical provisions (TPs) basis and receive higher deficit reduction contributions (DRCs) in nominal terms; while a relatively higher proportion have a form of contingent security.

Tranche 7 schemes made use of RP flexibilities, with Tranche 7 RP end dates exceeding that of Tranche 4 plan length by 1.5 years on average; and assume a higher investment return over gilts compared to the average Tranche 4 scheme.

For more detail on high level trends in this document, data summaries (tables) can be found in the appendix.

Key figures

- 80.8%: average¹ ratio of assets to TPs for schemes in deficit and surplus
- 4.28%: average nominal single effective discount rate (SEDR) for schemes in deficit only; with 50% of assumptions falling on or between: 3.97% and 4.67%
- 1.12%: average real SEDR for schemes in deficit only; with 50% of assumptions falling on or between 0.77% and 1.49%
- 89.9 years: average life expectancy of a future male pensioner currently aged 45 for schemes in deficit and surplus
- 8.4 years: average RP length for schemes in deficit.

Tranche 7

By January 2014 the regulator had received over 1,800 valuations with an effective valuation date for Tranche 7. Of schemes submitting these valuations, 85% had previously submitted valuations in respect of Tranche 4 and Tranche 1. Just under a tenth of Tranche 7 schemes reported a surplus of assets over TPs.

Tranche 7 schemes present a more mature profile than Tranche 4, with a relatively higher proportion of schemes comprising deferred pensioner and pensioner members only. In addition, over two thirds:

- comprise fewer than 1,000 members
- have less than £100m in liabilities; and
- have a RP of fewer than 10 years in length.

A fifth of schemes have at least one contingent asset (Tables 1.1, 1.2, appendix).

Market conditions

In the three years to 31 March 2012 (the effective date of many Tranche 7 valuations), yields on corporate and government bonds declined, with index-linked gilts showing negative yields.

By the end of 2011, and amidst a climate of uncertainty over interest rates, the UK economy fell back into negative growth.

Equity markets improved during the inter-valuation period relative to a low point in March 2009 while the outlook for long-term market-implied inflation (as estimated by the Bank of England) had been revised upward up by the end of the same period.

¹ Averages are unweighted means unless stated otherwise.

Funding

Due to the sensitivity of assets and liabilities to economic experience and market conditions at the valuation date, developments in the three years to 2011/2012 valuations will have had an impact on funding ratios.

The average ratio of assets to TPs for Tranche 7 is 81% compared to 74% for Tranche 4. This is generally higher for schemes:

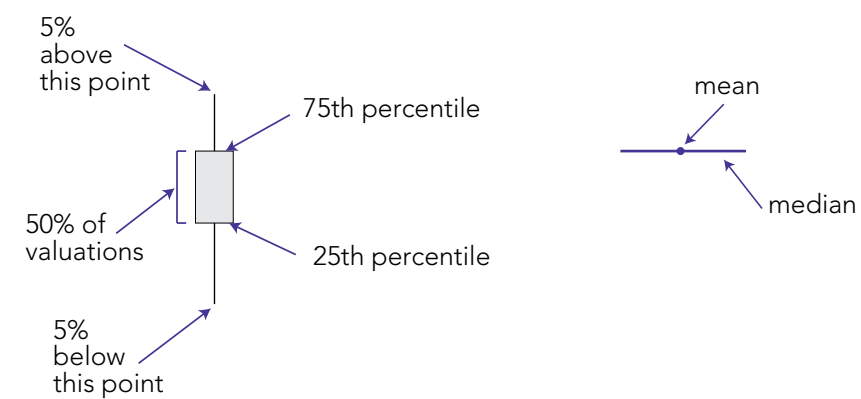
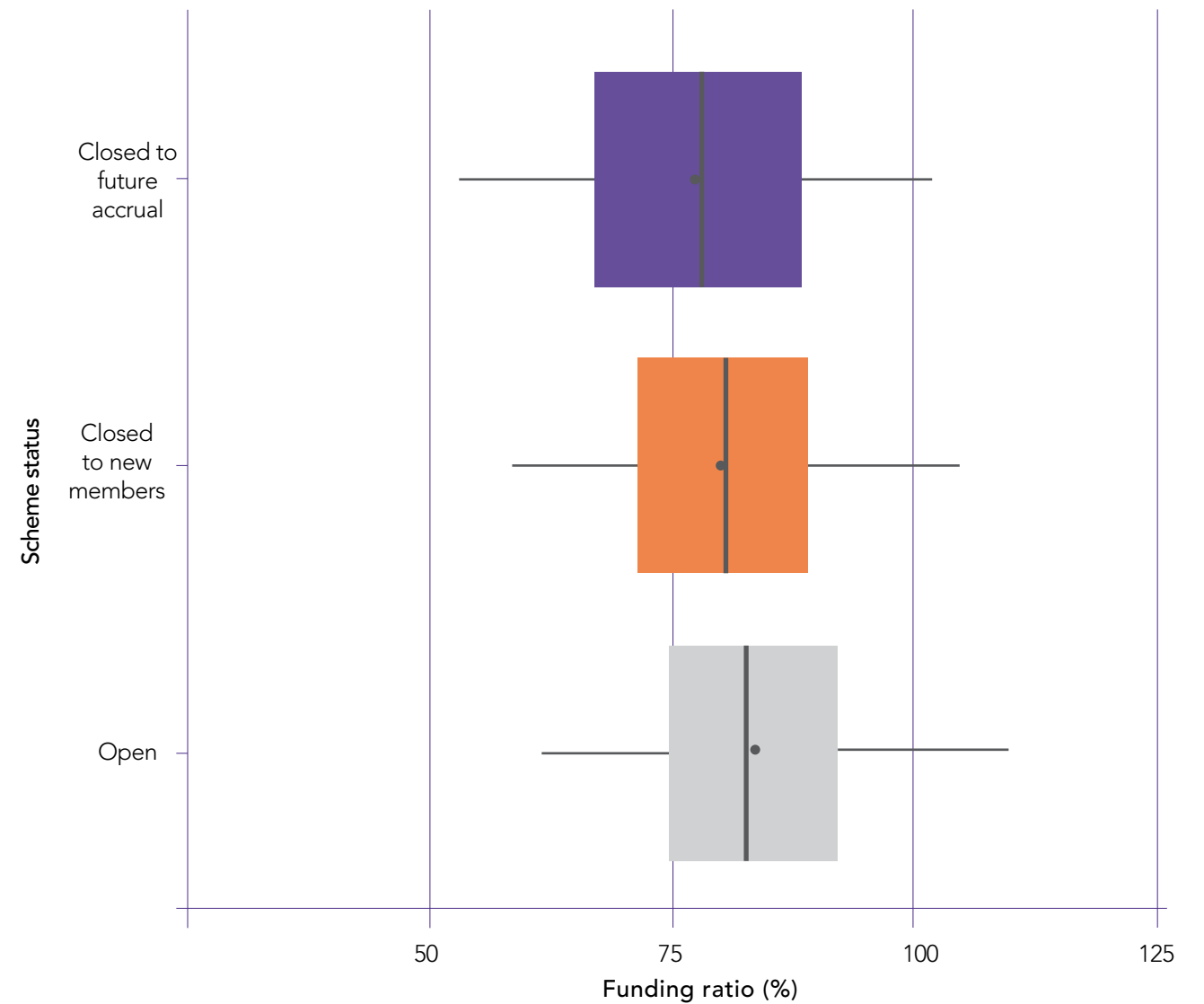
- that are open to new members
- with lower insolvency risk/greater sponsor support
- without a contingent asset; and
- with shorter RPs.

For schemes in surplus only, the average ratio of assets to TPs is 110%.

The average funding ratios on the s179 and buyout bases, 83% and 57% respectively, have also increased compared to the corresponding ratios for Tranche 4. (Tables 2.2, 2.3, appendix.)

Figure 1 shows Tranche 7 funding levels on a TPs basis by scheme status for schemes that are: Open, Closed to new members, or Closed to future accrual. The average funding ratio of schemes open to new members is higher than that of schemes closed to new members and schemes closed to future accrual.

Figure 1. Tranche 7 funding levels (TPs basis) by scheme status



Source: The Pensions Regulator

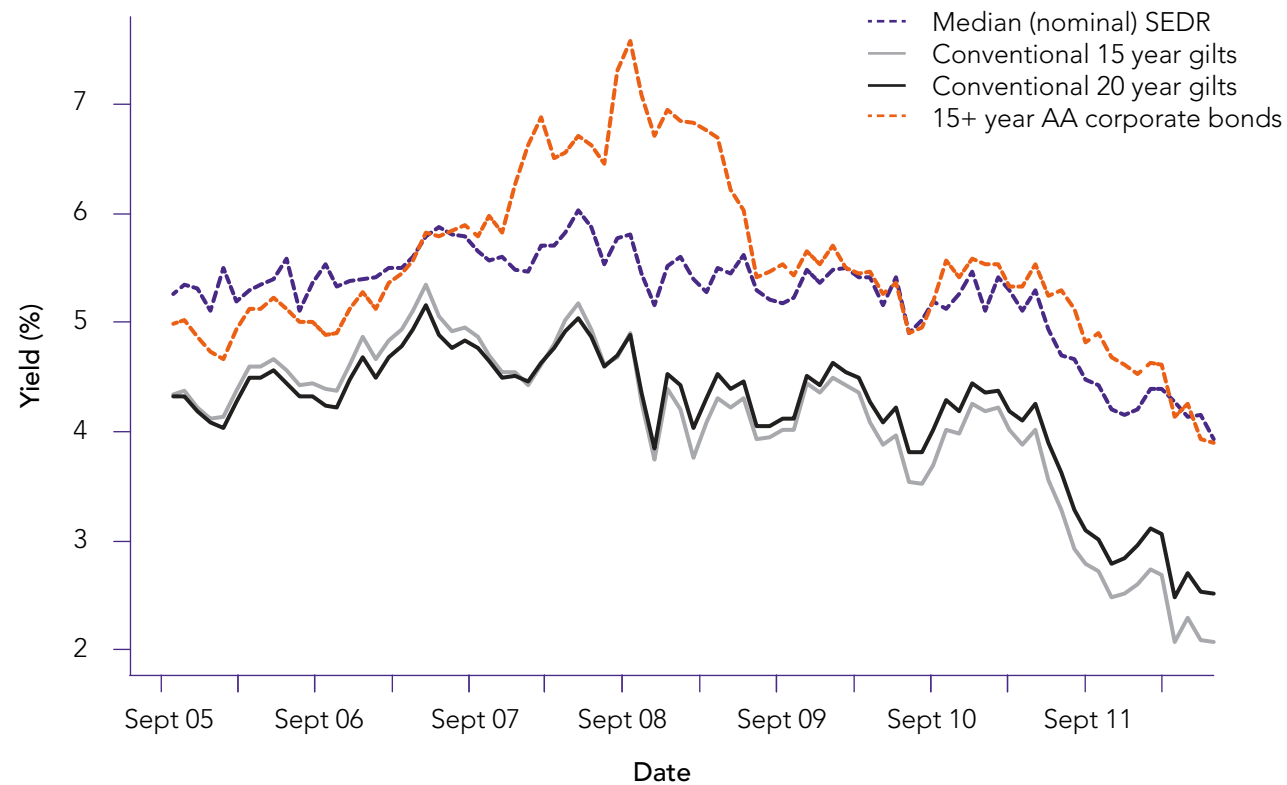
For schemes submitting valuations in respect of both Tranche 4 and Tranche 7, the median increase in assets is 41% compared to 28% in TPs.

Positive investment returns over the three years to valuation, improved asset values and sponsor contributions will have contributed to increases in scheme assets.

The increase in TPs, on the other hand, is a function of lower interest rate conditions in 2011/12 to the extent that Tranche 7 discount rates used to calculated TPs reflect the reduction in yields on gilts and other investment classes.

Figure 2 shows how the median single effective discount rate behaves in relation to: conventional 15 and 20 year UK gilt yields and greater than 15 year AA-rated corporate bonds for schemes in deficit in all tranches. Over the period of Tranche 7 (22 September 2011 to 21 September 2012) annualised UK 20 year gilt yields declined overall. On 31 December 2011 and 31 March 2012 (the 2 most common valuation dates) annualised 20-year UK gilt yields were 2.8% and 3.1% respectively while the median SEDR was 4.2% and 4.4% respectively.

Figure 2. Median (nominal) SEDR, conventional 15 and 20 year UK gilt yields, greater than 15 year AA corporate bonds (schemes in deficit only, all tranches)



Source: The Pensions Regulator's calculations, Thomson Reuters, FTSE group, Markit iBoxx

Discount rates

The average (real) SEDR is 1.12% in Tranche 7 compared to 2.19% in Tranche 4 (Table 4.3, appendix).

It is generally higher for schemes:

- with lower insolvency risk/greater sponsor support
- with a greater return-seeking assets as a proportion of total assets; and
- with at least one contingent asset.

The average assumed return over gilts is relatively higher for Tranche 7, compared to Tranche 4. The average outperformance of the real SEDR over greater than 5 year index-linked gilts is 1.23% for Tranche 7, compared to 1.11% for Tranche 4 (Tables 4.6, 4.7, appendix).

Table 1. Summary of discount rate assumptions for Tranches 4 and 7

| | Tranche 4 | Tranche 7 |
|---|-----------|-----------|
| Real SEDR | 2.19% | 1.12% |
| Real outperformance of SEDR greater than 5 year index-linked gilt | 1.11% | 1.23% |
| Nominal SEDR | 5.33% | 4.28% |
| Outperformance of SEDR over greater than nominal 20 year gilt | 1.18% | 1.30% |
| Greater than 15 year AA rated corporate bonds | -1.45% | -0.33% |

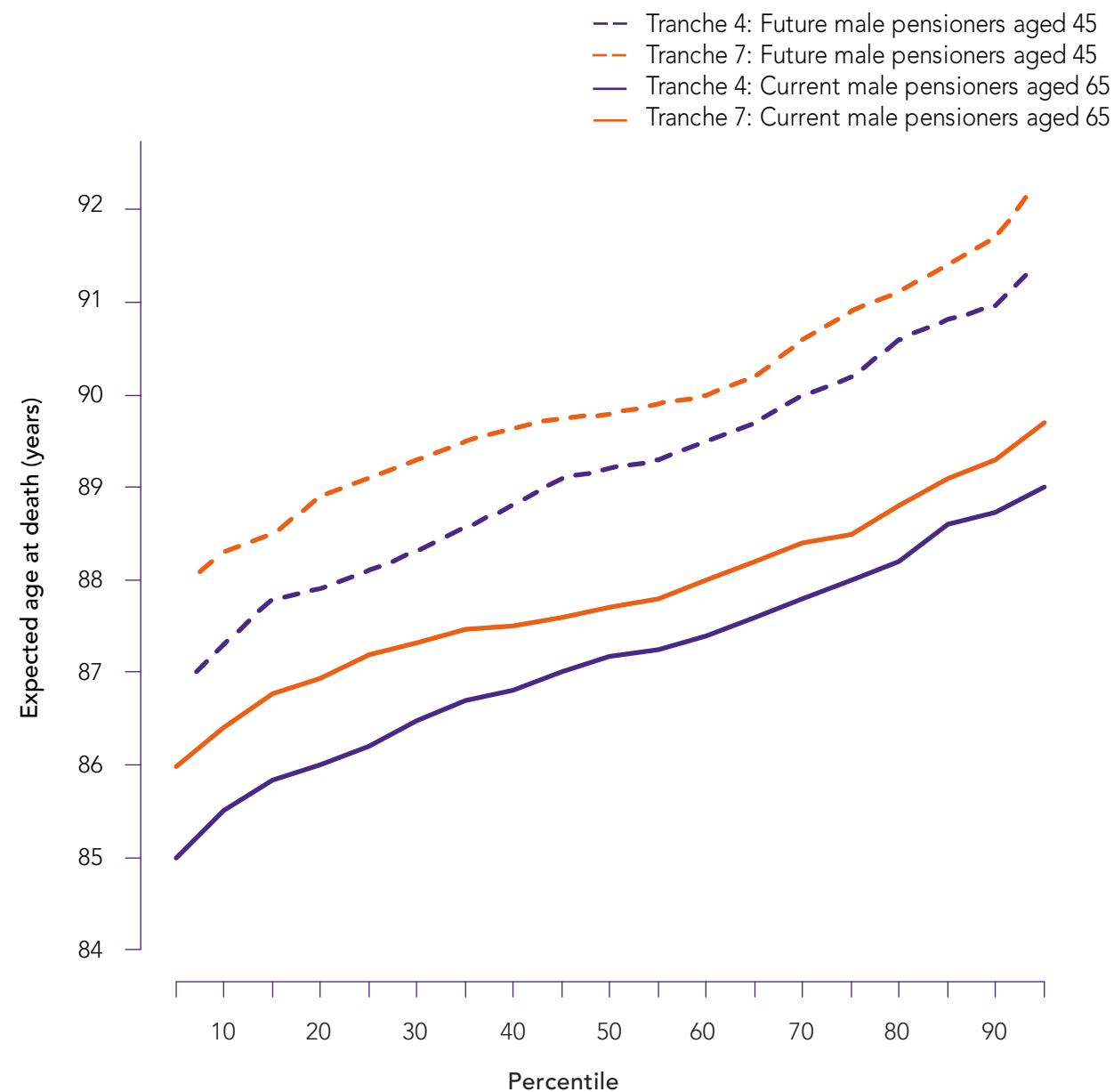
Source: The Pensions Regulator

Life expectancies and mortality assumptions

For some schemes life expectancy improvements may have added to the growth in TPs between the tranches. The average assumed life expectancy for a future male pensioner currently aged 45 is 89.9 years (compared to 89.2 years in Tranche 4). Schemes with fewer than 100 members assume a higher average life expectancy on average for a future male pensioner aged 45 than that assumed by schemes in other size groups. (Tables 6.1, 6.2, appendix.)

