

Scheme funding statistics

Annex

Data coverage

The data contained in this statistical release were submitted by schemes to The Pensions Regulator (TPR) in recovery plans (RPs) and scheme returns.

The data set builds on previous releases and includes Tranche 11 RPs received up to 31 January 2018. It also includes data on schemes in surplus for all tranches.

The majority of Cycle 4 plans (Tranches 11 and 10) and Cycle 3 plans (Tranches 7, 8 and 9) are fourth and third valuations respectively under the scheme funding regime. However Tranches 2, 5, 8 and 11 (3, 6, 9 and 12 and so on) do not constitute a perfect cohort. There are a few reasons why this may be the case, including the following:

- ▶ Where a scheme's assets were less than its technical provisions (TPs) in Tranche 8 but exceeded its TPs for its Tranche 11 valuation in Cycle 4 (in "surplus" under its Tranche 11 valuation in Cycle 4)
- ▶ Where a scheme has wound up or is in the process of winding up
- ▶ Where a scheme has transferred to the Pension Protection Fund (PPF)
- ▶ Some schemes have had their most recent valuation less than three years since their previous valuation.

Base data vary slightly in different sections as a result of data coverage, validation, and cleaning.

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.

The summaries on mortality assumptions are based on current male pensioners aged 65 only, unless otherwise stated.

Methodology

Weighted averages are weighted by TPs.

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.

Figure totals may reflect rounding.

Maturity is measured as the ratio of pensioner TPs to total TPs.

The discount rate assumption is reported in one of two formats:

- ▶ a single investment return, or as
- ▶ different investment returns for pre-retirement and post-retirement benefits.

For the purposes of comparison, in instances where a different rates have been reported a single equivalent rate (SEDR) is calculated: 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 using the following equation of value:

$$\begin{aligned} & (\text{active liabilities}) \times (1 + \text{Pre-retirement Discount Rate})^{\text{active Pre-retirement duration}} \times (1 + \text{Post retirement Discount Rate})^{\text{active Post-retirement duration}} + (\text{deferred liabilities}) \times (1 + \text{Pre-retirement Discount Rate})^{\text{deferred Pre-retirement duration}} \times (1 + \text{Post retirement Discount Rate})^{\text{deferred Post-retirement duration}} + (\text{pensioner liabilities}) \times (1 + \text{Pensioner Discount Rate})^{\text{Pensioner duration}} = \text{total liabilities} \times (1 + \text{SEDR})^{\text{total duration}} \end{aligned}$$

The duration parameters used in the above formula are estimated on a scheme by scheme basis, using data provided to us in the annual scheme return and valuation returns

Note : For reporting on Tranches 1-10, the SEDR is calculated as per old methodology:

$$\text{SEDR} = \text{Post-retirement rate} + \left(\frac{(1 + \text{Pre-retirement rate})}{(1 + \text{Post-retirement rate})} - 1 \right) * (1 - \text{Pensioner TPs/Total TPs})^{0.4} \times 0.56$$

(The parameters 0.4 and 0.56 fit a simple formula to the more complex and scheme-specific interaction of maturity and duration.)

Average annual deficit repair contributions (DRCs) summarised in Table 3.4 are calculated as the average of DRCs over the first four years of the RP.

While schemes are able to adjust their discount rates from one valuation to the next to reflect (among other things) changes in expectations for future returns, to facilitate the consistent comparison of schemes we select a reference point with regards to the discount rate. Liabilities on a 'reference basis' (Tables 2.5 and 3.4) are estimated using the Bank of England 20 year spot yield on gilts with an additional return of 50 basis points. This yield is not intended to be indicative of common or preferred practice.

The outperformance of the SEDR is calculated using different 20 year gilts (nominal and real) to previous editions. As a result, the levels of outperformance assumed will differ to that shown in previous reports. The differences may be inconsistent across tranches because the relationship between the Bank of England 20 year nominal government spot rate and FTSE index 20 year conventional gilt (used previously) varies at different dates.

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 as: Covenant Group 1 – strong; 2 – tending to strong; 3 – tending to weak; 4 – weak. Covenant assessments are not usually undertaken for schemes in surplus.

'Return-seeking assets' in this report include:

- ▶ equities
- ▶ 75% property
- ▶ commodities
- ▶ 60% Insurance policies
- ▶ 80% of hedge funds
- ▶ 25% of corporate bonds
- ▶ assets held in the 'other' category.

The PPF stressed asset ratio used in this report refers to: the ratio of the stressed value of assets to the (unstressed) market value of assets. For the purposes of this report the stressed value of assets is calculated for all schemes using the standard approach, but where the results of a bespoke stress have been submitted these have been instead used. The methodology for both the standard stress test is consistent with the methodology published in the relevant levy year.

Employer Industry Classification and Geographical Area as used in the Life Expectancy section have been derived using (a) the SIC code, and (b) the Registered Trading Address post code, of the largest sponsoring employer by number of defined benefit members to each scheme.

Schemes in the data set

Table 1.1 Numbers 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	1,770	221
	8	22 September 2012 to 21 September 2013	1,726	271
	9	22 September 2013 to 21 September 2014	1,530	482
4	10	22 September 2014 to 21 September 2015	1,403	432
	11	22 September 2015 to 21 September 2016	1,426	336

This data set comprises schemes that have submitted recovery plans (that is, schemes in deficit on the TPs funding basis as at their valuation date) as well schemes in surplus. By 31 January 2018, TPR had received over 1426 RPs and 336 valuations in respect of schemes reporting a surplus.

78.8% of schemes with Tranche 11 valuations, reported valuations in respect of Tranche 8, Tranche 5 and Tranche 2.

Table 1.2a Concentration by scheme characteristics (schemes in deficit and surplus, Tranches 2/5/8/11 and 9/10/11)

	Tranche (percentage of schemes)						
	2	5	8	11	9	10	11
Size by number of members							
Fewer than 100 members	34	35	35	36	35	35	36
100 to 499 members	36	35	35	34	35	32	34
500 to 999 members	10	11	11	10	10	12	10
1,000 to 4,999 members	13	13	13	13	14	14	13
5,000 members or more	7	7	7	7	6	8	7
Size by TPs							
Less than £5m	32	28	24	21	21	22	21
£5m to £19m	31	30	27	26	29	23	26
£20m to £99m	23	25	28	29	29	28	29
£100m to £299m	7	9	10	12	12	14	12
£300m or greater	7	9	11	13	9	13	13
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	47	38	30	26	29	25	26
25% to less than 50%	37	40	42	43	44	44	43
50% to less than 75%	14	19	24	27	24	27	27
75% or greater	2	3	4	4	3	4	4
TPs for active members							
TPs reported for active members	74	63	51	43	53	46	43
TPs not reported for active members	26	36	48	56	47	54	56

	Tranche (percentage of schemes)						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (strong)	–	–	18	11	18	12	11
Covenant Group 2 (tending to strong)	–	–	33	48	38	46	48
Covenant Group 3 (tending to weak)	–	–	25	27	22	28	27
Covenant Group 4 (weak)	–	–	24	14	22	14	14
RP length (schemes in deficit only)							
Less than 5 years	29	26	29	34	34	39	34
5 to less than 7.5 years	18	19	18	20	19	21	20
7.5 to less than 10 years	39	29	23	22	19	15	22
10 years or more	14	26	30	25	27	26	25
Return seeking assets							
Less than 20%	5	7	7	14	6	8	14
20% to less than 40%	6	10	12	21	12	17	21
40% to less than 60%	18	29	34	37	36	37	37
60% to less than 80%	49	43	39	23	39	32	23
80% or greater	23	12	8	5	8	6	5
Presence of contingent assets							
No contingent asset	–	80	81	81	83	82	81
At least one contingent asset	–	20	19	19	17	18	19

	Tranche (percentage of schemes)						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	13	20	21	13	10	11	13
70% to less than 80%	19	25	23	17	15	16	17
80% to less than 90%	27	28	24	27	24	25	27
90% to less than 100%	23	17	18	24	28	25	24
100% or greater	19	12	14	19	24	24	19
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	26	18	24	20	18
90% to less than 95%	–	–	35	28	37	29	28
95% to less than 100%	–	–	22	26	23	26	26
100% to less than 105%	–	–	10	16	9	13	16
105% or greater	–	–	6	13	8	12	13
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	26	18	24	19	18
90% to less than 95%	–	–	34	26	35	28	26
95% to less than 100%	–	–	21	22	22	24	22
100% to less than 105%	–	–	11	16	11	15	16
105% or greater	–	–	8	18	9	15	18

Table 1.2b Distribution of members and liabilities across covenant groups

Covenant Groups ¹ (schemes in deficit only)	Tranches 9, 10 and 11				
	Members (%)	Assets for Part 3 (TPs) valuation (%)	Technical provisions (TPs) (%)	Buyout liabilities (%)	S179 liabilities (%)
Covenant Group 1 (Strong)	25	26	26	26	25
Covenant Group 2 (Tending to strong)	42	45	44	44	44
Covenant Group 3 (Tending to weak)	22	24	24	25	25
Covenant Group 4 (Weak)	10	5	5	5	5

Coverage = approximately 91% of schemes in deficit for Tranches 9, 10 and 11 combined.

Table 1.2c Distribution of schemes and memberships across TP funding levels (Tranches 9-11)

Funding level (TPs)	Schemes (%)	Members (%)
Less than 50%	1	0
50% to 60%	3	1
60% to 70%	7	3
70% to 80%	16	13
80% to 90%	25	34
90% to 100%	26	32
100% to 110%	15	14
110% to 120%	4	1
120% or greater	3	2

¹Covenant 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 as: Covenant Group 1 – strong; 2 – tending to strong; 3 – tending to weak; 4 – weak. Covenant assessments are not usually undertaken for schemes in surplus.

Table 1.2d Concentration of memberships by scheme characteristics (schemes in deficit and surplus, Tranches 2/5/8/11 and 9/10/11)

	Tranche (percentage of members)						
	2	5	8	11	9	10	11
Size by number of members							
Fewer than 100 members	34	34	35	36	35	34	36
100 to 499 members	36	35	35	34	35	32	34
500 to 999 members	10	11	11	10	10	12	10
1,000 to 4,999 members	13	13	13	13	14	14	13
5,000 members or more	7	7	7	7	6	8	7
Size by TPs							
Less than £5m	12	20	21	13	10	11	13
£5m to £19m	19	24	23	17	15	15	17
£20m to £99m	27	28	24	27	24	25	27
£100m to £299m	23	17	18	24	27	25	24
£300m or greater	19	12	14	19	24	23	19
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	46	36	29	24	25	27	24
25% to less than 50%	38	42	44	44	44	42	44
50% to less than 75%	14	19	24	27	27	27	27
75% or greater	2	3	3	5	4	4	5
TPs for active members							
TPs reported for active members	74	64	51	44	53	46	44
TPs not reported for active members	26	37	49	56	47	54	56

Table 1.2d Concentration of memberships by scheme characteristics (schemes in deficit and surplus, Tranches 2/5/8/11 and 9/10/11) continued...