Figure 3 shows the distribution of assumed life expectancies for future and current male pensioners aged 45 and 65, respectively in Tranches 4 & 7. At the median the assumed life expectancy for Tranche 4 was 87.2 years compared to 87.7 years for Tranche 7.

Figure 3. Distribution of life expectancies for future and current male pensioners aged 45 and 65, respectively



Tranche 7 mortality assumptions reflect the widespread adoption of more recently released tables and projections for 2011/12 valuations compared to those used for 2008/9 valuations.

83% of Tranche 7 schemes use s1 tables (made available in 2008); 55% apply a scaling factor or rating to base tables to adjust for scheme experience; 81% use the continuous mortality investigation (CMI) projection model (first published in 2009) to allow for future improvements; while over half of schemes assume a long term rate of improvement/underpin of 1.5% or higher (Tables 5.1, 5.2, 5.4, 5.5, appendix).

RPs and contributions

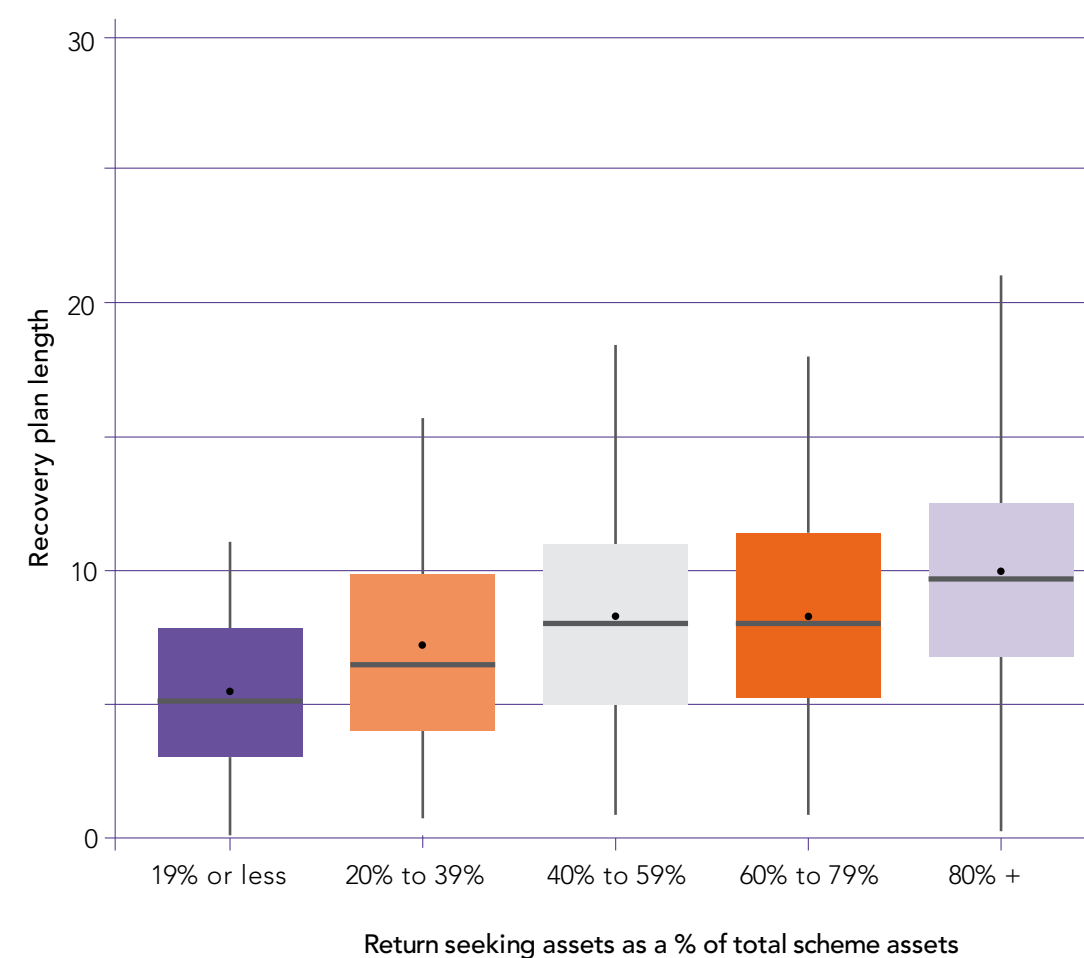
The improvement in the average TPs funding ratio for Tranche 7 over Tranche 4 is accompanied by smaller (absolute) deficits on average, although this may not necessarily be the case at individual scheme level. For schemes in deficit with valuations in both Tranches 4 and 7 the median reduction in deficit over the last cycle is 3%.

Smaller deficits on average have led to shorter plans in absolute terms. The mean RP length is 8.4 years for Tranche 7, compared to 9.7 years for Tranche 4. However, Tranche 7 RP end dates exceed that of Tranche 4 by 1.5 years on average, while 50% of DRCs are expected to be paid within 3.6 years at the median. Longer plans tend to be associated with schemes:

- of larger size
- with higher insolvency risk/lower covenant support; and
- with a higher level of return-seeking assets as a proportion of total scheme assets (Tables 3.1, 3.4, appendix).

Figure 4 shows the distribution of recovery plan length by return-seeking assets held (grouped by quintile) as a proportion of total scheme assets. Schemes with 19% or less return-seeking assets have an average recovery plan length of 5.6 years compared to 10.1 years for schemes with 80% or more return seeking assets.

Figure 4. RP length by percentage of return-seeking assets held



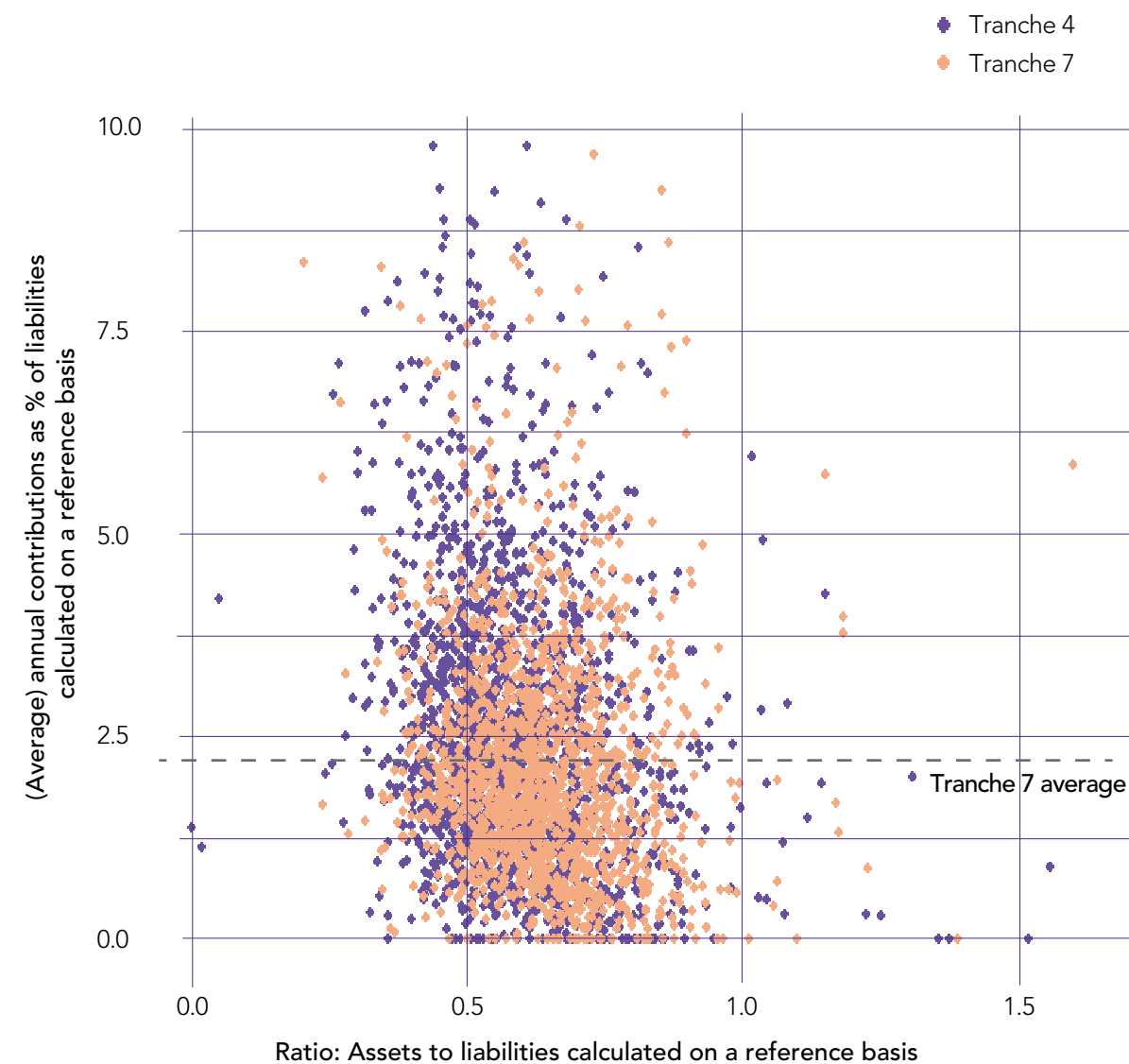
Source: The Pensions Regulator

Average² annual DRCs as a proportion of liabilities calculated on a reference basis³ for Tranche 7 schemes is 2.2%, compared to 2.5% for Tranche 4 schemes (Figure 4).

For the typical scheme in deficit with valuations in respect of both Tranches 4 and 7, average annual DRCs have increased by 14%, while liabilities on a reference basis have increased by 29%.

Figure 5. Shows average annual deficit reduction contributions as a proportion of liabilities calculated on a reference basis. Annual contributions as a proportion of reference liabilities is 2.2% for Tranche 7 schemes on average. For the majority of Tranche 7 schemes annual contributions as a proportion of reference liabilities is less than 4%.

Figure 5. Average annual contributions as a proportion of liabilities calculated on a reference basis



Source: The Pensions Regulator

² Mean of the first four years of deficit reduction contributions.

³ Liabilities are estimated using gilts with an excess return of 50 basis points.

A higher level of DRCs as a percentage of liabilities on a reference basis is associated with:

- shorter RPs
- schemes with a lower level of return-seeking assets as proportion of total assets
- smaller schemes
- lower levels of pensioner liabilities as a percentage of total liabilities and
- schemes without a contingent asset (Table 3.5, appendix).

Forms of contingent security

In addition to DRCs, just over a fifth of Tranche 7 schemes have additional security in the form of one or more contingent assets – which typically, but not always, take the form of guarantees from a sponsor’s parent or associated entity.

About 12% of schemes have contingent assets that are formally recognised by the Pension Protection Fund (PPF) in the calculation of the PPF risk-based levy. Another 11% of schemes have contingent assets that are not recognised by the PPF but are reported as additional security in support of funding.

A small minority of Tranche 7 schemes report asset-backed funding arrangements which are integrated with the RP.

Appendix: Tables

Data coverage

1. The data contained in this statistical release were submitted by schemes to the regulator in RPs and scheme returns.
2. The data set builds on previous releases and includes Tranche 7 RPs received by the regulator up to 31 January 2014. It also includes data on schemes in surplus for all tranches.
3. The majority of Cycle 2 plans (Tranches 4, 5 and 6) and Cycle 3 plans (Tranche 7) are second and third valuations respectively under the scheme funding regime. However Tranches 1, 4 and 7 (2 and 5, and so on) do not constitute a perfect cohort. The reasons for submitting a RP in Tranche 1 but not Tranche 4 (and in Tranche 2 but not Tranche 5, and so on) are several. They include:
 - where a scheme's assets were less than its TPs in Tranche 1 but exceeded its TPs for its Tranche 4 valuation in Cycle 2
 - where a scheme may have wound up or be in the process of winding up
 - and/or where a scheme may have transferred to the PPF.
 - Also, some schemes have had their most recent valuations less than three years since their previous valuation.
4. Base data vary slightly in different sections as a result of data coverage, validation, and cleaning.
5. The data count all memberships in schemes with a promise to a pension. As some individuals may have a number of pension entitlements spread over a number of schemes, they may be included more than once in the total memberships under consideration.
6. The trends presented in the Mortality sections are based on current male pensioners aged 65 only, unless otherwise stated.
7. Some Cycle 1 RPs are excluded from the mortality analysis to avoid extensive data processing for a relatively small proportion of schemes.

Methodology

1. Weighted averages are weighted by TPs.
2. Owing to the scheme-specific nature of the data, individual data points cannot be presented in some instances. As such, data distributions start and end at the 5th and 95th percentiles respectively, and in some instances group ranges have been broadened to include figures comprising fewer than 10 observations.
3. Figure totals may reflect rounding.
4. Maturity is measured as the ratio of pensioner TPs to total TPs.

5. Two approaches are used by pension schemes in respect of the discount rate assumption: a single investment return approach (single rates approach); and, a different investment returns approach (different rates approach). The former assumes that returns on pre-retirement investments are the same as that of post-retirement investments, while the latter usually assumes that the pre-retirement investment returns are higher than post-retirement investment returns. For the purposes of comparison, in instances where a different rates approach has been adopted, the regulator has constructed a single effective discount rate (SEDR): a composite rate based on the single rate or, where a different rates approach has been adopted, constructed from both the pre- and post-retirement rates.

This is calculated as: $SEDR = \text{Post-retirement rate} + ((1 + \text{Pre-retirement rate}) / (1 + \text{Post-retirement rate}) - 1) * (1 - \text{Pensioner TPs} / \text{Total TPs})^{0.4} * 0.56$.

(The parameters 0.4 and 0.56 were developed by trial and error to create an approximate methodology which fits a simple formula to the more complex and scheme-specific interaction of maturity and duration. The regulator does not hold sufficient data to reliably make a more accurate calculation on a scheme-by-scheme basis.)

6. Average annual DRCs summarised in Table 4.5 are calculated as the average of DRCs over the first four years of the RP.
7. Liabilities in Tables 2.5 and 3.5 are calculated on a reference basis – using gilts with an excess return of 50 basis points.
8. It is not possible to compare liabilities on different valuation bases in an entirely consistent way. The scheme valuation may exclude the value of insurance policies and expenses whereas s179 will normally include them. Internal sense checking suggests that for the majority of schemes insured, benefits are either included or not held. To the extent that there is any bias, it will tend to make the s179 values look slightly higher relative to TPs than is the case.
9. Covenant groups (1-4) are assigned at the point of initial RP reviews to facilitate prioritisation. These grades may vary to the view taken during case-level intervention, where a wider range of information is taken into account. They are defined: covenant group 1 – strong; 2 – tending to strong; 3 – tending to weak; 4 – weak. Covenant grades are not available for surplus schemes.
10. 'Return-seeking assets' in this report include: equities, property, commodities, hedge funds, 50% of corporate bonds, and assets held in the 'other' category. (In the absence of credit ratings, this report assumes that 50% of corporate bonds held rank below investment grade.)
11. Contingent assets are not reported for Tranches 1 to 3 due to the absence of reliable data on non-PPF-recognised assets for these tranches.

Schemes in the data set

Table 1.1 Number of valuations analysed by cycle and tranche (all tranches)

| Cycle | Tranche | Valuation period | Number of RPs analysed | Number of surplus schemes analysed |
|-------|---------|--|------------------------|------------------------------------|
| 1 | 1 | 22 September 2005 to 21 September 2006 | 2,127 | 435 |
| | 2 | 22 September 2006 to 21 September 2007 | 1,888 | 463 |
| | 3 | 22 September 2007 to 21 September 2008 | 1,840 | 422 |
| 2 | 4 | 22 September 2008 to 21 September 2009 | 2,048 | 156 |
| | 5 | 22 September 2009 to 21 September 2010 | 1,937 | 252 |
| | 6 | 22 September 2010 to 21 September 2011 | 1,652 | 445 |
| 3 | 7 | 22 September 2011 to 21 September 2012 | 1,665 | 172 |

This data set comprises schemes that have submitted RPs (that is, schemes in deficit on the TPs funding basis as at their valuation date) as well as schemes in surplus. By 31 January 2014, the regulator had received over 1,665 RPs and 172 valuations in respect of schemes reporting a surplus.

84.9% of schemes with Tranche 7 valuations reported valuations in respect of Tranche 4 and Tranche 1.

90.3% of schemes with Tranche 6 valuations reported valuations in respect of Tranche 3.

88.5% of schemes with Tranche 5 valuations reported valuations in respect of Tranche 2.

Table 1.2 Concentration by scheme characteristics (schemes in deficit and surplus, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 33.2 | 34.0 | 34.0 | 31.9 | 34.5 | 36.1 | 32.5 |
| 100 to 499 members | 34.0 | 36.1 | 34.1 | 33.0 | 34.8 | 34.9 | 33.7 |
| 500 to 999 members | 11.1 | 10.3 | 12.0 | 11.9 | 10.9 | 10.0 | 11.4 |
| 1,000 to 4,999 members | 14.5 | 12.7 | 13.7 | 15.0 | 12.8 | 13.3 | 14.4 |
| 5,000 members or more | 7.1 | 6.9 | 6.2 | 8.2 | 7.0 | 5.6 | 8.0 |
| Size by TPs | | | | | | | |
| Less than £5m | 31.1 | 31.8 | 28.3 | 27.4 | 27.8 | 26.0 | 21.2 |
| £5m to £19m | 28.7 | 31.1 | 29.8 | 28.2 | 29.8 | 29.2 | 25.5 |
| £20m to £99m | 24.9 | 23.0 | 26.4 | 25.6 | 25.2 | 26.5 | 29.3 |
| £100m to £299 | 7.7 | 7.1 | 8.7 | 9.9 | 8.6 | 10.9 | 13.0 |
| £300m or greater | 7.7 | 7.0 | 6.7 | 8.9 | 8.6 | 7.3 | 10.9 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 47.2 | 46.4 | 40.4 | 38.2 | 36.5 | 30.5 | 29.0 |
| 25% to 49% | 36.6 | 37.7 | 42.1 | 40.1 | 42.3 | 45.7 | 43.0 |
| 50% to 74% | 14.4 | 13.7 | 15.3 | 18.9 | 18.6 | 20.7 | 24.5 |
| 75% or greater | 1.8 | 2.2 | 2.1 | 2.7 | 2.7 | 3.2 | 3.6 |

continued...