	Tranche (percentage of members)						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (strong)	–	–	18	11	18	12	11
Covenant Group 2 (tending to strong)	–	–	33	48	38	46	48
Covenant Group 3 (tending to weak)	–	–	25	27	22	28	27
Covenant Group 4 (weak)	–	–	24	13	22	14	13
RP length (schemes in deficit only)							
Less than 5 years	29	26	29	34	34	39	34
5 to less than 7.5 years	18	19	18	20	19	20	20
7.5 to less than 10 years	39	29	23	21	19	15	21
10 years or more	14	26	30	25	27	26	25
Return seeking assets							
Less than 20%	5	6	7	14	6	8	14
20% to less than 40%	6	10	12	21	12	17	21
40% to less than 60%	18	29	34	37	36	37	37
60% to less than 80%	49	43	39	23	39	32	23
80% or greater	23	12	8	4	8	6	4
Presence of contingent assets							
No contingent asset	–	80	81	81	83	82	81
At least one contingent asset	–	20	19	19	17	18	19

	Tranche (percentage of members)						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	12	20	21	13	10	11	13
70% to less than 80%	19	24	23	17	15	15	17
80% to less than 90%	27	28	24	27	24	25	27
90% to less than 100%	23	17	18	24	27	25	24
100% or greater	19	12	14	19	24	23	19
PPF standard stressed/Unstressed asset ratio							
Less than 90%	–	–	26	17	24	19	17
90% to less than 95%	–	–	35	28	37	29	28
95% to less than 100%	–	–	22	26	23	26	26
100% to less than 105%	–	–	10	16	9	13	16
105% or greater	–	–	6	12	8	12	12
PPF combined stressed/Unstressed asset ratio							
Less than 90%	–	–	26	17	24	19	17
90% to less than 95%	–	–	34	26	35	28	26
95% to less than 100%	–	–	21	22	22	24	22
100% to less than 105%	–	–	11	16	11	15	16
105% or greater	–	–	8	18	9	15	18

Funding and other security arrangements (schemes in surplus and deficit)

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

	Unweighted average – Tranche							Weighted ² average – Tranche						
	2	5	8	11	9	10	11	2	5	8	11	9	10	11
Ratio of assets to:														
Technical provisions	87.3	82.5	82.4	87.2	89.6	88.9	87.2	93.0	84.2	84.8	88.8	89.2	90.9	88.8
s.179 liabilities	98.2	96.4	84.7	87.0	96.0	89.9	87.0	110.1	101.9	91.5	93.2	95.3	94.8	93.2
Buyout liabilities	62.4	61.1	58.8	60.6	64.4	61.6	60.6	70.0	63.2	60.6	62.0	64.3	64.2	62.0
Ratio of TPs to:														
s.179 liabilities	111.5	111.6	98.5	95.7	102.4	96.8	95.7	118.7	121.7	111.4	106.8	109.9	106.4	106.8
Buyout liabilities	71.0	73.8	71.3	69.4	71.8	69.3	69.4	75.2	74.7	71.2	69.7	72.0	70.4	69.7

²Weighted by TPs

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

	Tranche						
	2	5	8	11	9	10	11
Ratio of assets to TPs							
95th percentile	112.8	106.2	107.5	111.7	114.3	113.1	111.7
Upper quartile	96.3	91.0	92.8	97.1	99.2	98.7	97.1
Median	87.2	82.2	82.4	87.4	90.4	89.5	87.4
Lower quartile	77.1	72.8	72.2	77.8	80.2	79.2	77.8
5th percentile	61.6	58.4	55.9	59.9	62.3	62.8	59.9
Ratio of assets to s.179 liabilities							
95th percentile	145.1	140.5	127.6	130.4	142.7	134.5	130.4
Upper quartile	111.3	109.4	98.4	100.2	110.4	103.6	100.2
Median	94.8	93.2	81.2	84.1	93.8	86.5	84.1
Lower quartile	81.1	79.4	67.4	69.8	78.0	72.1	69.8
5th percentile	64.6	64.1	53.8	54.5	58.5	56.8	54.5
Ratio of assets to buyout liabilities							
95th percentile	91.9	91.7	89.4	90.8	93.6	90.9	90.8
Upper quartile	70.5	69.3	66.7	69.5	73.6	70.5	69.5
Median	59.7	59.0	56.2	58.0	62.6	59.7	58.0
Lower quartile	51.5	49.9	48.1	48.5	52.6	50.0	48.5
5th percentile	39.7	39.1	36.5	37.5	40.9	37.8	37.5
Ratio of TPs to buyout liabilities							
95th percentile	93.2	97.8	94.6	92.5	93.0	91.5	92.5
Upper quartile	78.7	81.4	78.7	77.0	79.0	76.0	77.0
Median	70.3	72.7	69.9	68.4	71.9	68.3	68.4
Lower quartile	62.5	65.2	63.0	60.8	64.0	61.5	60.8
5th percentile	51.9	54.4	53.4	50.3	51.8	50.3	50.3

	Tranche						
	2	5	8	11	9	10	11
Ratio of TPs to s.179 liabilities							
95th percentile	159.1	156.1	152.0	139.3	147.4	138.4	139.3
Upper quartile	124.5	127.0	111.0	108.4	117.0	108.9	108.4
Median	108.8	110.5	95.6	94.2	101.7	95.9	94.2
Lower quartile	95.7	96.1	82.2	81.7	86.4	82.2	81.7
5th percentile	76.1	73.1	60.0	57.8	63.5	58.7	57.8

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

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
Size by number of members							
Fewer than 100 members	86.5	82.6	82.7	89.6	90.1	90.5	89.6
100 to 499 members	86.5	81.6	81.6	84.9	89.0	87.2	84.9
500 to 999 members	88.5	82.2	81.9	86.0	88.1	89.0	86.0
1,000 to 4,999 members	88.0	83.0	82.4	87.1	89.6	88.9	87.1
5,000 members or more	91.7	84.1	85.3	88.4	91.4	88.7	88.4
Size by TPs							
Less than £5m	86.8	83.7	84.4	91.9	91.6	90.5	91.9
£5m to £19m	86.4	81.2	80.7	86.0	87.6	88.8	86.0
£20m to £99m	87.7	82.1	81.1	84.5	89.8	88.4	84.5
£100m to £299m	88.1	83.8	83.4	87.2	89.5	87.9	87.2
£300m or greater	91.2	82.8	84.5	87.9	90.5	89.0	87.9
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	85.2	81.9	83.1	88.2	90.2	90.1	88.2
25% to less than 50%	87.6	81.5	80.8	85.5	88.4	87.1	85.5
50% to less than 75%	90.7	83.8	82.5	87.0	89.8	89.2	87.0
75% or greater	94.6	89.6	90.6	96.3	92.4	95.7	96.3
TPs for active members							
TPs reported for active members	88.5	84.2	85.6	89.4	92.4	91.4	89.4
TPs not reported for active members	83.7	79.3	78.8	85.3	86.2	86.9	85.3

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (strong)	–	–	81.6	85.5	88.4	87.7	85.5
Covenant Group 2 (tending to strong)	–	–	79.3	83.3	84.7	83.6	83.3
Covenant Group 3 (tending to weak)	–	–	78.5	80.3	82.5	81.9	80.3
Covenant Group 4 (weak)	–	–	75.1	76.8	78.6	78.1	76.8
RP length (schemes in deficit only)							
Less than 5 years	86.4	84.4	87.1	89.5	90.6	89.6	89.5
5 to less than 7.5 years	82.5	80.9	79.1	83.6	84.6	84.1	83.6
7.5 to less than 10 years	80.0	78.0	77.8	79.7	80.5	80.1	79.7
10 years or more	76.7	73.2	70.4	72.6	76.6	74.3	72.6
Return seeking assets							
Less than 20%	87.6	86.6	93.2	95.8	97.9	98.5	95.8
20% to less than 40%	86.0	86.2	87.7	88.4	92.9	92.3	88.4
40% to less than 60%	86.8	82.9	82.5	84.3	88.9	86.8	84.3
60% to less than 80%	87.5	81.6	79.2	85.0	88.4	86.6	85.0
80% or greater	88.0	80.4	79.5	89.2	87.2	89.4	89.2
Presence of contingent assets							
No contingent asset	–	83.2	83.1	88.2	90.3	89.7	88.2
At least one contingent asset	–	79.7	79.5	83.0	85.7	85.5	83.0

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	61.0	61.5	59.7	59.7	59.2	61.1	59.7
70% to less than 80%	75.4	75.3	75.4	75.5	75.5	75.4	75.5
80% to less than 90%	85.1	85.0	85.1	85.1	85.2	85.4	85.1
90% to less than 100%	94.4	94.3	94.4	94.7	94.7	94.6	94.7
100% or greater	110.9	111.1	109.3	109.9	109.4	109.2	109.9
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	79.1	86.6	88.0	87.9	86.6
90% to less than 95%	–	–	80.6	84.9	88.0	86.2	84.9
95% to less than 100%	–	–	83.3	85.3	89.8	87.2	85.3
100% to less than 105%	–	–	87.9	90.2	92.7	91.5	90.2
105% or greater	–	–	94.4	92.3	97.1	97.4	92.3
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	79.1	86.6	88.1	88.0	86.6
90% to less than 95%	–	–	80.6	85.1	88.3	86.4	85.1
95% to less than 100%	–	–	82.9	84.8	89.6	86.5	84.8
100% to less than 105%	–	–	86.9	89.7	90.7	90.9	89.7
105% or greater	–	–	93.2	91.0	96.7	96.2	91.0

Table 2.3(b) [Weighted] Average ratio of assets to TPs by scheme characteristics (schemes in surplus and deficit)

	Weighted ¹ average						
	Tranche						
	2	5	8	11	9	10	11
Size by number of members							
Fewer than 100 members	85.0	81.5	81.0	87.0	89.9	92.4	87.0
100 to 499 members	86.4	82.4	82.3	85.6	89.4	87.7	85.6
500 to 999 members	88.2	81.1	81.8	85.9	88.1	89.1	85.9
1,000 to 4,999 members	87.4	81.8	83.4	88.0	90.0	88.5	88.0
5,000 members or more	94.8	85.0	85.6	89.5	89.0	91.7	89.5
Size by TPs							
Less than £5m	85.8	81.9	82.0	89.4	89.9	89.1	89.4
£5m to £19m	86.5	81.2	80.3	85.4	87.8	88.1	85.4
£20m to £99m	87.7	82.1	80.9	84.5	89.9	88.7	84.5
£100m to £299m	87.8	83.7	83.6	87.9	89.4	87.8	87.9
£300m or greater	94.5	84.5	85.3	89.2	89.1	91.5	89.2
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	87.6	82.9	85.5	88.6	87.9	95.9	88.6
25% to less than 50%	93.1	83.8	83.4	87.0	88.8	89.7	87.0
50% to less than 75%	94.1	84.2	85.7	90.4	90.0	91.2	90.4
75% or greater	99.4	89.5	94.9	91.7	87.4	99.7	91.7
TPs for active members							
TPs reported for active members	93.3	84.5	85.5	89.6	89.7	91.6	89.6
TPs not reported for active members	84.2	80.2	82.3	86.8	85.6	89.3	86.8