Table 1.2 Concentration by scheme characteristics (schemes in deficit and surplus, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 1.9 | 2.3 | 2.3 | 4.1 | 4.4 | 4.1 | 2.7 |
| 16 to 50 | 5.8 | 8.5 | 7.4 | 9.6 | 7.1 | 4.8 | 6.2 |
| 51 to 85 | 19.5 | 25.0 | 30.3 | 20.6 | 19.9 | 21.4 | 19.2 |
| 86 or more | 72.8 | 64.1 | 60.0 | 65.7 | 68.6 | 69.7 | 71.9 |
| Scheme status | | | | | | | |
| Open | 29.7 | 30.9 | 28.8 | 26.3 | 24.6 | 23.8 | 22.6 |
| Closed to new members | 51.1 | 48.7 | 50.5 | 49.5 | 49.1 | 48.3 | 47.9 |
| Closed to future accrual | 19.2 | 20.4 | 20.7 | 24.2 | 26.3 | 28.0 | 29.6 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 18.1 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 21.5 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 37.7 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 22.6 |

continued...

Table 1.2 Concentration by scheme characteristics (schemes in deficit and surplus, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|--|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length (schemes in deficit only) | | | | | | | |
| Fewer than 5 years | 25.5 | 29.2 | 25.1 | 18.3 | 26.0 | 32.7 | 28.3 |
| 5 to fewer than 7.5 years | 14.4 | 17.6 | 15.1 | 14.9 | 19.0 | 19.6 | 21.7 |
| 7.5 to fewer than 10 years | 41.5 | 39.3 | 38.0 | 32.1 | 28.9 | 23.0 | 20.6 |
| 10 years or greater | 18.6 | 13.9 | 21.9 | 34.7 | 26.2 | 24.7 | 29.4 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 15.8 | 16.9 | 15.3 | 17.8 | 11.2 | 9.7 | 10.7 |
| 20% to less than 40% | 6.2 | 6.7 | 9.2 | 13.3 | 10.9 | 13.7 | 17.4 |
| 40% to less than 60% | 19.0 | 19.0 | 25.0 | 30.5 | 32.6 | 33.8 | 37.5 |
| 60% to less than 80% | 36.9 | 35.5 | 33.9 | 30.2 | 35.0 | 33.2 | 28.8 |
| 80% or greater | 22.1 | 22.0 | 16.6 | 8.3 | 10.3 | 9.6 | 5.6 |
| Funding position (TPs) | | | | | | | |
| Deficit | 83.0 | 80.3 | 81.3 | 92.9 | 88.5 | 78.8 | 90.6 |
| Surplus | 17.0 | 19.7 | 18.7 | 7.1 | 11.5 | 21.2 | 9.4 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 84.6 | 79.7 | 82.0 | 78.3 |
| At least one contingent asset | - | - | - | 15.4 | 20.3 | 18.0 | 21.7 |

Funding and other security arrangements (schemes in surplus and deficit, all tranches)

Table 2.1 Key average funding ratios (surplus and deficit schemes, all tranches)

| | Unweighted average – Tranche: | | | | | | | Weighted ⁴ average – Tranche: | | | | | | |
|----------------------------|-------------------------------|-------|-------|-------|-------|-------|------|--|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ratio of assets to: | | | | | | | | | | | | | | |
| Technical provisions | 84.2 | 87.3 | 86.3 | 74.0 | 82.5 | 88.2 | 80.8 | 90.4 | 93.0 | 90.2 | 76.4 | 84.2 | 88.1 | 84.7 |
| s179 liabilities | 88.7 | 98.2 | 95.2 | 79.1 | 96.4 | 99.0 | 82.7 | 98.5 | 110.1 | 101.7 | 82.3 | 101.9 | 99.1 | 90.3 |
| Buyout liabilities | 57.4 | 62.4 | 64.4 | 54.1 | 61.1 | 63.8 | 57.1 | 65.6 | 70.0 | 71.4 | 57.2 | 63.2 | 63.9 | 61.3 |
| Ratio of TPs to: | | | | | | | | | | | | | | |
| s179 liabilities | 103.4 | 111.5 | 109.0 | 100.8 | 111.6 | 108.4 | 99.2 | 109.2 | 118.7 | 113.6 | 106.2 | 121.7 | 113.9 | 110.2 |
| Buyout liabilities | 67.7 | 71.0 | 74.6 | 72.8 | 73.8 | 72.4 | 71.0 | 72.5 | 75.2 | 79.4 | 74.6 | 74.7 | 72.4 | 72.3 |

⁴
Weighted by TPs.

Table 2.2 Distribution of key funding ratios on various bases (schemes in surplus and deficit)

| | Tranche | | | | | | |
|--|---------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ratio of assets to TPs | | | | | | | |
| 95th percentile | 111.8 | 112.8 | 111.9 | 100.7 | 106.2 | 114.9 | 105.5 |
| Upper quartile | 94.2 | 96.3 | 96.0 | 82.9 | 91.0 | 98.1 | 89.8 |
| Median | 83.5 | 87.2 | 86.0 | 72.6 | 82.2 | 88.2 | 80.6 |
| Lower quartile | 73.2 | 77.1 | 75.9 | 63.0 | 72.8 | 77.9 | 71.1 |
| 5th percentile | 57.8 | 61.6 | 61.1 | 50.9 | 58.4 | 62.4 | 57.1 |
| Ratio of assets to s179 liabilities | | | | | | | |
| 95th percentile | 136.1 | 145.1 | 143.6 | 127.6 | 140.5 | 143.5 | 126.6 |
| Upper quartile | 101.3 | 111.3 | 107.7 | 91.4 | 109.4 | 112.8 | 94.8 |
| Median | 84.0 | 94.8 | 92.2 | 73.6 | 93.2 | 95.9 | 78.7 |
| Lower quartile | 72.4 | 81.1 | 78.1 | 61.5 | 79.4 | 81.8 | 65.9 |
| 5th percentile | 56.1 | 64.6 | 61.8 | 48.9 | 64.1 | 65.0 | 52.2 |
| Ratio of assets to buyout liabilities | | | | | | | |
| 95th percentile | 88.8 | 91.9 | 95.1 | 85.7 | 91.7 | 95.7 | 83.4 |
| Upper quartile | 65.0 | 70.5 | 73.5 | 61.5 | 69.3 | 72.0 | 65.5 |
| Median | 54.5 | 59.7 | 61.9 | 50.9 | 59.0 | 61.5 | 55.1 |
| Lower quartile | 46.3 | 51.5 | 52.6 | 42.9 | 49.9 | 52.4 | 46.6 |
| 5th percentile | 35.8 | 39.7 | 41.2 | 32.9 | 39.1 | 40.9 | 36.2 |

continued...

Table 2.2 Distribution of key funding ratios on various bases (schemes in surplus and deficit)

| | Tranche | | | | | | |
|---|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ratio of TPs to buyout liabilities | | | | | | | |
| 95th percentile | 91.9 | 93.2 | 98.8 | 97.1 | 97.8 | 94.3 | 93.0 |
| Upper quartile | 74.8 | 78.7 | 84.0 | 80.5 | 81.4 | 79.7 | 78.4 |
| Median | 66.8 | 70.3 | 73.6 | 72.2 | 72.7 | 71.9 | 70.0 |
| Lower quartile | 59.2 | 62.5 | 64.7 | 63.6 | 65.2 | 63.9 | 62.5 |
| 5th percentile | 48.5 | 51.9 | 53.3 | 51.5 | 54.4 | 52.8 | 51.7 |

Table 2.3 Average ratio of assets to TPs by scheme characteristics (schemes in surplus and deficit, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 85.3 | 86.5 | 85.9 | 76.8 | 82.6 | 88.7 | 81.8 |
| 100 to 499 members | 82.3 | 86.5 | 85.9 | 72.0 | 81.6 | 87.2 | 79.5 |
| 500 to 999 members | 81.6 | 88.5 | 85.7 | 70.4 | 82.2 | 87.8 | 80.2 |
| 1,000 to 4,999 members | 84.9 | 88.0 | 86.8 | 73.6 | 83.0 | 88.6 | 80.7 |
| 5,000 members or more | 89.0 | 91.7 | 90.1 | 76.3 | 84.1 | 90.1 | 81.8 |
| Size by TPs | | | | | | | |
| Less than £5m | 86.1 | 86.8 | 86.6 | 77.8 | 83.7 | 90.3 | 83.9 |
| £5m to £19m | 82.1 | 86.4 | 84.9 | 72.3 | 81.2 | 86.3 | 80.2 |
| £20m to £99m | 82.4 | 87.7 | 86.0 | 71.4 | 82.1 | 88.2 | 79.3 |
| £100m to £299 | 84.7 | 88.1 | 89.1 | 73.2 | 83.8 | 88.8 | 79.8 |
| £300m or greater | 89.1 | 91.2 | 88.4 | 75.5 | 82.8 | 88.1 | 81.9 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 82.6 | 85.2 | 84.1 | 74.5 | 81.9 | 88.1 | 82.0 |
| 25% to 49% | 83.5 | 87.6 | 86.1 | 71.6 | 81.5 | 87.4 | 78.6 |
| 50% to 74% | 88.2 | 90.7 | 89.4 | 75.6 | 83.8 | 88.0 | 81.5 |
| 75% or greater | 92.6 | 94.6 | 96.4 | 81.5 | 89.6 | 94.1 | 89.2 |

continued...

Table 2.3 Average ratio of assets to TPs by scheme characteristics (schemes in surplus and deficit, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 79.1 | 78.8 | 78.7 | 69.1 | 75.0 | 76.1 | 76.5 |
| 16 to 50 | 77.4 | 77.7 | 77.9 | 69.1 | 76.5 | 79.5 | 73.2 |
| 51 to 85 | 78.9 | 80.5 | 80.5 | 69.3 | 77.0 | 80.5 | 75.2 |
| 86 or more | 80.6 | 83.8 | 82.2 | 72.5 | 80.1 | 83.5 | 79.2 |
| Scheme status | | | | | | | |
| Open | 84.6 | 87.6 | 88.6 | 75.3 | 85.6 | 95.3 | 84.3 |
| Closed to new members | 83.7 | 86.5 | 85.5 | 73.2 | 82.6 | 87.3 | 80.7 |
| Closed to future accrual | 82.5 | 86.2 | 83.5 | 72.6 | 79.5 | 83.1 | 78.2 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 75.1 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 76.3 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 78.7 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 81.3 |

Table 2.3 Average ratio of assets to TPs by scheme characteristics (schemes in surplus and deficit, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|--|---------------------------------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length (schemes in deficit only) | | | | | | | |
| Fewer than 5 years | 84.9 | 86.4 | 87.3 | 78.3 | 84.4 | 88.4 | 86.3 |
| 5 to fewer than 7.5 years | 78.7 | 82.5 | 81.8 | 73.1 | 80.9 | 82.8 | 79.8 |
| 7.5 to fewer than 10 years | 78.4 | 80.0 | 79.6 | 71.0 | 78.0 | 80.2 | 76.4 |
| 10 years or greater | 76.0 | 76.7 | 74.6 | 66.5 | 73.2 | 76.0 | 70.2 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 86.1 | 86.4 | 86.4 | 84.4 | 90.7 | 96.1 | 89.9 |
| 20% to less than 40% | 86.3 | 88.0 | 88.4 | 76.3 | 85.7 | 89.8 | 85.1 |
| 40% to less than 60% | 84.3 | 86.8 | 85.4 | 72.7 | 82.4 | 87.3 | 79.1 |
| 60% to less than 80% | 83.1 | 87.6 | 85.0 | 69.1 | 81.4 | 87.3 | 78.4 |
| 80% or greater | 84.0 | 88.0 | 89.7 | 71.1 | 80.5 | 89.5 | 73.7 |
| Funding position (TPs) | | | | | | | |
| Deficit | 79.4 | 81.8 | 81.0 | 71.3 | 78.9 | 82.3 | 78.0 |
| Surplus | 111.4 | 110.8 | 110.2 | 111.3 | 111.1 | 110.7 | 109.9 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 74.6 | 83.2 | 89.2 | 81.6 |
| At least one contingent asset | - | - | - | 70.6 | 79.7 | 83.9 | 78.2 |

Table 2.4 Average ratio of TPs to buyout liabilities by scheme characteristics (schemes in surplus and deficit, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 69.8 | 72.8 | 75.7 | 75.0 | 75.7 | 75.7 | 72.9 |
| 100 to 499 members | 66.0 | 69.3 | 72.3 | 70.9 | 72.3 | 70.4 | 69.1 |
| 500 to 999 members | 66.6 | 69.4 | 73.3 | 71.4 | 71.6 | 69.8 | 69.0 |
| 1,000 to 4,999 members | 66.3 | 71.2 | 76.3 | 72.0 | 72.7 | 70.1 | 71.0 |
| 5,000 members or more | 69.8 | 73.6 | 80.1 | 73.9 | 75.2 | 72.6 | 72.4 |
| Size by TPs | | | | | | | |
| Less than £5m | 68.9 | 71.6 | 74.2 | 73.9 | 75.3 | 75.5 | 72.0 |
| £5m to £19m | 66.2 | 70.0 | 73.2 | 71.7 | 72.7 | 71.9 | 70.4 |
| £20m to £99m | 67.1 | 70.1 | 74.3 | 71.6 | 73.1 | 70.4 | 69.7 |
| £100m to £299 | 66.6 | 72.4 | 76.4 | 73.1 | 73.0 | 70.6 | 71.6 |
| £300m or greater | 71.5 | 74.3 | 80.9 | 75.2 | 75.3 | 73.6 | 73.0 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 64.6 | 68.3 | 71.5 | 69.6 | 71.3 | 70.5 | 67.2 |
| 25% to 49% | 67.4 | 70.9 | 74.2 | 71.8 | 72.8 | 70.5 | 69.1 |
| 50% to 74% | 75.1 | 77.3 | 81.1 | 78.2 | 78.5 | 76.8 | 75.7 |
| 75% or greater | 84.4 | 87.7 | 91.1 | 87.7 | 86.2 | 86.2 | 88.9 |

continued...

Table 2.4 Average ratio of TPs to buyout liabilities by scheme characteristics (schemes in surplus and deficit, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 73.6 | 70.6 | 72.3 | 76.5 | 73.6 | 75.9 | 74.2 |
| 16 to 50 | 67.9 | 70.8 | 72.7 | 71.8 | 75.3 | 71.7 | 71.2 |
| 51 to 85 | 66.6 | 71.6 | 73.7 | 71.8 | 73.7 | 73.0 | 71.0 |
| 86 or more | 67.1 | 70.4 | 75.3 | 71.6 | 72.3 | 70.8 | 69.8 |
| Scheme status | | | | | | | |
| Open | 68.1 | 70.6 | 74.5 | 72.3 | 74.2 | 72.2 | 71.0 |
| Closed to new members | 67.3 | 70.9 | 74.6 | 72.4 | 73.3 | 72.3 | 70.8 |
| Closed to future accrual | 67.2 | 70.6 | 74.8 | 72.8 | 73.1 | 72.4 | 71.0 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 69.4 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 69.1 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 70.0 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 70.1 |

continued...

Table 2.4 Average ratio of TPs to buyout liabilities by scheme characteristics (schemes in surplus and deficit, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|--|---------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length (schemes in deficit only) | | | | | | | |
| Fewer than 5 years | 69.1 | 71.6 | 75.3 | 73.3 | 75.0 | 72.6 | 72.5 |
| 5 to fewer than 7.5 years | 68.6 | 70.8 | 75.0 | 74.2 | 74.2 | 72.2 | 70.7 |
| 7.5 to fewer than 10 years | 66.3 | 70.1 | 74.7 | 72.2 | 71.5 | 71.6 | 69.5 |
| 10 years or greater | 66.3 | 70.6 | 73.4 | 70.4 | 71.8 | 69.3 | 68.9 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 70.7 | 73.7 | 75.9 | 77.4 | 84.1 | 83.0 | 82.3 |
| 20% to less than 40% | 74.2 | 78.6 | 80.5 | 77.1 | 78.3 | 77.7 | 74.8 |
| 40% to less than 60% | 69.4 | 71.8 | 76.9 | 72.4 | 74.0 | 72.8 | 70.6 |
| 60% to less than 80% | 66.1 | 69.9 | 72.9 | 69.8 | 70.4 | 68.2 | 66.1 |
| 80% or greater | 64.3 | 67.8 | 70.2 | 68.7 | 69.4 | 67.9 | 65.8 |
| Funding position (TPs) | | | | | | | |
| Deficit | 67.3 | 70.7 | 74.6 | 72.2 | 73.2 | 71.5 | 70.6 |
| Surplus | 69.6 | 72.4 | 74.5 | 80.9 | 78.4 | 75.9 | 75.4 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 73.1 | 73.9 | 72.6 | 71.1 |
| At least one contingent asset | - | - | - | 71.2 | 73.4 | 71.7 | 70.6 |

Table 2.5 Average ratio of TPs to liabilities estimated on a reference⁵ basis by scheme characteristics (schemes in deficit only, Tranches 4 and 7)

| | Tranche | |
|---|---------|------|
| | 4 | 7 |
| All schemes | 82.4 | 81.2 |
| Size by number of members | | |
| Fewer than 100 members | 84.1 | 83.3 |
| 100 to 499 members | 81.8 | 79.8 |
| 500 to 999 members | 81.3 | 79.5 |
| 1,000 to 4,999 members | 81.3 | 80.6 |
| 5,000 members or more | 82.8 | 81.6 |
| Size by TPs | | |
| Less than £5m | 83.8 | 83.2 |
| £5m to £19m | 81.8 | 80.7 |
| £20m to £99m | 81.4 | 80.1 |
| £100m to £299 | 82.1 | 81.2 |
| £300m or greater | 83.7 | 82.0 |
| Maturity (ratio of pensioner TPs to total TPs) | | |
| Less than 25% | 81.7 | 79.5 |
| 25% to 49% | 81.3 | 79.6 |
| 50% to 74% | 85.0 | 84.4 |
| 75% or greater | 90.2 | 92.3 |

| | Tranche | |
|---|---------|------|
| | 4 | 7 |
| D&B Failure Score | | |
| 15 or less | 85.1 | 85.0 |
| 16 to 50 | 83.6 | 84.2 |
| 51 to 85 | 83.0 | 82.3 |
| 86 or greater | 81.6 | 80.3 |
| Scheme status | | |
| Open | 81.4 | 79.6 |
| Closed to new members | 82.3 | 80.7 |
| Closed to future accrual | 83.4 | 82.9 |
| Covenant (schemes in deficit only) | | |
| Covenant group 4 (Weak) | - | 82.0 |
| Covenant group 3 (Tending to weak) | - | 80.9 |
| Covenant group 2 (Tending to strong) | - | 80.0 |
| Covenant group 1 (Strong) | - | 80.4 |

| | Tranche | |
|--|---------|------|
| | 4 | 7 |
| RP length (schemes in deficit only) | | |
| Fewer than 5 years | 83.2 | 82.8 |
| 5 to fewer than 7.5 years | 84.5 | 82.0 |
| 7.5 to fewer than 10 years | 81.5 | 79.7 |
| 10 years or greater | 81.8 | 80.1 |
| Return-seeking assets | | |
| Less than 20% | 87.3 | 93.0 |
| 20% to less than 40% | 85.5 | 85.4 |
| 40% to less than 60% | 82.1 | 80.5 |
| 60% to less than 80% | 79.8 | 77.3 |
| 80% or greater | 80.8 | 76.3 |
| Presence of contingent assets | | |
| No contingent asset | 82.5 | 81.3 |
| At least one contingent asset | 81.9 | 80.9 |

⁵ Liabilities are estimated using gilts with an excess return of 50 basis points.