	Weighted ¹ average						
	Tranche						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (strong)	–	–	86.7	89.5	86.1	89.6	89.5
Covenant Group 2 (tending to strong)	–	–	83.0	86.4	87.3	88.6	86.4
Covenant Group 3 (tending to weak)	–	–	82.1	84.5	88.2	84.1	84.5
Covenant Group 4 (weak)	–	–	79.9	83.4	81.7	78.8	83.4
RP length (schemes in deficit only)							
Less than 5 years	93.6	88.7	91.4	93.3	93.1	92.5	93.3
5 to less than 7.5 years	88.7	84.0	86.0	88.7	86.8	90.2	88.7
7.5 to less than 10 years	85.2	82.2	81.7	84.9	82.2	87.2	84.9
10 years or more	81.9	81.1	79.5	82.9	85.5	80.2	82.9
Return seeking assets							
Less than 20%	97.0	93.8	94.1	95.2	97.9	101.4	95.2
20% to less than 40%	90.8	87.1	87.1	90.5	89.8	91.3	90.5
40% to less than 60%	92.2	84.5	83.7	85.8	88.3	88.4	85.8
60% to less than 80%	94.5	83.0	81.9	85.8	89.0	87.1	85.8
80% or greater	91.1	77.6	72.1	86.0	89.8	111.8	86.0
Presence of contingent assets							
No contingent asset	–	85.6	85.1	88.8	90.7	91.2	88.8
At least one contingent asset	–	82.4	84.3	88.8	85.6	90.5	88.8

	Weighted ¹ average						
	Tranche						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	65.9	64.9	63.2	61.3	63.8	60.7	61.3
70% to less than 80%	76.1	76.0	75.7	76.0	75.4	75.2	76.0
80% to less than 90%	85.2	85.2	84.7	85.2	86.1	85.2	85.2
90% to less than 100%	94.9	94.5	93.5	94.3	93.9	94.6	94.3
100% or greater	105.3	104.3	104.2	103.9	105.6	105.9	103.9
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	79.3	83.2	85.4	94.3	83.2
90% to less than 95%	–	–	83.3	86.0	89.8	84.5	86.0
95% to less than 100%	–	–	84.6	88.0	87.4	91.0	88.0
100% to less than 105%	–	–	88.5	88.9	93.0	91.5	88.9
105% or greater	–	–	90.4	91.8	91.7	94.5	91.8
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	77.2	87.6	89.1	89.5	87.6
90% to less than 95%	–	–	83.1	87.2	88.8	85.4	87.2
95% to less than 100%	–	–	82.9	86.5	88.3	90.3	86.5
100% to less than 105%	–	–	84.9	88.1	89.4	89.9	88.1
105% or greater	–	–	92.0	90.4	90.4	95.2	90.4

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

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
Size by number of members							
Fewer than 100 members	72.8	75.7	74.8	71.3	74.3	70.5	71.3
100 to 499 members	69.3	72.3	68.7	67.8	70.8	67.6	67.8
500 to 999 members	69.4	71.6	68.8	69.1	69.5	68.4	69.1
1,000 to 4,999 members	71.2	72.7	70.5	68.6	69.7	69.5	68.6
5,000 members or more	73.6	75.2	71.9	69.4	71.5	71.4	69.4
Size by TPs							
Less than £5m	71.6	75.3	75.0	71.3	73.6	69.4	71.3
£5m to £19m	70.0	72.7	69.9	68.1	71.7	68.9	68.1
£20m to £99m	70.1	73.1	69.8	68.9	70.5	67.9	68.9
£100m to £299m	72.4	73.0	71.1	70.0	70.9	70.7	70.0
£300m or greater	74.3	75.3	71.2	69.9	72.5	71.3	69.9
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	68.3	71.3	69.6	66.7	69.8	65.7	66.7
25% to less than 50%	70.9	72.8	69.1	66.9	69.3	67.2	66.9
50% to less than 75%	77.3	78.5	75.2	72.8	75.4	73.8	72.8
75% or greater	87.7	86.2	87.9	86.2	85.3	85.5	86.2
TPs for active members							
TPs reported for active members	70.4	73.3	70.5	68.2	70.1	68.4	68.2
TPs not reported for active members	72.9	74.6	72.1	70.2	73.5	70.1	70.2

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (Strong)	–	–	71.0	68.9	70.3	70.5	68.9
Covenant Group 2 (Tending to strong)	–	–	69.5	69.4	70.8	68.5	69.4
Covenant Group 3 (Tending to weak)	–	–	69.8	67.5	70.8	67.2	67.5
Covenant Group 4 (Weak)	–	–	71.5	68.6	72.3	67.7	68.6
RP length (schemes in deficit only)							
Less than 5 years	71.6	75.0	73.3	70.5	73.3	70.3	70.5
5 to less than 7.5 years	70.8	74.2	70.4	67.3	72.3	68.4	67.3
7.5 to less than 10 years	70.1	71.5	68.4	68.3	69.6	66.9	68.3
10 years or more	70.6	71.8	68.9	67.8	68.5	66.4	67.8
Return seeking assets							
Less than 20%	81.4	84.5	85.9	78.2	83.6	79.9	78.2
20% to less than 40%	78.0	81.0	75.7	72.5	77.7	74.3	72.5
40% to less than 60%	72.9	74.7	71.3	67.5	72.1	68.6	67.5
60% to less than 80%	70.0	71.2	68.2	65.1	68.1	65.4	65.1
80% or greater	67.8	69.4	67.1	66.3	69.8	65.0	66.3
Presence of contingent assets							
No contingent asset	–	73.9	71.3	69.4	71.7	69.4	69.4
At least one contingent asset	–	73.4	71.2	69.7	72.3	69.1	69.7

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	74.9	75.1	72.7	71.1	75.0	69.7	71.1
70% to less than 80%	70.3	71.9	68.9	65.8	71.2	67.6	65.8
80% to less than 90%	69.4	72.4	69.6	67.9	70.0	68.0	67.9
90% to less than 100%	70.3	74.3	71.0	70.4	71.1	68.9	70.4
100% or greater	72.3	78.3	76.7	72.5	73.3	72.0	72.5
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	68.1	65.6	69.4	65.0	65.6
90% to less than 95%	–	–	69.4	66.7	68.7	66.8	66.7
95% to less than 100%	–	–	71.8	68.6	74.1	69.3	68.6
100% to less than 105%	–	–	76.5	72.8	76.7	73.9	72.8
105% or greater	–	–	85.6	78.5	80.9	77.1	78.5
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	68.2	65.7	69.2	64.9	65.7
90% to less than 95%	–	–	69.5	66.8	68.7	66.9	66.8
95% to less than 100%	–	–	71.8	68.4	73.8	69.6	68.4
100% to less than 105%	–	–	74.9	72.1	75.8	73.3	72.1
105% or greater	–	–	83.3	75.7	80.2	74.9	75.7

	Unweighted average						
	Tranche						
	2	5	8	11	9	10	11
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	65.2	60.5	67.7	72.6	60.5
90% to less than 95%	–	–	68.3	65.6	65.4	63.8	65.6
95% to less than 100%	–	–	69.9	68.1	74.2	69.7	68.1
100% to less than 105%	–	–	78.0	70.7	74.7	72.3	70.7
105% or greater	–	–	82.1	78.5	82.3	74.6	78.5
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	64.8	67.8	64.5	71.2	67.8
90% to less than 95%	–	–	69.1	65.4	66.0	63.5	65.4
95% to less than 100%	–	–	70.1	66.8	74.7	70.3	66.8
100% to less than 105%	–	–	70.6	69.9	75.3	72.7	69.9
105% or greater	–	–	78.7	71.9	76.8	72.4	71.9

Table 2.5 Use of contingent assets (Tranche 11, 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	170	10
Contingent asset reported in support of funding (non-PPF-recognised)	172	10
All contingent assets	334	19
PPF-recognised		
Type A	142	8
Type B and C	32	2
Non-PPF-recognised		
Property	21	1
Parental guarantee	107	6
Escrow, cash or charge over other asset (excludes property), or other (eg letter of credit)	61	3

19.0% of Tranche 11 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 recovery plan 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 2.6 Use of contingent assets by scheme characteristics (surplus and deficit schemes, Tranche 11 only)

	Percentage of schemes		
	PPF-recognised	Non-PPF-recognised	All contingent assets
Size by number of members			
Fewer than 100 members	5	3	8
100 to 499 members	10	9	18
500 to 999 members	12	19	30
1,000 to 4,999 members	13	18	31
5,000 members or more	22	22	42
Size by TPs			
Less than £5m	3	2	4
£5m to less than £20m	8	5	13
£20m to less than £100m	10	12	21
£100m to less than £300m	16	19	35
£300m or greater	17	20	36
Maturity (ratio of pensioner TPs to total TPs)			
Less than 25%	7	7	13
25% to less than 50%	10	12	22
50% to less than 75%	12	10	21
75% or greater	4	8	11
TPs for active members			
TPs reported for active members	11	11	21
TPs not reported for active members	9	9	17

	Percentage of schemes		
	PPF-recognised	Non-PPF-recognised	All contingent assets
Covenant (schemes in deficit only)			
Covenant group 1 (Strong)	6	13	17
Covenant group 2 (Tending to strong)	7	12	18
Covenant group 3 (Tending to weak)	16	13	27
Covenant group 4 (Weak)	12	12	24
RP length (schemes in deficit only)			
Less than 5 years	8	10	17
5 to less than 7.5 years	15	11	26
7.5 to less than 10 years	11	13	24
10 years or more	9	16	25
Return seeking assets			
Less than 20%	7	7	13
20% to less than 40%	13	11	23
40% to less than 60%	11	11	22
60% to less than 80%	8	8	16
80% or greater	5	8	13
Funding level (TPs)			
Less than 70%	11	14	23
70% to less than 80%	11	9	21
80% to less than 90%	11	13	23
90% to less than 100%	8	13	20
100% or greater	7	0	7

Table 2.7 Schemes with contingent assets (schemes in surplus and deficit, Tranches 5, 8 and 11)

	Tranche		
	5	8	11
All contingent assets (percentage of schemes)			
Schemes with at least one PPF-recognised contingent asset	14	13	10
Schemes with at least one contingent asset reported in support of funding (non-PPF-recognised)	7	8	10
Schemes with at least one contingent asset	20	19	19
PPF-recognised (percentage of schemes)			
Type A	13	11	8
Type B and C	1	2	2
Non-PPF-recognised (percentage of schemes)			
Property	1	1	1
Parental guarantee	4	4	6
Escrow, cash or charge over other asset (excludes property), or other (eg letter of credit)	2	3	3

Recovery plans and contributions (schemes in deficit only)

Table 3.1 Distribution of recovery plan lengths (schemes in deficit only)

RP length (years)	Tranche						
	2	5	8	11	9	10	11
95th percentile	15.0	17.5	17.6	16.4	18.7	16.9	16.4
Upper quartile	10.0	10.0	11.0	10.2	10.3	10.3	10.2
Median	8.0	8.3	8.1	7.2	7.1	6.6	7.2
Lower quartile	5.0	5.0	5.0	4.3	4.2	4.0	4.3
5th percentile	1.2	1.7	1.2	1.2	1.0	1.2	1.2

Table 3.2 Distribution of recovery plan lengths (for schemes in deficit submitting valuations in respect of both Tranches 8 and 11)

RP length (years)	Tranche	
	8	11
95th percentile	18.0	16.4
Upper quartile	11.5	10.5
Median	8.9	7.5
Lower quartile	5.8	4.6
5th percentile	2.3	1.3

Table 3.3 Average recovery plan length by scheme characteristics (schemes in deficit only)