Table 2.6 Use of contingent assets (Tranche 7, surplus and deficit schemes)

| | Number of schemes (holding at least one) | Percentage of schemes (holding at least one) |
|---|---|---|
| All contingent assets | | |
| PPF-recognised contingent asset | 224 | 12.2 |
| Contingent asset reported in support of funding (non-PPF-recognised) | 206 | 11.2 |
| All contingent assets | 399 | 21.7 |
| PPF-recognised | | |
| Type A | 190 | 10.3 |
| Type B and C | 36 | 1.9 |
| Non-PPF-recognised | | |
| Property | 39 | 2.1 |
| Parental guarantee | 95 | 5.2 |
| Escrow, cash or charge over other asset (excludes property), or other (eg letter of credit) | 79 | 4.3 |
| Total schemes | 1,837 | 100 |

21.7% of Tranche 7 schemes hold at least one contingent asset.

PPF-recognised contingent assets fall into three categories:

- Type A: guarantees provided by the parent/group companies to fund the scheme, most commonly guarantees to cover a pre-arranged percentage of liabilities.
- Type B: includes security over cash, UK real estate and securities
- Type C: includes letters of credit and bank guarantees.

There are some cases in which a contingent asset that is reported in the RP has not been formally recognised by the PPF in support of the scheme's levy calculation. These contingent assets may, for example, take the form of security over property, escrow accounts or parental/group guarantees, and are referred to here as non-PPF-recognised.

Table 2.7 Use of contingent assets by scheme characteristics (Tranche 7, surplus and deficit schemes)

| | Percentage of schemes | | |
|---|-----------------------|--------------------|-----------------------|
| | PPF-recognised | Non-PPF-recognised | All contingent assets |
| Size by number of members | | | |
| Fewer than 100 members | 3.3 | 4.8 | 8.1 |
| 100 to 499 members | 12.3 | 9.3 | 20.2 |
| 500 to 999 members | 15.7 | 12.7 | 27.5 |
| 1,000 to 4,999 members | 23.6 | 18.6 | 38.8 |
| 5,000 members or more | 24.3 | 31.3 | 47.2 |
| Size by TPs | | | |
| Less than £5m | 1.5 | 1.5 | 3.1 |
| £5m to £19m | 7.5 | 7.5 | 14.3 |
| £20m to £99m | 14.9 | 12.3 | 25.7 |
| £100m to £299 | 23.5 | 18.1 | 38.2 |
| £300m or greater | 23.4 | 27.9 | 45.3 |
| Maturity (ratio of pensioner TPs to total TPs) | | | |
| Less than 25% | 7.3 | 5.0 | 11.7 |
| 25% to 49% | 15.1 | 12.4 | 25.7 |
| 50% to 74% | 15.2 | 18.2 | 30.2 |
| 75% or greater | 3.1 | 4.7 | 7.8 |

| | Percentage of schemes | | |
|---|-----------------------|--------------------|-----------------------|
| | PPF-recognised | Non-PPF-recognised | All contingent assets |
| D&B Failure Score | | | |
| 15 or less | 18.4 | 7.9 | 26.3 |
| 16 to 50 | 23.0 | 13.8 | 34.5 |
| 51 to 85 | 13.8 | 10.1 | 22.0 |
| 86 or greater | 12.5 | 12.7 | 23.5 |
| Scheme status | | | |
| Open | 11.6 | 11.9 | 21.8 |
| Closed to new members | 12.9 | 12.0 | 23.1 |
| Closed to future accrual | 11.5 | 9.5 | 19.5 |
| Covenant (schemes in deficit only) | | | |
| Covenant group 4 (Weak) | 18.2 | 11.6 | 27.7 |
| Covenant group 3 (Tending to weak) | 16.4 | 15.3 | 29.3 |
| Covenant group 2 (Tending to strong) | 11.9 | 11.3 | 21.5 |
| Covenant group 1 (Strong) | 9.6 | 11.9 | 21.2 |

continued...

Table 2.7 Use of contingent assets by scheme characteristics (Tranche 7, surplus and deficit schemes)

| | Percentage of schemes | | |
|------------------------------|-----------------------|--------------------|-----------------------|
| | PPF-recognised | Non-PPF-recognised | All contingent assets |
| RP length | | | |
| Fewer than 5 years | 12.8 | 9.1 | 20.1 |
| 5 to fewer than 7.5 years | 12.7 | 14.7 | 25.4 |
| 7.5 to fewer than 10 years | 13.4 | 12.2 | 23.7 |
| 10 years or greater | 14.6 | 14.8 | 27.3 |
| Return-seeking assets | | | |
| Less than 20% | 4.1 | 9.2 | 13.3 |
| 20% to less than 40% | 13.8 | 12.5 | 23.8 |
| 40% to less than 60% | 12.8 | 13.0 | 23.9 |
| 60% to less than 80% | 13.3 | 8.7 | 20.5 |
| 80% or greater | 13.7 | 12.7 | 24.5 |

Table 2.8 Schemes with contingent assets (Tranches 4 to 7)

| | Tranche 4 | Tranche 5 | Tranche 6 | Tranche 7 |
|--|------------------|------------------|------------------|------------------|
| All contingent assets (percentage of schemes) | | | | |
| Schemes with at least one PPF-recognised contingent asset | 8.0 | 14.1 | 11.9 | 12.2 |
| Schemes with at least one contingent asset reported in support of funding (non-PPF-recognised) | 7.7 | 6.9 | 6.6 | 11.2 |
| Schemes with at least one contingent asset | 15.4 | 20.3 | 18.0 | 21.7 |
| PPF-recognised (percentage of schemes) | | | | |
| Type A | 6.6 | 12.7 | 10.6 | 10.3 |
| Type B and C | 1.5 | 1.7 | 1.4 | 1.9 |
| Non-PPF-recognised (percentage of schemes) | | | | |
| Property | 1.6 | 1.1 | 0.7 | 2.1 |
| Parental guarantee | 4.2 | 4.3 | 3.6 | 5.2 |
| Escrow, cash or charge over other asset (excludes property), or other (eg letter of credit) | 2.5 | 1.7 | 2.5 | 4.3 |

RP lengths and contributions (schemes in deficit only)

Table 3.1 Distribution of RP lengths (schemes in deficit only, all tranches)

| RP length (years) | Tranche 1 | Tranche 2 | Tranche 3 | Tranche 4 | Tranche 5 | Tranche 6 | Tranche 7 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 95th percentile | 15.0 | 15.0 | 17.0 | 19.8 | 17.5 | 15.9 | 17.1 |
| Upper quartile | 10.0 | 10.0 | 10.0 | 12.0 | 10.0 | 10.0 | 10.9 |
| Median | 8.8 | 8.0 | 8.8 | 9.4 | 8.3 | 7.2 | 7.8 |
| Lower quartile | 5.0 | 5.0 | 5.1 | 6.8 | 5.0 | 4.4 | 5.0 |
| 5th percentile | 1.6 | 1.2 | 2.0 | 2.4 | 1.7 | 1.1 | 1.7 |

Table 3.2 Distribution of RP lengths (for schemes in deficit submitting valuations in respect of both Tranches 4 and 7)

| RP length (years) | Tranche 4 | Tranche 7 |
|-------------------|-----------|-----------|
| 95th percentile | 19.2 | 17.7 |
| Upper quartile | 12.1 | 11.0 |
| Median | 9.6 | 8.0 |
| Lower quartile | 7.0 | 5.0 |
| 5th percentile | 3.0 | 1.7 |

Table 3.3 Distribution of DRC schedules (schemes in deficit only, all tranches)

| 50% of scheduled DRCs to be paid after (years) | Tranche 1 | Tranche 2 | Tranche 3 | Tranche 4 | Tranche 5 | Tranche 6 | Tranche 7 |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 95th percentile | 7.5 | 7.8 | 9.1 | 10.4 | 9.3 | 8.8 | 9.3 |
| Upper quartile | 5.0 | 5.0 | 5.1 | 6.1 | 5.2 | 5.0 | 5.5 |
| Median | 3.9 | 3.5 | 4.0 | 4.5 | 3.8 | 3.4 | 3.6 |
| Lower quartile | 1.9 | 1.8 | 2.3 | 2.6 | 2.0 | 1.8 | 2.0 |
| 5th percentile | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

Table 3.4 Average RP length by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (years) | | | | | | |
|---|-----------------|-----|-----|------|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| All schemes | 8.1 | 7.7 | 8.6 | 9.7 | 8.5 | 7.8 | 8.4 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 8.0 | 8.0 | 8.2 | 8.9 | 8.1 | 7.5 | 7.9 |
| 100 to 499 members | 8.2 | 7.9 | 9.0 | 10.1 | 8.6 | 7.9 | 8.7 |
| 500 to 999 members | 8.1 | 7.5 | 8.3 | 9.8 | 8.2 | 7.8 | 8.0 |
| 1,000 to 4,999 members | 8.1 | 7.2 | 8.9 | 9.9 | 8.9 | 8.1 | 8.5 |
| 5,000 members or more | 7.8 | 7.2 | 8.1 | 10.5 | 8.9 | 8.1 | 9.0 |
| Size by TPs | | | | | | | |
| Less than £5m | 8.0 | 7.9 | 8.6 | 8.9 | 8.1 | 7.6 | 7.8 |
| £5m to £19m | 8.3 | 8.1 | 8.9 | 10.0 | 8.6 | 8.1 | 8.8 |
| £20m to £99m | 8.2 | 7.4 | 8.4 | 9.9 | 8.4 | 7.5 | 8.3 |
| £100m to £299 | 7.5 | 6.9 | 8.4 | 9.7 | 8.6 | 7.8 | 8.2 |
| £300m or greater | 7.9 | 7.3 | 8.4 | 10.6 | 9.0 | 8.1 | 8.9 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 8.0 | 7.5 | 8.3 | 8.8 | 7.7 | 7.4 | 7.5 |
| 25% to 49% | 8.2 | 7.9 | 8.8 | 10.5 | 8.8 | 7.8 | 8.9 |
| 50% to 74% | 8.4 | 8.2 | 8.8 | 9.9 | 9.0 | 8.3 | 8.6 |
| 75% or greater | 6.9 | 7.1 | 7.7 | 9.3 | 8.1 | 7.9 | 6.7 |

| | Tranche (years) | | | | | | |
|---|-----------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 8.9 | 10.6 | 10.6 | 10.9 | 11.0 | 10.9 | 9.4 |
| 16 to 50 | 8.8 | 8.6 | 10.6 | 10.1 | 9.3 | 8.6 | 9.6 |
| 51 to 85 | 8.9 | 7.8 | 8.9 | 10.3 | 9.0 | 8.5 | 9.3 |
| 86 or greater | 7.8 | 7.4 | 8.2 | 9.5 | 8.2 | 7.5 | 8.1 |
| Scheme status | | | | | | | |
| Open | 8.3 | 7.8 | 8.4 | 9.6 | 7.9 | 8.0 | 8.2 |
| Closed to new members | 8.0 | 7.7 | 8.6 | 9.7 | 8.3 | 7.5 | 8.3 |
| Closed to future accrual | 8.3 | 7.7 | 8.8 | 10.0 | 9.3 | 8.3 | 8.7 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 10.8 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 9.5 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 8.0 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 6.5 |

continued...

Table 3.4 Average RP length by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (years) | | | | | | |
|--------------------------------------|-----------------|-----|-----|------|-----|-----|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 8.2 | 8.0 | 8.4 | 8.4 | 7.0 | 7.1 | 6.0 |
| 20% to less than 40% | 6.9 | 7.6 | 8.1 | 9.1 | 7.7 | 7.2 | 7.5 |
| 40% to less than 60% | 8.2 | 7.4 | 8.3 | 9.8 | 8.0 | 7.6 | 8.6 |
| 60% to less than 80% | 8.2 | 8.0 | 9.0 | 10.3 | 9.1 | 8.2 | 8.9 |
| 80% or greater | 8.3 | 7.4 | 9.0 | 10.1 | 9.3 | 8.7 | 10.4 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 9.6 | 8.3 | 7.6 | 8.3 |
| At least one contingent asset | - | - | - | 10.5 | 9.0 | 8.6 | 8.6 |

Table 3.5 Average annual contributions as a percentage of liabilities estimated on a reference⁶ basis split by scheme characteristics (schemes in deficit Tranches 4 and 7)

| | Tranche (percentage) | |
|---|----------------------|-----|
| | 4 | 7 |
| All schemes | 2.5 | 2.2 |
| Size by number of members | | |
| Fewer than 100 members | 2.8 | 2.6 |
| 100 to 499 members | 2.4 | 2.1 |
| 500 to 999 members | 2.5 | 2.0 |
| 1,000 to 4,999 members | 2.2 | 1.8 |
| 5,000 members or more | 1.9 | 1.5 |
| Size by TPs | | |
| Less than £5m | 2.9 | 2.9 |
| £5m to £19m | 2.4 | 2.1 |
| £20m to £99m | 2.4 | 2.1 |
| £100m to £299 | 2.2 | 1.9 |
| £300m or greater | 2.0 | 1.6 |
| Maturity (ratio of pensioner TPs to total TPs) | | |
| Less than 25% | 2.8 | 2.6 |
| 25% to 49% | 2.3 | 2.0 |
| 50% to 74% | 2.2 | 2.0 |
| 75% or greater | 2.2 | 2.1 |

| | Tranche (percentage) | |
|---|----------------------|-----|
| | 4 | 7 |
| D&B Failure Score | | |
| 15 or less | 2.3 | 2.0 |
| 16 to 50 | 2.5 | 2.4 |
| 51 to 85 | 2.4 | 2.2 |
| 86 or greater | 2.4 | 2.1 |
| Scheme status | | |
| Open | 2.4 | 2.1 |
| Closed to new members | 2.5 | 2.1 |
| Closed to future accrual | 2.5 | 2.2 |
| Covenant (schemes in deficit only) | | |
| Covenant group 4 (Weak) | - | 2.1 |
| Covenant group 3 (Tending to weak) | - | 1.9 |
| Covenant group 2 (Tending to strong) | - | 2.1 |
| Covenant group 1 (Strong) | - | 2.3 |

| | Tranche (percentage) | |
|--|----------------------|-----|
| | 4 | 7 |
| RP length (schemes in deficit only) | | |
| Fewer than 5 years | 3.2 | 2.6 |
| 5 to fewer than 7.5 years | 3.1 | 2.4 |
| 7.5 to fewer than 10 years | 2.5 | 2.1 |
| 10 years or greater | 1.8 | 1.7 |
| Return-seeking assets | | |
| Less than 20% | 2.7 | 2.8 |
| 20% to less than 40% | 2.7 | 2.0 |
| 40% to less than 60% | 2.3 | 2.1 |
| 60% to less than 80% | 2.4 | 2.1 |
| 80% or greater | 2.6 | 1.8 |
| Presence of contingent assets | | |
| No contingent asset | 2.5 | 2.2 |
| At least one contingent asset | 2.4 | 2.0 |

⁶ Liabilities are estimated using gilts with an excess return of 50 basis points.