	Tranche (years)						
	2	5	8	11	9	10	11
All schemes	7.7	8.5	8.5	7.8	8.0	7.5	7.8
Size by number of members							
Fewer than 100 members	8.0	8.1	8.3	7.1	7.7	6.9	7.1
100 to 499 members	7.9	8.6	8.4	7.9	8.4	7.9	7.9
500 to 999 members	7.5	8.2	8.7	8.1	7.8	6.7	8.1
1,000 to 4,999 members	7.2	8.9	9.3	8.6	8.0	7.9	8.6
5,000 members or more	7.2	8.9	8.8	8.8	8.1	8.7	8.8
Size by TPs							
Less than £5m	7.9	8.1	8.3	6.3	8.0	6.8	6.3
£5m to less than £20m	8.1	8.6	8.6	8.1	8.5	7.8	8.1
£20m to less than £100m	7.4	8.4	8.4	8.1	7.8	7.3	8.1
£100m to less than £300m	6.9	8.6	8.9	7.9	7.7	7.3	7.9
£300m or greater	7.3	9.0	8.9	8.4	8.0	8.5	8.4
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	7.5	7.7	8.1	6.7	7.3	6.8	6.7
25% to less than 50%	7.9	8.8	8.7	8.1	8.3	7.9	8.1
50% to less than 75%	8.2	9.0	8.9	8.2	8.3	7.5	8.2
75% or greater	7.1	8.1	7.1	7.3	7.0	6.9	7.3
TPs for active members							
TPs reported for active members	7.4	8.1	8.2	7.6	8.0	7.2	7.6
TPs not reported for active members	8.6	9.1	8.9	8.0	8.0	7.7	8.0

	Tranche (years)						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant group 1 (Strong)	–	–	6.9	5.9	6.3	5.6	5.9
Covenant group 2 (Tending to strong)	–	–	7.9	7.2	7.4	6.8	7.2
Covenant group 3 (Tending to weak)	–	–	9.0	8.5	9.0	8.4	8.5
Covenant group 4 (Weak)	–	–	10.1	10.2	9.5	9.8	10.2
Return-seeking assets							
Less than 20%	7.5	6.9	5.7	6.1	7.1	5.7	6.1
20% to less than 40%	7.9	7.3	7.5	7.0	6.5	6.4	7.0
40% to less than 60%	7.6	7.8	8.5	8.3	7.9	7.7	8.3
60% to less than 80%	7.9	9.0	9.2	8.4	8.5	7.9	8.4
80% or greater	7.5	9.3	8.8	8.4	8.9	8.4	8.4
Presence of contingent assets							
No contingent asset	–	8.3	8.4	7.7	8.0	7.5	7.7
At least one contingent asset	–	9.0	9.0	8.3	8.3	7.6	8.3
Funding level (TPs)							
Less than 70%	9.6	10.7	11.9	12.4	13.3	12.3	12.4
70% to less than 80%	8.6	9.4	9.3	9.3	10.0	9.4	9.3
80% to less than 90%	7.8	7.4	7.4	7.3	7.8	7.0	7.3
90% to less than 100%	5.8	6.0	4.9	4.6	5.2	4.7	4.6

	Tranche (years)						
	2	5	8	11	9	10	11
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	8.8	8.2	8.9	7.7	8.2
90% to less than 95%	–	–	9.1	8.5	8.1	8.2	8.5
95% to less than 100%	–	–	8.6	7.8	8.0	7.3	7.8
100% to less than 105%	–	–	6.9	7.4	6.5	6.3	7.4
105% or greater	–	–	5.5	6.2	6.6	6.9	6.2
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	8.8	8.2	8.9	7.7	8.2
90% to less than 95%	–	–	9.1	8.5	8.1	8.2	8.5
95% to less than 100%	–	–	8.5	7.9	8.1	7.5	7.9
100% to less than 105%	–	–	7.5	7.2	6.9	6.6	7.2
105% or greater	–	–	6.2	6.8	6.2	6.5	6.8

Discount rates

Table 4.1 Average nominal discount rate and outperformance by Tranche
(Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Pre and post-retirement rates (a)	5.35	5.25	3.97	3.24	4.33	3.39	3.25	3.24
Pre-retirement rate (b)	6.30	6.11	4.92	4.15	5.27	4.29	4.15	4.15
Post-retirement rate (b)	4.93	4.76	3.50	2.77	3.93	2.87	2.77	2.77
SEDR (c)	5.56	5.37	4.13	3.33	4.52	3.5	3.38	3.33
SEDR (all schemes) (d)	5.50	5.33	4.08	3.29	4.46	3.46	3.33	3.29
SEDR outperformance over 20-year UK gilt (e)	1.05	0.77	0.99	0.90	0.88	1.00	0.94	0.90
SEDR outperformance over greater than 15 year AA UK corporate bonds (f)	0.15	-0.17	0.01	-0.09	0.17	0.15	-0.05	-0.09

(a) Single rates provided

(b) Different rates provided

(c) Composite of pre- and post-retirement rates where different rates are provided

(d) Combined single and different rates

Source for (e) : Thomson Reuters, Bank of England

Source for (f): Thomson Reuters, Markit Iboxx

**Table 4.2 Average real discount rate and outperformance by Tranche
(Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)**

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Pre and post-retirement rates (a)	2.15	1.65	0.70	0.13	0.88	0.22	0.15	0.13
Pre-retirement rate (b)	3.04	2.49	1.67	1.03	1.81	1.10	1.03	1.03
Post-retirement rate (b)	1.71	1.19	0.29	-0.32	0.52	-0.28	-0.32	-0.32
SEDR (c)	2.35	1.80	0.94	0.10	1.11	0.37	0.31	0.10
SEDR (all schemes) (d)	2.29	1.76	0.87	0.09	1.04	0.32	0.25	0.09
Real SEDR Outperformance against 20 year index linked gilts (e)	1.01	0.90	1.12	0.99	1.01	1.15	1.15	0.99