Discount rates (schemes in deficit only)

Table 4.1 Average nominal discount rate and outperformance by tranche⁷ (schemes in deficit only, all tranches)

| | Mean (%) | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Tranche 1 | Tranche 2 | Tranche 3 | Tranche 4 | Tranche 5 | Tranche 6 | Tranche 7 |
| Pre- and post-retirement rates (a) | 5.01 | 5.35 | 5.63 | 5.27 | 5.25 | 5.10 | 4.22 |
| Pre-retirement rate (b) | 6.13 | 6.30 | 6.44 | 6.11 | 6.11 | 6.05 | 5.09 |
| Post-retirement rate (b) | 4.63 | 4.93 | 5.06 | 4.73 | 4.76 | 4.70 | 3.66 |
| SEDR (c) | 5.33 | 5.56 | 5.69 | 5.35 | 5.37 | 5.29 | 4.30 |
| SEDR (all schemes) (d) | 5.23 | 5.50 | 5.67 | 5.33 | 5.34 | 5.25 | 4.28 |
| SEDR outperformance over conventional 20 year UK gilts (e) | 0.96 | 0.84 | 1.04 | 1.18 | 0.91 | 1.01 | 1.30 |
| SEDR outperformance over greater than 15 year AA UK corporate bonds (f) | 0.30 | 0.15 | -0.78 | -1.45 | -0.16 | -0.20 | -0.33 |

(a) Single rate approach

(b) Different rates approach

(c) Composite of pre- and post-retirement rates for the different rate approach

(d) Combined single and different rates approach

Source for (e): Thomson Reuters, FTSE Group

Source for (f): Thomson Reuters, Markit iBoxx

⁷

Tranche 1: 22 September 2005 to 21 September 2006

Tranche 2: 22 September 2006 to 21 September 2007

Tranche 3: 22 September 2007 to 21 September 2008

Tranche 4: 22 September 2008 to 21 September 2009

Tranche 5: 22 September 2009 to 21 September 2010

Tranche 6: 22 September 2010 to 21 September 2011

Tranche 7: 22 September 2011 to 21 September 2012

Table 4.2 Average real discount rate and outperformance by tranche (schemes in deficit only, all tranches)

| | Mean (%) | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Tranche 1 | Tranche 2 | Tranche 3 | Tranche 4 | Tranche 5 | Tranche 6 | Tranche 7 |
| Pre- and post-retirement rates (a) | 2.03 | 2.15 | 2.09 | 2.12 | 1.65 | 1.56 | 1.03 |
| Pre-retirement rate (b) | 3.12 | 3.04 | 2.85 | 2.94 | 2.50 | 2.48 | 1.89 |
| Post-retirement rate (b) | 1.66 | 1.71 | 1.51 | 1.60 | 1.19 | 1.17 | 0.51 |
| SEDR (c) | 2.35 | 2.35 | 2.15 | 2.22 | 1.80 | 1.78 | 1.16 |
| SEDR (all schemes) (d) | 2.21 | 2.29 | 2.14 | 2.19 | 1.76 | 1.73 | 1.12 |
| Outperformance against greater than 5 year index linked gilts (e) | 0.90 | 0.83 | 1.13 | 1.11 | 1.07 | 1.14 | 1.23 |
| Outperformance against greater than 15 year index linked gilts (e) | 1.05 | 1.06 | 1.26 | 1.20 | 1.09 | 1.09 | 1.15 |

(a) Single rate approach

(b) Different rates approach

(c) Composite of pre- and post-retirement rates for the different rate approach

(d) Combined single and different rates approach

Source for (e): Thomson Reuters, FTSE Group

Table 4.3 Average nominal SEDR by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 5.11 | 5.35 | 5.49 | 5.20 | 5.15 | 5.04 | 4.08 |
| 100 to 499 members | 5.31 | 5.58 | 5.76 | 5.33 | 5.39 | 5.30 | 4.33 |
| 500 to 999 members | 5.27 | 5.64 | 5.79 | 5.37 | 5.50 | 5.39 | 4.42 |
| 1,000 to 4,999 members | 5.25 | 5.53 | 5.75 | 5.44 | 5.42 | 5.42 | 4.41 |
| 5,000 members or more | 5.17 | 5.46 | 5.66 | 5.46 | 5.49 | 5.43 | 4.42 |
| Size by TPs | | | | | | | |
| Less than £5m | 5.10 | 5.35 | 5.49 | 5.18 | 5.11 | 5.01 | 4.04 |
| £5m to £19m | 5.34 | 5.57 | 5.71 | 5.34 | 5.36 | 5.21 | 4.25 |
| £20m to £99m | 5.26 | 5.59 | 5.76 | 5.37 | 5.44 | 5.36 | 4.35 |
| £100m to £299 | 5.20 | 5.49 | 5.74 | 5.42 | 5.39 | 5.43 | 4.36 |
| £300m or greater | 5.13 | 5.49 | 5.68 | 5.43 | 5.48 | 5.34 | 4.42 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 5.23 | 5.44 | 5.60 | 5.26 | 5.28 | 5.12 | 4.23 |
| 25% to 49% | 5.28 | 5.58 | 5.78 | 5.41 | 5.40 | 5.34 | 4.36 |
| 50% to 74% | 5.14 | 5.50 | 5.59 | 5.31 | 5.33 | 5.23 | 4.25 |
| 75% or greater | 4.72 | 5.16 | 5.31 | 5.03 | 4.91 | 5.04 | 3.84 |

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 5.02 | 5.46 | 5.43 | 5.19 | 5.28 | 4.96 | 4.00 |
| 16 to 50 | 5.19 | 5.39 | 5.60 | 5.26 | 5.17 | 5.17 | 4.10 |
| 51 to 85 | 5.25 | 5.45 | 5.65 | 5.27 | 5.24 | 5.11 | 4.21 |
| 86 or greater | 5.24 | 5.53 | 5.73 | 5.38 | 5.37 | 5.29 | 4.34 |
| Scheme status | | | | | | | |
| Open | 5.23 | 5.48 | 5.68 | 5.37 | 5.38 | 5.41 | 4.34 |
| Closed to new members | 5.22 | 5.50 | 5.68 | 5.32 | 5.36 | 5.25 | 4.33 |
| Closed to future accrual | 5.24 | 5.52 | 5.63 | 5.30 | 5.28 | 5.15 | 4.17 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 4.18 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 4.30 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 4.33 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 4.35 |

continued...

Table 4.3 Average nominal SEDR by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|--|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length (schemes in deficit only) | | | | | | | |
| Fewer than 5 years | 5.15 | 5.46 | 5.63 | 5.27 | 5.26 | 5.23 | 4.18 |
| 5 to fewer than 7.5 years | 5.20 | 5.51 | 5.69 | 5.26 | 5.31 | 5.22 | 4.28 |
| 7.5 to fewer than 10 years | 5.28 | 5.50 | 5.68 | 5.36 | 5.41 | 5.24 | 4.36 |
| 10 years or greater | 5.25 | 5.57 | 5.69 | 5.36 | 5.35 | 5.31 | 4.33 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 4.96 | 5.19 | 5.34 | 5.04 | 4.82 | 4.69 | 3.70 |
| 20% to less than 40% | 4.97 | 5.30 | 5.49 | 5.20 | 5.19 | 5.08 | 4.12 |
| 40% to less than 60% | 5.20 | 5.52 | 5.65 | 5.33 | 5.34 | 5.22 | 4.31 |
| 60% to less than 80% | 5.30 | 5.60 | 5.80 | 5.45 | 5.47 | 5.42 | 4.47 |
| 80% or greater | 5.38 | 5.60 | 5.75 | 5.38 | 5.45 | 5.43 | 4.45 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 5.30 | 5.30 | 5.23 | 4.24 |
| At least one contingent asset | - | - | - | 5.44 | 5.44 | 5.31 | 4.38 |

Table 4.4 Average outperformance of the nominal SEDR over conventional 20 year UK gilts by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 0.84 | 0.69 | 0.85 | 1.03 | 0.75 | 0.82 | 1.12 |
| 100 to 499 members | 1.04 | 0.92 | 1.12 | 1.16 | 0.97 | 1.05 | 1.36 |
| 500 to 999 members | 1.00 | 0.96 | 1.16 | 1.26 | 1.07 | 1.14 | 1.45 |
| 1,000 to 4,999 members | 0.99 | 0.87 | 1.14 | 1.31 | 0.97 | 1.17 | 1.42 |
| 5,000 members or more | 0.92 | 0.79 | 1.03 | 1.37 | 0.98 | 1.17 | 1.40 |
| Size by TPs | | | | | | | |
| Less than £5m | 0.81 | 0.70 | 0.84 | 0.99 | 0.73 | 0.79 | 1.07 |
| £5m to £19m | 1.06 | 0.91 | 1.07 | 1.18 | 0.94 | 0.97 | 1.29 |
| £20m to £99m | 1.00 | 0.91 | 1.13 | 1.23 | 1.02 | 1.11 | 1.38 |
| £100m to £299 | 0.95 | 0.84 | 1.13 | 1.32 | 0.94 | 1.17 | 1.39 |
| £300m or greater | 0.88 | 0.81 | 1.06 | 1.33 | 0.97 | 1.09 | 1.41 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 0.95 | 0.78 | 0.96 | 1.09 | 0.87 | 0.91 | 1.27 |
| 25% to 49% | 1.01 | 0.93 | 1.14 | 1.25 | 0.98 | 1.10 | 1.39 |
| 50% to 74% | 0.89 | 0.82 | 0.96 | 1.19 | 0.89 | 0.97 | 1.25 |
| 75% or greater | 0.46 | 0.53 | 0.70 | 0.97 | 0.47 | 0.75 | 0.88 |

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 0.74 | 0.81 | 0.78 | 1.06 | 0.85 | 0.70 | 1.01 |
| 16 to 50 | 0.90 | 0.75 | 0.96 | 1.10 | 0.81 | 0.90 | 1.12 |
| 51 to 85 | 0.98 | 0.79 | 1.03 | 1.11 | 0.82 | 0.88 | 1.23 |
| 86 or greater | 0.97 | 0.88 | 1.09 | 1.22 | 0.95 | 1.06 | 1.36 |
| Scheme status | | | | | | | |
| Open | 0.96 | 0.83 | 1.05 | 1.24 | 0.94 | 1.19 | 1.37 |
| Closed to new members | 0.95 | 0.84 | 1.05 | 1.17 | 0.94 | 1.01 | 1.35 |
| Closed to future accrual | 0.96 | 0.85 | 0.99 | 1.14 | 0.86 | 0.90 | 1.21 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 1.22 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 1.32 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 1.36 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 1.37 |

continued...

Table 4.4 Average outperformance of the nominal SEDR over conventional 20 year UK gilts by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|--------------------------------------|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length | | | | | | | |
| Fewer than 5 years | 0.88 | 0.79 | 1.00 | 1.12 | 0.83 | 0.98 | 1.22 |
| 5 to fewer than 7.5 years | 0.93 | 0.83 | 1.06 | 1.14 | 0.88 | 0.98 | 1.29 |
| 7.5 to fewer than 10 years | 1.01 | 0.84 | 1.04 | 1.20 | 0.99 | 1.01 | 1.38 |
| 10 years or greater | 0.97 | 0.92 | 1.06 | 1.21 | 0.95 | 1.08 | 1.35 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 0.66 | 0.54 | 0.69 | 0.89 | 0.41 | 0.45 | 0.72 |
| 20% to less than 40% | 0.70 | 0.63 | 0.86 | 1.06 | 0.75 | 0.84 | 1.15 |
| 40% to less than 60% | 0.94 | 0.83 | 1.02 | 1.20 | 0.91 | 0.97 | 1.33 |
| 60% to less than 80% | 1.04 | 0.94 | 1.16 | 1.29 | 1.05 | 1.19 | 1.49 |
| 80% or greater | 1.11 | 0.97 | 1.12 | 1.21 | 1.02 | 1.19 | 1.47 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 1.15 | 0.89 | 1.00 | 1.27 |
| At least one contingent asset | - | - | - | 1.30 | 1.00 | 1.05 | 1.40 |

Table 4.5 Average outperformance of the nominal SEDR over greater than 15 year AA rated corporate bonds by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|---|------------------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| All schemes | 0.30 | 0.15 | -0.78 | -1.45 | -0.16 | -0.20 | -0.33 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 0.18 | 0.00 | -0.91 | -1.56 | -0.34 | -0.41 | -0.51 |
| 100 to 499 members | 0.38 | 0.23 | -0.71 | -1.45 | -0.10 | -0.15 | -0.27 |
| 500 to 999 members | 0.34 | 0.27 | -0.71 | -1.42 | 0.01 | -0.06 | -0.20 |
| 1,000 to 4,999 members | 0.33 | 0.18 | -0.71 | -1.36 | -0.08 | -0.04 | -0.21 |
| 5,000 members or more | 0.26 | 0.11 | -0.85 | -1.31 | -0.03 | -0.03 | -0.22 |
| Size by TPs | | | | | | | |
| Less than £5m | 0.15 | 0.00 | -0.94 | -1.58 | -0.37 | -0.44 | -0.56 |
| £5m to £19m | 0.41 | 0.22 | -0.73 | -1.45 | -0.13 | -0.23 | -0.35 |
| £20m to £99m | 0.34 | 0.22 | -0.71 | -1.43 | -0.05 | -0.09 | -0.26 |
| £100m to £299 | 0.30 | 0.16 | -0.71 | -1.34 | -0.11 | -0.04 | -0.25 |
| £300m or greater | 0.22 | 0.13 | -0.85 | -1.36 | -0.04 | -0.11 | -0.23 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 0.29 | 0.09 | -0.82 | -1.52 | -0.22 | -0.31 | -0.38 |
| 25% to 49% | 0.35 | 0.23 | -0.69 | -1.37 | -0.09 | -0.11 | -0.25 |
| 50% to 74% | 0.23 | 0.14 | -0.88 | -1.47 | -0.15 | -0.24 | -0.37 |
| 75% or greater | -0.20 | -0.15 | -1.17 | -1.72 | -0.58 | -0.45 | -0.79 |

| | Tranche (mean %) | | | | | | |
|---|------------------|------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 0.08 | 0.14 | -1.11 | -1.59 | -0.21 | -0.49 | -0.63 |
| 16 to 50 | 0.24 | 0.06 | -0.84 | -1.59 | -0.31 | -0.31 | -0.50 |
| 51 to 85 | 0.32 | 0.10 | -0.79 | -1.53 | -0.24 | -0.33 | -0.40 |
| 86 or greater | 0.31 | 0.19 | -0.73 | -1.41 | -0.11 | -0.16 | -0.26 |
| Scheme status | | | | | | | |
| Open | 0.30 | 0.14 | -0.76 | -1.41 | -0.13 | -0.03 | -0.28 |
| Closed to new members | 0.29 | 0.15 | -0.77 | -1.47 | -0.13 | -0.20 | -0.29 |
| Closed to future accrual | 0.30 | 0.15 | -0.83 | -1.47 | -0.20 | -0.31 | -0.41 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | -0.44 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | -0.31 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | -0.28 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | -0.28 |

continued...

Table 4.5 Average outperformance of the nominal SEDR over greater than 15 year AA rated corporate bonds by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|--------------------------------------|------------------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length | | | | | | | |
| Fewer than 5 years | 0.22 | 0.10 | -0.70 | -1.49 | -0.23 | -0.24 | -0.43 |
| 5 to fewer than 7.5 years | 0.27 | 0.14 | -0.80 | -1.50 | -0.18 | -0.23 | -0.34 |
| 7.5 to fewer than 10 years | 0.35 | 0.15 | -0.78 | -1.44 | -0.09 | -0.20 | -0.25 |
| 10 years or greater | 0.31 | 0.23 | -0.86 | -1.42 | -0.13 | -0.13 | -0.29 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 0.01 | -0.16 | -1.02 | -1.69 | -0.66 | -0.76 | -0.91 |
| 20% to less than 40% | 0.04 | -0.05 | -1.06 | -1.60 | -0.30 | -0.37 | -0.51 |
| 40% to less than 60% | 0.28 | 0.14 | -0.81 | -1.45 | -0.15 | -0.24 | -0.30 |
| 60% to less than 80% | 0.38 | 0.25 | -0.67 | -1.34 | -0.02 | -0.02 | -0.14 |
| 80% or greater | 0.45 | 0.28 | -0.71 | -1.38 | -0.06 | -0.01 | -0.15 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | -1.47 | -0.19 | -0.21 | -0.36 |
| At least one contingent asset | - | - | - | -1.35 | -0.06 | -0.15 | -0.25 |

Table 4.6 Average real SEDR by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| All schemes | 2.21 | 2.29 | 2.14 | 2.19 | 1.76 | 1.73 | 1.12 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 2.09 | 2.10 | 1.96 | 2.07 | 1.59 | 1.54 | 1.02 |
| 100 to 499 members | 2.23 | 2.37 | 2.22 | 2.21 | 1.82 | 1.77 | 1.18 |
| 500 to 999 members | 2.30 | 2.46 | 2.26 | 2.24 | 1.93 | 1.85 | 1.19 |
| 1,000 to 4,999 members | 2.30 | 2.37 | 2.24 | 2.28 | 1.82 | 1.90 | 1.15 |
| 5,000 members or more | 2.24 | 2.31 | 2.12 | 2.32 | 1.79 | 1.86 | 1.18 |
| Size by TPs | | | | | | | |
| Less than £5m | 2.08 | 2.10 | 1.94 | 2.06 | 1.57 | 1.53 | 1.02 |
| £5m to £19m | 2.37 | 2.35 | 2.19 | 2.20 | 1.80 | 1.69 | 1.14 |
| £20m to £99m | 2.30 | 2.40 | 2.22 | 2.24 | 1.86 | 1.84 | 1.17 |
| £100m to £299 | 1.77 | 2.34 | 2.24 | 2.27 | 1.78 | 1.88 | 1.10 |
| £300m or greater | 2.20 | 2.33 | 2.12 | 2.28 | 1.80 | 1.75 | 1.16 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 2.23 | 2.21 | 2.08 | 2.11 | 1.70 | 1.61 | 1.07 |
| 25% to 49% | 2.32 | 2.39 | 2.24 | 2.26 | 1.83 | 1.82 | 1.20 |
| 50% to 74% | 1.88 | 2.28 | 2.06 | 2.22 | 1.75 | 1.69 | 1.09 |
| 75% or greater | 1.72 | 1.98 | 1.74 | 2.03 | 1.43 | 1.60 | 0.75 |

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 2.03 | 2.19 | 1.92 | 2.04 | 1.69 | 1.43 | 0.94 |
| 16 to 50 | 2.20 | 2.20 | 2.09 | 2.13 | 1.63 | 1.60 | 0.95 |
| 51 to 85 | 2.26 | 2.23 | 2.12 | 2.15 | 1.67 | 1.63 | 1.06 |
| 86 or greater | 2.21 | 2.32 | 2.18 | 2.24 | 1.79 | 1.77 | 1.17 |
| Scheme status | | | | | | | |
| Open | 2.25 | 2.28 | 2.16 | 2.25 | 1.78 | 1.89 | 1.16 |
| Closed to new members | 2.24 | 2.30 | 2.14 | 2.18 | 1.79 | 1.72 | 1.16 |
| Closed to future accrual | 2.26 | 2.29 | 2.09 | 2.17 | 1.71 | 1.64 | 1.05 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 1.06 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 1.13 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 1.18 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 1.18 |

continued...

Table 4.6 Average real SEDR by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|--------------------------------------|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length | | | | | | | |
| Fewer than 5 years | 1.99 | 2.23 | 2.09 | 2.12 | 1.65 | 1.68 | 1.02 |
| 5 to fewer than 7.5 years | 2.23 | 2.30 | 2.13 | 2.11 | 1.72 | 1.69 | 1.10 |
| 7.5 to fewer than 10 years | 2.30 | 2.29 | 2.16 | 2.23 | 1.84 | 1.74 | 1.20 |
| 10 years or greater | 2.28 | 2.38 | 2.17 | 2.24 | 1.82 | 1.82 | 1.18 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 1.94 | 1.93 | 1.77 | 1.90 | 1.24 | 1.17 | 0.58 |
| 20% to less than 40% | 1.98 | 2.08 | 1.94 | 2.10 | 1.58 | 1.55 | 0.98 |
| 40% to less than 60% | 2.23 | 2.30 | 2.11 | 2.21 | 1.76 | 1.68 | 1.14 |
| 60% to less than 80% | 2.24 | 2.41 | 2.27 | 2.30 | 1.89 | 1.90 | 1.31 |
| 80% or greater | 2.39 | 2.40 | 2.23 | 2.21 | 1.87 | 1.96 | 1.34 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 2.18 | 1.74 | 1.72 | 1.11 |
| At least one contingent asset | - | - | - | 2.26 | 1.82 | 1.75 | 1.16 |

Table 4.7 Average outperformance of the real SEDR over greater than 5 year index-linked UK gilts by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| All schemes | 0.90 | 0.83 | 1.13 | 1.11 | 1.07 | 1.14 | 1.23 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 0.78 | 0.65 | 0.94 | 0.99 | 0.90 | 0.96 | 1.12 |
| 100 to 499 members | 0.92 | 0.92 | 1.21 | 1.13 | 1.13 | 1.18 | 1.28 |
| 500 to 999 members | 0.99 | 0.99 | 1.27 | 1.16 | 1.24 | 1.25 | 1.31 |
| 1,000 to 4,999 members | 0.99 | 0.92 | 1.25 | 1.19 | 1.13 | 1.30 | 1.26 |
| 5,000 members or more | 0.94 | 0.85 | 1.12 | 1.26 | 1.11 | 1.25 | 1.27 |
| Size by TPs | | | | | | | |
| Less than £5m | 0.76 | 0.65 | 0.92 | 0.97 | 0.88 | 0.94 | 1.11 |
| £5m to £19m | 1.05 | 0.91 | 1.17 | 1.12 | 1.11 | 1.10 | 1.25 |
| £20m to £99m | 0.99 | 0.94 | 1.23 | 1.16 | 1.17 | 1.25 | 1.27 |
| £100m to £299 | 0.47 | 0.89 | 1.24 | 1.18 | 1.08 | 1.28 | 1.22 |
| £300m or greater | 0.90 | 0.86 | 1.14 | 1.22 | 1.11 | 1.16 | 1.26 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 0.92 | 0.76 | 1.06 | 1.03 | 1.00 | 1.03 | 1.18 |
| 25% to 49% | 1.01 | 0.94 | 1.23 | 1.18 | 1.13 | 1.23 | 1.31 |
| 50% to 74% | 0.58 | 0.82 | 1.06 | 1.14 | 1.06 | 1.08 | 1.19 |
| 75% or greater | 0.43 | 0.55 | 0.73 | 0.95 | 0.73 | 0.98 | 0.88 |

| | Tranche (mean %) | | | | | | |
|---|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D&B Failure Score | | | | | | | |
| 15 or less | 0.74 | 0.74 | 0.91 | 0.95 | 1.00 | 0.83 | 1.03 |
| 16 to 50 | 0.88 | 0.76 | 1.07 | 1.03 | 0.94 | 0.99 | 1.06 |
| 51 to 85 | 0.95 | 0.78 | 1.11 | 1.06 | 0.97 | 1.03 | 1.17 |
| 86 or greater | 0.90 | 0.88 | 1.19 | 1.16 | 1.10 | 1.18 | 1.27 |
| Scheme status | | | | | | | |
| Open | 0.95 | 0.83 | 1.15 | 1.16 | 1.08 | 1.31 | 1.28 |
| Closed to new members | 0.93 | 0.84 | 1.14 | 1.10 | 1.10 | 1.13 | 1.27 |
| Closed to future accrual | 0.95 | 0.83 | 1.09 | 1.09 | 1.02 | 1.04 | 1.15 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 1.17 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 1.24 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 1.28 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 1.28 |

continued...

Table 4.7 Average outperformance of the real SEDR over greater than 5 year index-linked UK gilts by scheme characteristics (schemes in deficit only, all tranches)

| | Tranche (mean %) | | | | | | |
|--------------------------------------|------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RP length | | | | | | | |
| Fewer than 5 years | 0.68 | 0.78 | 1.06 | 1.05 | 0.96 | 1.08 | 1.13 |
| 5 to fewer than 7.5 years | 0.92 | 0.84 | 1.14 | 1.03 | 1.03 | 1.08 | 1.20 |
| 7.5 to fewer than 10 years | 1.00 | 0.84 | 1.15 | 1.14 | 1.14 | 1.15 | 1.31 |
| 10 years or greater | 0.97 | 0.93 | 1.19 | 1.16 | 1.13 | 1.23 | 1.28 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 0.61 | 0.48 | 0.74 | 0.83 | 0.54 | 0.58 | 0.68 |
| 20% to less than 40% | 0.68 | 0.62 | 0.96 | 1.01 | 0.89 | 0.96 | 1.09 |
| 40% to less than 60% | 0.93 | 0.83 | 1.11 | 1.13 | 1.06 | 1.09 | 1.25 |
| 60% to less than 80% | 0.93 | 0.95 | 1.26 | 1.22 | 1.20 | 1.31 | 1.40 |
| 80% or greater | 1.09 | 0.97 | 1.22 | 1.14 | 1.18 | 1.36 | 1.43 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 1.10 | 1.05 | 1.13 | 1.22 |
| At least one contingent asset | - | - | - | 1.18 | 1.13 | 1.15 | 1.26 |

Table 4.8 Distribution of the nominal SEDR (schemes in deficit only, all tranches)

| | Tranche 1 % | Tranche 2 % | Tranche 3 % | Tranche 4 % | Tranche 5 % | Tranche 6 % | Tranche 7 % |
|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 95th percentile | 6.00 | 6.23 | 6.48 | 6.22 | 6.03 | 6.01 | 5.17 |
| Upper quartile | 5.55 | 5.83 | 6.00 | 5.73 | 5.68 | 5.58 | 4.67 |
| Mean | 5.23 | 5.50 | 5.67 | 5.33 | 5.34 | 5.25 | 4.28 |
| Median | 5.23 | 5.50 | 5.70 | 5.38 | 5.41 | 5.30 | 4.32 |
| Lower quartile | 4.99 | 5.23 | 5.40 | 5.00 | 5.06 | 4.96 | 3.97 |
| 5th percentile | 4.37 | 4.67 | 4.80 | 4.30 | 4.35 | 4.22 | 3.15 |

Table 4.9 Distribution of the outperformance of the nominal SEDR over conventional 20 year UK gilts and greater than 15 year AA corporate bonds (schemes in deficit only, all tranches)

Excess return over 20 year gilts

| | Tranche 1 % | Tranche 2 % | Tranche 3 % | Tranche 4 % | Tranche 5 % | Tranche 6 % | Tranche 7 % |
|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 95th percentile | 1.69 | 1.55 | 1.79 | 2.10 | 1.63 | 1.82 | 2.16 |
| Upper quartile | 1.28 | 1.18 | 1.34 | 1.55 | 1.24 | 1.31 | 1.69 |
| Mean | 0.96 | 0.84 | 1.04 | 1.18 | 0.91 | 1.01 | 1.30 |
| Median | 0.95 | 0.82 | 1.07 | 1.21 | 0.99 | 1.06 | 1.35 |
| Lower quartile | 0.71 | 0.60 | 0.78 | 0.84 | 0.66 | 0.73 | 0.96 |
| 5th percentile | 0.09 | 0.02 | 0.15 | 0.12 | -0.09 | 0.02 | 0.22 |

Excess return over greater than 15 year AA corporate bonds

| | Tranche 1 % | Tranche 2 % | Tranche 3 % | Tranche 4 % | Tranche 5 % | Tranche 6 % | Tranche 7 % |
|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 95th percentile | 1.03 | 0.88 | 0.19 | -0.35 | 0.53 | 0.58 | 0.53 |
| Upper quartile | 0.62 | 0.48 | -0.30 | -1.08 | 0.18 | 0.11 | 0.06 |
| Mean | 0.30 | 0.15 | -0.78 | -1.45 | -0.16 | -0.20 | -0.33 |
| Median | 0.29 | 0.13 | -0.82 | -1.45 | -0.08 | -0.14 | -0.27 |
| Lower quartile | 0.05 | -0.10 | -1.22 | -1.84 | -0.46 | -0.48 | -0.65 |
| 5th percentile | -0.56 | -0.67 | -1.83 | -2.53 | -1.15 | -1.19 | -1.47 |

Table 4.10 Distribution of the real SEDR (schemes in deficit only, all tranches)

| | Tranche 1 % | Tranche 2 % | Tranche 3 % | Tranche 4 % | Tranche 5 % | Tranche 6 % | Tranche 7 % |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 95th percentile | 3.07 | 3.05 | 2.92 | 3.16 | 2.58 | 2.61 | 2.04 |
| Upper quartile | 2.59 | 2.62 | 2.46 | 2.57 | 2.10 | 2.04 | 1.49 |
| Mean | 2.21 | 2.29 | 2.14 | 2.19 | 1.76 | 1.73 | 1.12 |
| Median | 2.26 | 2.29 | 2.16 | 2.22 | 1.79 | 1.74 | 1.14 |
| Lower quartile | 1.94 | 2.03 | 1.84 | 1.84 | 1.46 | 1.42 | 0.77 |
| 5th percentile | 1.27 | 1.36 | 1.17 | 1.07 | 0.77 | 0.68 | 0.10 |

Table 4.11 Distribution of the outperformance of the real SEDR over greater than 5 year index-linked UK gilts (schemes in deficit only, all tranches)

Excess return over greater than 5 year index-linked gilts

| | Tranche 1 % | Tranche 2 % | Tranche 3 % | Tranche 4 % | Tranche 5 % | Tranche 6 % | Tranche 7 % |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 95th percentile | 1.74 | 1.59 | 1.95 | 2.06 | 1.87 | 2.04 | 2.14 |
| Upper quartile | 1.27 | 1.18 | 1.45 | 1.48 | 1.41 | 1.44 | 1.60 |
| Mean | 0.90 | 0.83 | 1.13 | 1.11 | 1.07 | 1.14 | 1.23 |
| Median | 0.94 | 0.84 | 1.14 | 1.14 | 1.11 | 1.16 | 1.25 |
| Lower quartile | 0.65 | 0.57 | 0.85 | 0.76 | 0.77 | 0.81 | 0.88 |
| 5th percentile | 0.01 | -0.05 | 0.17 | -0.01 | 0.08 | 0.14 | 0.20 |

Mortality assumptions (schemes in deficit only)

Table 5.1 Base mortality tables (schemes in deficit only, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|--------------|---------------------------------|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 92 series | 97 | 73 | 41 | 13 | 6 | 2 | 0 |
| 00 series | 2 | 26 | 53 | 37 | 32 | 19 | 13 |
| S1 series | 1 | 0 | 5 | 47 | 61 | 77 | 83 |
| Other series | 0 | 1 | 1 | 3 | 1 | 2 | 4 |

Table 5.2 Loadings applied to base mortality tables (schemes in deficit only, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|---|---------------------------------|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| No loading | 70 | 60 | 50 | 48 | 50 | 49 | 45 |
| Rating by age | 23 | 25 | 26 | 20 | 13 | 13 | 13 |
| Percentage adjustment to $q(x)$ | 7 | 15 | 24 | 25 | 27 | 28 | 31 |
| S1 series light/heavy | .8 | .8 | .8 | 4 | 5 | 5 | 6 |
| Combination of two or more of the above | - | - | - | 4 | 5 | 6 | 6 |

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For Tranches 1 to 3, S1 series light/heavy assumptions are included in category 3 ($q(x)$ adjustment).

Table 5.3 Q(X) adjustments to base mortality tables (Tranche 7 schemes in deficit only)

| | Base table (percentage of schemes) | | | | |
|---------------------------------|------------------------------------|-----------|-----------|--------------|-------|
| | 92 series | 00 series | S1 series | Other series | Total |
| No q(X) Loading | 88 | 85 | 61 | 91 | 65 |
| Less than 80% | 0 | 1 | 2 | 0 | 1 |
| 80% to 100% | 0 | 6 | 20 | 6 | 18 |
| 100% to 120% | 13 | 6 | 15 | 3 | 13 |
| Over 120% | 0 | 2 | 2 | 0 | 2 |
| Percentage of Tranche 7 schemes | 0 | 4 | 29 | 1 | 35 |

Table 5.4 Adjustment to base mortality table from valuation date (schemes in deficit only, all tranches)

| | Tranche (percentage of schemes) | | | | | | |
|--|---------------------------------|-----|-----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| None/not stated | 11 | 2 | 0 | 3 | 3 | 3 | 3 |
| 92 base adjustment | 23 | 11 | 3 | 1 | 0 | 0 | 0 |
| Short cohort projection | 8 | 3 | 1 | 0 | 0 | 0 | 0 |
| Medium cohort projection | 57 | 69 | 63 | 56 | 35 | 16 | 9 |
| Long cohort projection | 1 | 13 | 32 | 35 | 29 | 13 | 6 |
| CMI projection | N/a | N/a | N/a | 2 | 31 | 67 | 81 |
| Other projection | 0 | 2 | 2 | 2 | 2 | 2 | 2 |
| Use of an underpin or long-term rate of improvement ⁹ | 1 | 23 | 62 | 86 | 92 | 94 | 94 |

⁹ Usually used in conjunction with other items.

Table 5.5 Size of underpin adopted in combination with various adjustments to base tables (Tranche 7 schemes in deficit only)

| Size of underpin/improvement category | Adjustments to base tables (percentage of schemes) | | | | |
|---------------------------------------|--|--------------------------|------------------------|----------------|------------------|
| | None/not Stated | Medium cohort projection | Long cohort projection | CMI projection | Other projection |
| None/not stated | 2.5 | 0.3 | 1.1 | 0.9 | 1.9 |
| 1% or less | 0.0 | 4.1 | 3.1 | 8.0 | 0.1 |
| Greater than 1% to less than 1.5% | 0.0 | 1.3 | 0.2 | 15.7 | 0.2 |
| 1.5% | 0.0 | 3.1 | 1.1 | 49.8 | 0.0 |
| Greater than 1.5% to 3.0% | 0.0 | 0.1 | 0.1 | 6.7 | 0.0 |
| Total | 2.5 | 8.8 | 5.6 | 80.7 | 2.4 |

Table 5.6 Average life expectancies by scheme characteristics, base tables, adjustments to base tables (Tranche 7 schemes in deficit only)

| | Unweighted life expectancy (males) | | | % schemes | Adjustment to base table | | | | Rate of improvement/underpin | | | | |
|---|------------------------------------|--------|------------|-----------|--------------------------|------|------|-------|------------------------------|------------|---------------------------------|------|-------------------|
| | Age 65 | Age 45 | Difference | | MC | LC | CMI | Other | None | 1% or less | Greater than 1%, less than 1.5% | 1.5% | Greater than 1.5% |
| Size by number of members | | | | | | | | | | | | | |
| Fewer than 100 members | 88.1 | 90.2 | 2.1 | 31 | 15.8 | 9.3 | 72.2 | 2.7 | 8.6 | 22.0 | 11.2 | 49.1 | 9.0 |
| 100 to 499 members | 87.8 | 89.9 | 2.1 | 34 | 8.9 | 5.4 | 83.8 | 1.9 | 5.8 | 14.8 | 19.5 | 53.7 | 6.2 |
| 500 to 999 members | 87.8 | 89.8 | 2.0 | 12 | 6.4 | 2.7 | 88.8 | 2.1 | 4.6 | 13.9 | 19.6 | 57.2 | 4.6 |
| 1,000 to 4,999 members | 87.8 | 89.8 | 2.0 | 15 | 1.7 | 2.9 | 93.4 | 2.1 | 2.1 | 11.5 | 21.8 | 58.0 | 6.6 |
| 5,000 members or more | 87.8 | 89.9 | 2.1 | 9 | 2.9 | 2.9 | 90.6 | 3.6 | 4.3 | 6.5 | 22.3 | 59.7 | 7.2 |
| Size by TPs | | | | | | | | | | | | | |
| Less than £5m | 87.9 | 90.0 | 2.1 | 19 | 18.9 | 11.1 | 66.3 | 3.7 | 10.6 | 24.1 | 9.7 | 47.0 | 8.7 |
| £5m to £19m | 87.8 | 89.9 | 2.1 | 26 | 12.8 | 6.1 | 78.4 | 2.7 | 8.7 | 16.7 | 16.7 | 50.7 | 7.3 |
| £20m to £99m | 87.8 | 89.9 | 2.1 | 31 | 5.8 | 4.4 | 88.5 | 1.4 | 2.6 | 15.2 | 20.5 | 57.5 | 4.3 |
| £100m to £299 | 87.9 | 89.9 | 2.0 | 14 | 1.3 | 3.1 | 93.4 | 2.2 | 3.9 | 11.4 | 19.7 | 56.8 | 8.3 |
| £300m or greater | 88.0 | 90.1 | 2.1 | 11 | 3.2 | 3.2 | 90.5 | 3.2 | 4.2 | 5.8 | 20.9 | 61.3 | 7.9 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | | | | | | | |
| Less than 25% | 88.1 | 90.3 | 2.1 | 27 | 12.6 | 8.3 | 74.7 | 4.4 | 9.1 | 16.3 | 12.9 | 51.9 | 9.8 |
| 25% to 49% | 87.8 | 89.9 | 2.1 | 45 | 7.8 | 4.7 | 85.6 | 1.9 | 4.1 | 14.6 | 19.0 | 56.8 | 5.5 |
| 50% to 74% | 87.7 | 89.8 | 2.0 | 25 | 7.7 | 4.0 | 86.8 | 1.5 | 4.4 | 16.3 | 21.4 | 52.1 | 5.8 |
| 75% or greater | 88.5 | 90.7 | 2.1 | 3 | 8.7 | 13.0 | 78.3 | 0.0 | 6.4 | 25.5 | 6.4 | 51.1 | 10.6 |

| | Unweighted life expectancy (males) | | | % schemes | Adjustment to base table | | | | Rate of improvement/underpin | | | | |
|---|------------------------------------|--------|------------|-----------|--------------------------|------|------|-------|------------------------------|------------|---------------------------------|------|-------------------------|
| | Age 65 | Age 45 | Difference | | MC | LC | CMI | Other | None | 1% or less | Greater than 1%, less than 1.5% | 1.5% | Greater than 1.5% to 3% |
| Scheme status | | | | | | | | | | | | | |
| Open | 87.8 | 89.9 | 2.1 | 21 | 6.3 | 8.7 | 84.2 | 0.9 | 7.3 | 16.9 | 20.2 | 49.7 | 5.9 |
| Closed to new members | 88.0 | 90.0 | 2.1 | 48 | 6.9 | 3.5 | 86.6 | 3.1 | 5.0 | 13.6 | 16.8 | 57.4 | 7.3 |
| Closed to future accrual | 87.8 | 89.9 | 2.1 | 30 | 13.7 | 7.4 | 76.6 | 2.3 | 6.6 | 17.9 | 16.5 | 52.0 | 7.0 |
| Base mortality table | | | | | | | | | | | | | |
| 00 series | 88.4 | 90.8 | 2.3 | 13 | 38.0 | 17.3 | 43.3 | 1.4 | 2.4 | 32.2 | 7.2 | 40.9 | 17.3 |
| S1 series | 87.7 | 89.8 | 2.1 | 83 | 4.1 | 3.1 | 91.5 | 1.3 | 1.4 | 13.7 | 20.1 | 59.1 | 5.7 |
| Other series | 89.0 | 91.0 | 2.0 | 4 | 7.6 | 22.7 | 40.9 | 28.8 | 47.0 | 12.1 | 7.6 | 31.8 | 1.5 |
| Adjustment to base mortality table | | | | | | | | | | | | | |
| Medium cohort projection | 87.3 | 89.6 | 2.2 | 9 | - | - | - | - | 2.7 | 47.3 | 14.4 | 34.9 | 0.7 |
| Long cohort projection | 88.2 | 90.4 | 2.2 | 6 | - | - | - | - | 19.4 | 55.9 | 4.3 | 19.4 | 1.1 |
| CMI projection | 87.9 | 89.9 | 2.1 | 81 | - | - | - | - | 0.4 | 10.1 | 19.5 | 61.7 | 8.3 |
| Other projection | 89.3 | 91.2 | 1.9 | 2 | - | - | - | - | 77.5 | 7.5 | 7.5 | 7.5 | 0.0 |
| Rate of improvement/underpin | | | | | | | | | | | | | |
| None/not stated | 88.7 | 90.6 | 1.9 | 6 | 6.9 | 31.0 | 8.6 | 53.5 | - | - | - | - | - |
| 1% or less | 87.3 | 88.9 | 1.6 | 16 | 26.5 | 20.0 | 52.3 | 1.2 | - | - | - | - | - |
| Greater than 1% to less than 1.5% | 87.7 | 89.5 | 1.8 | 17 | 7.2 | 1.4 | 90.3 | 1.0 | - | - | - | - | - |
| 1.5% | 87.9 | 90.1 | 2.2 | 54 | 5.7 | 2.0 | 92.0 | 0.3 | - | - | - | - | - |
| Greater than 1.5% to 3% | 88.8 | 91.7 | 2.9 | 7 | 0.9 | 0.9 | 98.3 | 0.0 | - | - | - | - | - |

Life expectancies (schemes in surplus and deficit, all tranches)

Table 6.1 Distribution of life expectancies for current/future male/female pensioners aged 45 and 65, all tranches (surplus and deficit schemes)

Current male pensioners aged 65

| Percentile | Tranche | | | | | | |
|------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 83.5 | 84.0 | 84.8 | 85.0 | 85.4 | 85.7 | 86.0 |
| 10 | 84.0 | 84.7 | 85.3 | 85.5 | 85.8 | 86.2 | 86.4 |
| 15 | 84.2 | 85.1 | 85.7 | 85.8 | 86.1 | 86.5 | 86.8 |
| 20 | 84.4 | 85.5 | 85.8 | 86.0 | 86.4 | 86.7 | 86.9 |
| 25 | 84.7 | 85.9 | 86.1 | 86.2 | 86.6 | 86.9 | 87.2 |
| 30 | 84.8 | 86.1 | 86.3 | 86.5 | 86.8 | 87.1 | 87.3 |
| 35 | 85.1 | 86.4 | 86.6 | 86.7 | 86.9 | 87.2 | 87.5 |
| 40 | 85.3 | 86.6 | 86.8 | 86.8 | 87.1 | 87.4 | 87.5 |
| 45 | 85.6 | 86.8 | 87.0 | 87.0 | 87.3 | 87.4 | 87.6 |
| 50 | 86.0 | 86.9 | 87.0 | 87.2 | 87.3 | 87.6 | 87.7 |
| 55 | 86.3 | 86.9 | 87.1 | 87.2 | 87.5 | 87.7 | 87.8 |
| 60 | 86.7 | 86.9 | 87.2 | 87.4 | 87.6 | 87.9 | 88.0 |
| 65 | 86.8 | 86.9 | 87.5 | 87.6 | 87.8 | 88.1 | 88.2 |
| 70 | 86.8 | 87.0 | 87.8 | 87.8 | 88.0 | 88.3 | 88.4 |
| 75 | 86.8 | 87.0 | 87.9 | 88.0 | 88.1 | 88.5 | 88.5 |
| 80 | 86.8 | 87.3 | 88.3 | 88.2 | 88.4 | 88.7 | 88.8 |
| 85 | 86.9 | 87.8 | 88.6 | 88.6 | 88.8 | 89.0 | 89.1 |
| 90 | 87.0 | 88.3 | 88.7 | 88.7 | 88.9 | 89.2 | 89.3 |
| 95 | 87.7 | 88.6 | 89.0 | 89.0 | 89.2 | 89.5 | 89.7 |

Future male pensioners aged 45

| Percentile | Tranche | | | | | | |
|------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 84.3 | 84.9 | 86.2 | 86.8 | 87.2 | 87.6 | 87.9 |
| 10 | 84.8 | 85.8 | 87.0 | 87.3 | 87.9 | 88.1 | 88.3 |
| 15 | 84.9 | 86.2 | 87.3 | 87.8 | 88.0 | 88.3 | 88.5 |
| 20 | 85.3 | 86.7 | 87.7 | 87.9 | 88.2 | 88.5 | 88.9 |
| 25 | 85.6 | 87.1 | 88.0 | 88.1 | 88.5 | 88.9 | 89.1 |
| 30 | 85.9 | 87.3 | 88.1 | 88.3 | 88.8 | 89.1 | 89.3 |
| 35 | 86.1 | 87.7 | 88.1 | 88.6 | 89.0 | 89.3 | 89.5 |
| 40 | 86.3 | 88.0 | 88.4 | 88.8 | 89.2 | 89.4 | 89.7 |
| 45 | 86.6 | 88.0 | 88.6 | 89.1 | 89.3 | 89.6 | 89.8 |
| 50 | 87.0 | 88.0 | 89.0 | 89.2 | 89.5 | 89.7 | 89.8 |
| 55 | 87.2 | 88.0 | 89.1 | 89.3 | 89.6 | 89.8 | 89.9 |
| 60 | 87.5 | 88.0 | 89.2 | 89.5 | 89.7 | 90.0 | 90.0 |
| 65 | 87.9 | 88.1 | 89.5 | 89.7 | 89.9 | 90.2 | 90.2 |
| 70 | 88.0 | 88.1 | 89.8 | 90.0 | 90.1 | 90.5 | 90.6 |
| 75 | 88.0 | 88.7 | 89.9 | 90.2 | 90.4 | 90.8 | 90.9 |
| 80 | 88.0 | 89.1 | 90.4 | 90.6 | 90.8 | 91.0 | 91.1 |
| 85 | 88.0 | 89.6 | 90.7 | 90.8 | 90.9 | 91.3 | 91.4 |
| 90 | 88.1 | 89.8 | 90.8 | 91.0 | 91.2 | 91.6 | 91.7 |
| 95 | 89.0 | 90.8 | 91.5 | 91.5 | 92.0 | 92.4 | 92.4 |

Table 6.1 Distribution of life expectancies for current/future male/female pensioners aged 45 and 65, all tranches (surplus and deficit schemes)

Current female pensioners aged 65

| Percentile | Tranche | | | | | | |
|------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 86.4 | 86.9 | 87.0 | 87.6 | 87.6 | 88.1 | 88.3 |
| 10 | 86.9 | 87.4 | 87.4 | 88.0 | 88.1 | 88.5 | 88.7 |
| 15 | 87.1 | 87.8 | 88.0 | 88.4 | 88.5 | 88.8 | 89.0 |
| 20 | 87.4 | 88.0 | 88.2 | 88.6 | 88.7 | 89.0 | 89.2 |
| 25 | 87.6 | 88.4 | 88.5 | 88.7 | 88.9 | 89.1 | 89.4 |
| 30 | 87.8 | 88.8 | 88.8 | 88.9 | 89.0 | 89.3 | 89.5 |
| 35 | 87.9 | 89.0 | 89.0 | 89.1 | 89.2 | 89.4 | 89.6 |
| 40 | 88.0 | 89.1 | 89.2 | 89.2 | 89.4 | 89.5 | 89.7 |
| 45 | 88.2 | 89.5 | 89.5 | 89.5 | 89.5 | 89.7 | 89.8 |
| 50 | 88.8 | 89.7 | 89.6 | 89.6 | 89.6 | 89.8 | 89.9 |
| 55 | 89.0 | 89.8 | 89.8 | 89.7 | 89.7 | 89.8 | 90.0 |
| 60 | 89.4 | 89.8 | 89.9 | 89.9 | 89.8 | 89.9 | 90.1 |
| 65 | 89.6 | 89.8 | 90.0 | 90.0 | 90.0 | 90.1 | 90.2 |
| 70 | 89.7 | 89.8 | 90.4 | 90.3 | 90.2 | 90.3 | 90.4 |
| 75 | 89.7 | 89.9 | 90.5 | 90.5 | 90.5 | 90.5 | 90.6 |
| 80 | 89.8 | 90.0 | 90.8 | 90.6 | 90.6 | 90.7 | 90.7 |
| 85 | 89.8 | 90.5 | 91.1 | 90.8 | 90.9 | 91.0 | 91.0 |
| 90 | 89.9 | 91.0 | 91.2 | 91.1 | 91.3 | 91.2 | 91.2 |
| 95 | 90.6 | 91.5 | 91.7 | 91.3 | 91.4 | 91.6 | 91.6 |

Future female pensioners aged 45

| Percentile | Tranche | | | | | | |
|------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 87.2 | 87.8 | 88.4 | 89.1 | 89.4 | 89.9 | 90.1 |
| 10 | 87.8 | 88.4 | 88.9 | 89.7 | 90.0 | 90.4 | 90.6 |
| 15 | 87.8 | 89.0 | 89.2 | 90.0 | 90.4 | 90.6 | 90.9 |
| 20 | 88.1 | 89.1 | 89.9 | 90.4 | 90.6 | 90.8 | 91.1 |
| 25 | 88.6 | 89.8 | 90.0 | 90.6 | 90.8 | 91.0 | 91.4 |
| 30 | 88.9 | 89.9 | 90.4 | 90.7 | 91.0 | 91.2 | 91.6 |
| 35 | 89.0 | 90.1 | 90.7 | 90.9 | 91.1 | 91.5 | 91.7 |
| 40 | 89.1 | 90.3 | 90.9 | 91.1 | 91.3 | 91.6 | 91.8 |
| 45 | 89.3 | 90.8 | 90.9 | 91.3 | 91.6 | 91.7 | 92.0 |
| 50 | 89.8 | 90.8 | 91.2 | 91.5 | 91.6 | 91.9 | 92.1 |
| 55 | 89.9 | 90.8 | 91.4 | 91.6 | 91.8 | 92.0 | 92.2 |
| 60 | 90.2 | 90.8 | 91.6 | 91.9 | 92.0 | 92.1 | 92.3 |
| 65 | 90.7 | 90.9 | 91.9 | 92.0 | 92.1 | 92.2 | 92.5 |
| 70 | 90.8 | 90.9 | 92.1 | 92.2 | 92.3 | 92.5 | 92.6 |
| 75 | 90.8 | 91.1 | 92.4 | 92.4 | 92.5 | 92.7 | 92.8 |
| 80 | 90.8 | 91.6 | 92.7 | 92.6 | 92.6 | 92.9 | 93.0 |
| 85 | 90.9 | 92.2 | 92.9 | 92.9 | 93.0 | 93.3 | 93.3 |
| 90 | 90.9 | 92.7 | 93.2 | 93.1 | 93.3 | 93.6 | 93.7 |
| 95 | 91.8 | 93.0 | 93.4 | 93.5 | 93.7 | 94.2 | 94.3 |

Table 6.2 Average life expectancies by scheme characteristics (surplus and deficit schemes)

Current male pensioners aged 65

| | Tranche | | | | | | |
|----------------------------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Unweighted mean | 85.7 | 86.5 | 87.0 | 87.1 | 87.4 | 87.7 | 87.8 |
| Weighted mean | 85.5 | 86.2 | 86.9 | 87.1 | 87.4 | 87.9 | 88.2 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 86.0 | 86.7 | 87.4 | 87.5 | 87.7 | 87.9 | 88.0 |
| 100 to 499 members | 85.8 | 86.6 | 87.0 | 87.2 | 87.2 | 87.6 | 87.8 |
| 500 to 999 members | 85.7 | 86.5 | 86.9 | 86.8 | 87.2 | 87.6 | 87.8 |
| 1,000 to 4,999 members | 85.5 | 86.3 | 86.6 | 86.8 | 87.4 | 87.4 | 87.8 |
| 5,000 members or more | 85.2 | 86.1 | 86.5 | 86.7 | 87.2 | 87.6 | 87.8 |
| Size by TPs | | | | | | | |
| Less than £5m | 85.9 | 86.6 | 87.4 | 87.4 | 87.6 | 87.7 | 87.7 |
| £5m to £19m | 85.7 | 86.6 | 87.0 | 87.2 | 87.3 | 87.7 | 87.8 |
| £20m to £99m | 85.7 | 86.6 | 86.9 | 87.0 | 87.4 | 87.7 | 87.8 |
| £100m to £299 | 85.7 | 86.3 | 86.6 | 87.1 | 87.2 | 87.5 | 87.9 |
| £300m or greater | 85.4 | 86.2 | 86.7 | 86.9 | 87.4 | 87.9 | 88.0 |

| | Tranche | | | | | | |
|---|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 85.9 | 86.7 | 87.2 | 87.3 | 87.6 | 87.8 | 88.0 |
| 25% to 49% | 85.6 | 86.4 | 86.8 | 87.0 | 87.2 | 87.6 | 87.8 |
| 50% to 74% | 85.5 | 86.4 | 86.7 | 87.1 | 87.3 | 87.6 | 87.7 |
| 75% or greater | 85.7 | 87.3 | 87.0 | 87.6 | 87.7 | 88.2 | 88.4 |
| D&B Failure Score | | | | | | | |
| 15 or less | 86.0 | 86.7 | 87.1 | 87.1 | 87.0 | 87.6 | 87.7 |
| 16 to 50 | 85.9 | 86.5 | 87.2 | 87.0 | 87.0 | 87.3 | 87.5 |
| 51 to 85 | 85.8 | 86.6 | 86.9 | 87.1 | 87.4 | 87.6 | 87.9 |
| 86 or greater | 85.8 | 86.6 | 87.0 | 87.2 | 87.4 | 87.7 | 87.9 |
| Scheme status | | | | | | | |
| Open | 85.8 | 86.4 | 86.9 | 87.0 | 87.3 | 87.5 | 87.7 |
| Closed to new members | 85.7 | 86.5 | 87.0 | 87.2 | 87.4 | 87.8 | 87.9 |
| Closed to future accrual | 85.8 | 86.8 | 87.2 | 87.2 | 87.4 | 87.7 | 87.8 |

continued...

Table 6.2 Average life expectancies by scheme characteristics (surplus and deficit schemes)

| | Tranche | | | | | | |
|---|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 87.7 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 87.7 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 87.9 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 88.2 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 86.4 | 87.1 | 87.7 | 87.6 | 87.9 | 88.1 | 88.0 |
| 25% to 39% | 85.7 | 86.6 | 87.1 | 87.1 | 87.5 | 87.8 | 87.9 |
| 40% to 59% | 85.6 | 86.5 | 87.0 | 87.1 | 87.4 | 87.8 | 87.9 |
| 60 to 79% | 85.6 | 86.5 | 86.9 | 86.9 | 87.3 | 87.5 | 87.7 |
| 80% or greater | 85.7 | 86.3 | 86.7 | 87.1 | 87.2 | 87.2 | 87.8 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 87.2 | 87.4 | 87.7 | 87.8 |
| At least one contingent asset | - | - | - | 87.0 | 87.2 | 87.7 | 87.8 |
| RP length | | | | | | | |
| Fewer than 5 years | 85.9 | 86.7 | 87.2 | 87.4 | 87.5 | 87.9 | 88.2 |
| 5 to fewer than 7.5 years | 85.9 | 86.6 | 87.1 | 87.4 | 87.4 | 87.7 | 87.9 |
| 7.5 to fewer than 10 years | 85.8 | 86.6 | 87.0 | 87.2 | 87.3 | 87.7 | 87.9 |
| 10 years or greater | 85.7 | 86.6 | 86.9 | 86.9 | 87.2 | 87.4 | 87.5 |

Future male pensioners aged 45

| | Tranche | | | | | | |
|----------------------------------|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Unweighted mean | 86.8 | 87.9 | 88.9 | 89.2 | 89.5 | 89.8 | 89.9 |
| Weighted mean | 87.0 | 87.9 | 88.9 | 89.4 | 89.5 | 89.9 | 90.4 |
| Size by number of members | | | | | | | |
| Fewer than 100 members | 86.9 | 87.9 | 89.3 | 89.4 | 89.7 | 90.1 | 90.1 |
| 100 to 499 members | 86.7 | 87.9 | 88.8 | 89.3 | 89.3 | 89.7 | 89.9 |
| 500 to 999 members | 86.7 | 88.0 | 88.8 | 88.9 | 89.2 | 89.7 | 89.8 |
| 1,000 to 4,999 members | 86.6 | 87.8 | 88.5 | 88.8 | 89.3 | 89.5 | 89.8 |
| 5,000 members or more | 86.5 | 87.7 | 88.6 | 88.9 | 89.4 | 89.6 | 89.9 |
| Size by TPs | | | | | | | |
| Less than £5m | 86.8 | 87.8 | 89.2 | 89.3 | 89.6 | 89.9 | 89.8 |
| £5m to £19m | 86.7 | 87.8 | 88.8 | 89.3 | 89.4 | 89.8 | 89.9 |
| £20m to £99m | 86.7 | 88.1 | 88.8 | 89.1 | 89.4 | 89.8 | 89.9 |
| £100m to £299 | 86.8 | 87.8 | 88.5 | 89.1 | 89.3 | 89.6 | 90.0 |
| £300m or greater | 86.6 | 87.9 | 88.8 | 89.1 | 89.6 | 89.9 | 90.2 |

continued...

Table 6.2 Average life expectancies by scheme characteristics (surplus and deficit schemes)

| | Tranche | | | | | | |
|---|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Maturity (ratio of pensioner TPs to total TPs) | | | | | | | |
| Less than 25% | 86.9 | 87.9 | 89.1 | 89.3 | 89.6 | 90.0 | 90.1 |
| 25% to 49% | 86.7 | 87.8 | 88.7 | 89.0 | 89.3 | 89.7 | 89.9 |
| 50% to 74% | 86.6 | 87.8 | 88.7 | 89.1 | 89.4 | 89.7 | 89.8 |
| 75% or greater | 86.7 | 89.1 | 88.9 | 89.7 | 89.8 | 90.4 | 90.6 |
| D&B Failure Score | | | | | | | |
| 15 or less | 86.8 | 88.1 | 88.6 | 89.3 | 89.0 | 89.7 | 89.7 |
| 16 to 50 | 86.8 | 87.7 | 88.9 | 89.0 | 89.1 | 89.4 | 89.6 |
| 51 to 85 | 86.8 | 88.0 | 88.8 | 89.2 | 89.5 | 89.8 | 90.0 |
| 86 or greater | 86.8 | 87.9 | 88.9 | 89.2 | 89.5 | 89.9 | 90.0 |
| Scheme status | | | | | | | |
| Open | 86.8 | 87.7 | 88.8 | 89.1 | 89.3 | 89.6 | 89.8 |
| Closed to new members | 86.7 | 87.9 | 88.9 | 89.2 | 89.5 | 89.9 | 90.0 |
| Closed to future accrual | 86.8 | 88.1 | 89.0 | 89.2 | 89.5 | 89.8 | 89.9 |

| | Tranche | | | | | | |
|---|---------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Covenant (schemes in deficit only) | | | | | | | |
| Covenant group 4 (Weak) | - | - | - | - | - | - | 89.8 |
| Covenant group 3 (Tending to weak) | - | - | - | - | - | - | 89.8 |
| Covenant group 2 (Tending to strong) | - | - | - | - | - | - | 89.9 |
| Covenant group 1 (Strong) | - | - | - | - | - | - | 90.3 |
| Return-seeking assets | | | | | | | |
| Less than 20% | 87.3 | 88.3 | 89.6 | 89.6 | 89.9 | 90.3 | 90.2 |
| 25% to 39% | 86.7 | 88.0 | 89.0 | 89.2 | 89.6 | 89.9 | 89.9 |
| 40% to 59% | 86.6 | 87.9 | 88.8 | 89.2 | 89.5 | 89.9 | 90.0 |
| 60 to 79% | 86.6 | 87.8 | 88.8 | 88.9 | 89.3 | 89.6 | 89.8 |
| 80% or greater | 86.7 | 87.6 | 88.6 | 89.1 | 89.3 | 89.2 | 89.7 |
| Presence of contingent assets | | | | | | | |
| No contingent asset | - | - | - | 89.2 | 89.5 | 89.8 | 89.9 |
| At least one contingent asset | - | - | - | 89.0 | 89.3 | 89.9 | 89.9 |
| RP length | | | | | | | |
| Fewer than 5 years | 86.9 | 88.1 | 89.0 | 89.5 | 89.6 | 90.0 | 90.3 |
| 5 to fewer than 7.5 years | 86.9 | 88.0 | 89.1 | 89.5 | 89.6 | 89.9 | 90.0 |
| 7.5 to fewer than 10 years | 86.8 | 87.9 | 88.8 | 89.2 | 89.4 | 89.8 | 90.0 |
| 10 years or greater | 86.7 | 87.9 | 88.7 | 88.8 | 89.2 | 89.5 | 89.6 |

Table 6.3 Average change in life expectancies for current male pensioners aged 65 by scheme characteristics – Tranche 4 versus Tranche 7 (surplus and deficit schemes)

| | Change in assumed age at death (years) | Percentage of schemes |
|---|--|-----------------------|
| All schemes | 0.67 | 100 |
| Size by number of members | | |
| Fewer than 100 members | 0.44 | 32 |
| 100 to 499 members | 0.61 | 34 |
| 500 to 999 members | 0.92 | 11 |
| 1,000 to 4,999 members | 1.05 | 15 |
| 5,000 members or more | 1.18 | 8 |
| Size by TPs | | |
| Less than £5m | 0.34 | 20 |
| £5m to £19m | 0.49 | 27 |
| £20m to £99m | 0.78 | 30 |
| £100m to £299 | 0.82 | 13 |
| £300m or greater | 1.22 | 11 |
| Maturity (ratio of pensioner TPs to total TPs) | | |
| Less than 25% | 0.54 | 27 |
| 25% to 49% | 0.77 | 44 |
| 50% to 74% | 0.65 | 25 |
| 75% or greater | 0.74 | 4 |

| | Change in assumed age at death (years) | Percentage of schemes |
|---|--|-----------------------|
| D&B Failure Score | | |
| 15 or less | 0.65 | 3 |
| 16 to 50 | 0.31 | 6 |
| 51 to 85 | 0.60 | 19 |
| 86 or greater | 0.73 | 72 |
| Scheme status | | |
| Open | 0.77 | 21 |
| Closed to new members | 0.73 | 49 |
| Closed to future accrual | 0.53 | 31 |
| Covenant (schemes in deficit only) | | |
| Covenant group 4 (Weak) | 0.63 | 18 |
| Covenant group 3 (Tending to weak) | 0.56 | 22 |
| Covenant group 2 (Tending to strong) | 0.74 | 38 |
| Covenant group 1 (Strong) | 0.77 | 22 |

continued...

Table 6.3 Average change in life expectancies for current male pensioners aged 65 by scheme characteristics – Tranche 4 versus Tranche 7 (surplus and deficit schemes)

| | Change in assumed age at death (years) | Percentage of schemes |
|--------------------------------------|---|------------------------------|
| Return-seeking assets | | |
| Less than 20% | 0.38 | 10 |
| 25% to 39% | 0.68 | 17 |
| 40% to 59% | 0.76 | 38 |
| 60 to 79% | 0.64 | 29 |
| 80% or greater | 0.72 | 6 |
| Presence of contingent assets | | |
| No contingent asset | 0.66 | 78 |
| At least one contingent asset | 0.71 | 22 |
| RP length | | |
| Fewer than 5 years | 0.55 | 27 |
| 5 to fewer than 7.5 years | 0.78 | 22 |
| 7.5 to fewer than 10 years | 0.75 | 21 |
| 10 years or greater | 0.72 | 30 |

Glossary

00 series base mortality table (00 series)

Based on 1999-2002 experience collected from UK insurance companies.

92 series base mortality table (92 series)

Based on 1991-1994 experience collected from UK insurance companies.

Actuarial valuation

A comparison by the actuary of the value placed on scheme assets with the TPs and an assessment of any future contribution requirement. Calculation of the TPs is usually based on full member-by-member data.

Buyout liabilities (or s75 or solvency)

This refers to the scheme actuary's estimate of the cost of securing scheme liabilities with annuities purchased from a regulated insurance company, which features as part of the actuarial valuation. Section 75 (s75) of the Pensions Act 1995 provides for the calculation of a debt on the employer on the buyout basis (see s75 debt) if a scheme winds up (or if an employer becomes insolvent, or ceases to participate in a multi-employer scheme). Throughout this publication we use the term 'buyout'. In a small number of cases, an alternative measure of solvency is submitted to us, in which case this will be the data that has been used in this analysis and there is no distinction made.

Contingent assets

Contingent assets are assets on which a claim by the pension scheme would exist on the occurrence of one or more specified future events ('the contingent event'), such as movements in corporate asset holdings, increased employer borrowing, employer failure or the failure to achieve a specified funding level. Unless the events occur, these assets are not available to the trustees to meet members' benefit payments. They are not included as scheme assets for the purpose of assessing whether a scheme meets its statutory funding objective (ie that assets are sufficient to cover TPs) until they are transferred to the scheme.

Continuous Mortality Investigation (CMI)

The CMI Mortality Projections, created by the UK Actuarial Profession, are based upon a deterministic model driven by user inputs. The model is based on the assumption that current rates of mortality improvement converge to a single long-term rate. The latest version of the model, CMI 2013, was published in September 2013. Previous versions: CMI 2012, was published in February 2013; CMI 2011 was published in September 2011; CMI 2010 was published in November 2010; and, CMI 2009 was published in November 2009.

Deficit Repair Contributions (DRCs)

These are contributions made by sponsors to the scheme in order to address any asset to TPs deficit, in line with the Schedule of Contributions and the RP.

Defined benefit (DB)

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.

Different rates approach

The practice of using separate discount rates with respect to pre-retirement and post-retirement benefits in the valuation of liabilities. (See also Single rates approach.)

Discount rate

A discount rate is a rate of compound interest which is used to calculate the present value of a sum due at a later time. This action discounts the sum due to its value today. It inherently assumes that the present value is invested and has to earn the chosen discount rate to achieve the sum due at the later time.

Often separate rates are chosen for the pre-retirement and post-retirement periods. The post-retirement rate is used to discount the pension payments of current pensioners back to the valuation date. It is also used to discount the expected pensions of active and deferred members back to their assumed retirement date, and then the pre-retirement discount rate is used to discount these retirement date liabilities of active and deferred members back to the valuation date.

Where a single discount rate is used, scheme maturity might affect the rates chosen by particular schemes. Immature schemes (with the majority of members being active or deferred) may seek higher returns from higher risk investments, such as equities. Mature schemes (with the majority of members being pensioners) may be more likely to invest in bonds or gilts with lower expected returns but less risk. The discount rate may be set to reflect these behaviour patterns. (See also Single rates approach, Different rates approach, Effective single rate.)

Dun and Bradstreet Trading Ltd (D&B) Failure Score

The D&B Failure Score predicts the likelihood that a company will obtain legal relief from its creditors or cease operations over the next 12 month period. The D&B Failure Score is a relative measure of risk, whereby 1 represents companies that have the highest probability of failure and 100 the lowest. It shows how a company's risk of failure compares to other companies within a country by ordering and segmenting that country's database into 100 equal percentiles. Each Failure Score represents 1% of companies within that country with the same risk of failure. Therefore it can be said that:

1. A score of 10 means a business falls into the bottom 10% of UK companies; and
2. A score of 38 means that 62% of UK companies have a lower risk of failure. It also means that 38% of UK companies have the same or higher risk.

Effective date (valuation date)

An actuarial valuation or an actuarial report considers the funding of a scheme as at a particular date, known as the effective date. The effective date will be earlier than the date on which calculations are done. The effective date of a scheme's first Part 3 valuation cannot be before 22 September 2005.

Part 3 Valuation or scheme funding valuation

An actuarial valuation meeting the requirements of Part 3 of the Pensions Act 2004 concerning the funding of DB, which apply to any actuarial valuation received by trustees (on or after 30 December 2005) that is based on an effective date of 22 September 2005 or later.

Pension Protection Fund (PPF)

A corporate body established under the Pensions Act 2004. The PPF was set up to provide compensation to members of eligible DB pension schemes, when there is a qualifying failure event in relation to the employer, and where there are insufficient assets in the pension scheme to cover the PPF level of compensation.

Pension protection levy

This is the annual amount that a pension scheme is charged by the PPF. It is composed of a scheme-based levy and a risk-based levy.

Recovery Plan (RP)

Under Part 3 of the Pensions Act 2004, where there is a funding shortfall at the effective date of the actuarial valuation, the trustees must prepare a plan to achieve full funding in relation to the TPs. The plan to address this shortfall is known as a RP.

RP length

The RP length is the time that it is assumed it will take for a scheme to eliminate any shortfall at the effective date of the actuarial valuation, so that by the end of the RP it will be fully funded in relation to the TPs.

S1 series base mortality table (S1 series)

Based on 2000-2006 experience collected by 30 June 2007 from UK self-administered pension schemes.

Section 179 liabilities (s179)

This refers to a valuation of PPF compensation benefits under section 179 of the Pensions Act 2004, for PPF levy purposes. This measure is designed to be a close approximation to the liability measure that would be used to decide whether the PPF would need to take on the scheme were the employer to become insolvent.

In contrast to TPs, the assumptions to be used in an s179 valuation are prescribed by the PPF and are standard across all schemes. They are designed such that s179 is close to the cost of securing the valued benefits with an insurance company at the valuation date.

Section 179 (s179) valuation

To calculate the risk-based pension protection levy, the PPF board must take account of scheme underfunding. To obtain a consistent basis for determining underfunding, schemes must complete a PPF 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 PPF, as set out in Schedule 7 of the Pensions Act.

Short (SC), medium (MC) and long (LC) cohort projections

A number of UK mortality studies have shown that in recent years, the birth cohort of pensioners born around 1926 is, on average, living longer than those born earlier or later (the 'golden cohort'). In 2002, the UK Actuarial Profession created three different cohort projections which take account of the 'golden cohort' effect, each projecting the future of the 'golden cohort' differently. The 'short cohort' projections assume that the 'extra' improvement in longevity experienced by the golden cohort will last, for the most fortunate generation, until 2010 (before reverting to 'normal' levels of improvement), the 'medium cohort' projections assume the effect will last until 2020 and the 'long cohort' projections assume the effect will last until 2040.

Single effective discount rate (SEDR)

A single composite rate computed by the regulator and made up of constituents of the different rates approach, allowing approximately for the maturity of schemes. The regulator also uses this approach to normalise bases where the discount rate varies year-on-year. Please see the Methodology section of this document for greater detail.

Single rates approach

The use of a single discount rate in the valuation of pre-retirement and post-retirement liabilities. (See also Different rates approach.)

Technical provisions (TPs)

The funding measure used for the purposes of Part 3 valuations (see above). The 'TPs' are a calculation undertaken by the actuary of the assets needed at any particular time to make provision for benefits already considered accrued under the scheme using assumptions prudently chosen by the trustees – in other words, what is required for the scheme to meet the statutory funding objective. These include pensions in payment (including those payable to survivors of former members) and benefits accrued by other members and beneficiaries, which will become payable in the future.

The Pensions Regulator ('the regulator')

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

Tranches

'Tranche' refers to the set of schemes which are required to carry out a scheme-specific funding valuation within a particular time period. Schemes whose valuation dates fell from 22 September 2005 to 21 September 2006 (both dates inclusive) were in Tranche 1, from 22 September 2006 to 21 September 2007 were Tranche 2 (both dates inclusive), etc. Because scheme-specific funding valuations are generally required every three years, schemes whose valuations are in Tranche 1 will also be likely to carry out valuations in Tranches 4, 7 and 10.

Triennial Valuation Cycles (Cycles)

Given that all schemes are required to submit a Part 3 valuation to the regulator at least every three years, each three year period (three valuation tranches), is referred to as a cycle. Cycle 1 corresponds to the first three valuation tranches (Tranches 1, 2 and 3); Cycle 2 the second three valuation tranches (Tranches 4, 5 and 6); etc. The majority of Cycle 2 plans (Tranches 4, 5 and 6) are second valuations under the scheme funding regime. However Tranches 1 and 4 (2 and 5, and so on) do not constitute a perfect cohort. See the Data coverage section in this document for further detail.

Valuation summary

A form to be completed when a RP and schedule of contributions have been agreed by the trustees and the employer, following an actuarial valuation.

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