(a) Single rates provided

(b) Different rates provided

(c) Composite of pre- and post-retirement rates where different rates are provided

(d) Combined single and different rates

Source for (e) : Thomson Reuters, Bank of England

Table 4.3 Average nominal SEDR by scheme characteristics (Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Size by number of members								
Fewer than 100 members	5.35	5.15	3.89	3.20	4.25	3.39	3.27	3.20
100 to 499 members	5.58	5.39	4.15	3.36	4.52	3.56	3.39	3.36
500 to 999 members	5.64	5.50	4.23	3.31	4.59	3.49	3.34	3.31
1,000 to 4,999 members	5.53	5.42	4.18	3.31	4.65	3.45	3.32	3.31
5,000 members or more	5.46	5.48	4.26	3.23	4.64	3.40	3.32	3.23
Size by TPs								
Less than £5m	5.35	5.11	3.80	3.13	4.17	3.34	3.20	3.13
£5m to £19m	5.57	5.36	4.09	3.36	4.45	3.52	3.41	3.36
£20m to £99m	5.59	5.44	4.20	3.37	4.57	3.55	3.39	3.37
£100m to £299m	5.49	5.39	4.17	3.23	4.61	3.43	3.25	3.23
£300m or greater	5.49	5.47	4.23	3.21	4.57	3.37	3.26	3.21
Maturity (ratio of pensioner TPs to total TPs)								
Less than 25%	5.44	5.28	4.02	3.18	4.29	3.44	3.23	3.18
25% to less than 50%	5.58	5.40	4.18	3.37	4.58	3.53	3.40	3.37
50% to less than 75%	5.50	5.33	4.04	3.32	4.45	3.43	3.36	3.32
75% or greater	5.16	4.91	3.49	2.81	4.09	3.05	2.86	2.81
TPs for active members								
TPs reported for active members	5.53	5.40	4.18	3.38	4.57	3.53	3.43	3.38
TPs not reported for active members	5.41	5.23	3.97	3.22	4.33	3.41	3.25	3.22

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Covenant Group (schemes in deficit only)								
Covenant Group 1 (Strong)	–	–	4.14	3.24	4.66	3.44	3.28	3.24
Covenant Group 2 (Tending to strong)	–	–	4.18	3.27	4.50	3.49	3.32	3.27
Covenant Group 3 (Tending to weak)	–	–	4.11	3.36	4.49	3.49	3.41	3.36
Covenant Group 4 (Weak)	–	–	3.95	3.28	4.31	3.40	3.30	3.28
RP length								
Less than 5 years	5.46	5.26	3.99	3.18	4.37	3.41	3.23	3.18
5 to less than 7.5 years	5.51	5.31	4.12	3.34	4.45	3.51	3.42	3.34
7.5 to less than 10 years	5.50	5.41	4.20	3.37	4.51	3.53	3.38	3.37
10 years or greater	5.57	5.35	4.13	3.36	4.61	3.49	3.39	3.36
Return seeking assets								
Less than 20%	5.05	4.78	3.30	2.69	3.71	2.84	2.74	2.69
20% to less than 40%	5.21	5.07	3.77	3.12	4.10	3.19	3.18	3.12
40% to less than 60%	5.48	5.31	4.09	3.37	4.42	3.48	3.40	3.37
60% to less than 80%	5.52	5.45	4.24	3.56	4.67	3.68	3.59	3.56
80% or greater	5.61	5.44	4.36	3.70	4.62	3.88	3.76	3.70
Presence of contingent assets								
No contingent asset	–	5.30	4.07	3.29	4.44	3.46	3.33	3.29
At least one contingent asset	–	5.44	4.14	3.27	4.52	3.48	3.31	3.27

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Funding level (TPs)								
Less than 70%	5.24	5.15	3.85	3.15	4.21	3.26	3.19	3.15
70% to less than 80%	5.48	5.39	4.18	3.38	4.43	3.49	3.42	3.38
80% to less than 90%	5.54	5.40	4.19	3.38	4.53	3.49	3.43	3.38
90% to less than 100%	5.60	5.38	4.16	3.23	4.55	3.53	3.28	3.23
100% or greater	–	–	3.91	3.22	4.40	3.44	3.25	3.22
PPF Standard stressed/Unstressed asset ratio								
Less than 90%	–	–	4.24	3.60	4.61	3.78	3.65	3.60
90% to less than 95%	–	–	4.20	3.44	4.61	3.58	3.44	3.44
95% to less than 100%	–	–	4.02	3.32	4.33	3.43	3.36	3.32
100% to less than 105%	–	–	3.78	3.06	4.18	3.19	3.13	3.06
105% or greater	–	–	3.32	2.72	3.97	3.03	2.78	2.72
PPF Combined stressed/Unstressed asset ratio								
Less than 90%	–	–	4.24	3.59	4.61	3.79	3.64	3.59
90% to less than 95%	–	–	4.21	3.43	4.61	3.58	3.44	3.43
95% to less than 100%	–	–	4.01	3.34	4.33	3.44	3.38	3.34
100% to less than 105%	–	–	3.87	3.13	4.25	3.24	3.18	3.13
105% or greater	–	–	3.47	2.83	3.99	3.11	2.90	2.83

Table 4.4 Average outperformance of the nominal SEDR over nominal 20 year UK gilts by scheme characteristics (Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Size by number of members								
Fewer than 100 members	0.91	0.60	0.78	0.82	0.68	0.91	0.88	0.82
100 to 499 members	1.13	0.82	1.05	0.99	0.95	1.09	1.01	0.99
500 to 999 members	1.17	0.93	1.14	0.93	1.02	1.04	0.96	0.93
1,000 to 4,999 members	1.08	0.84	1.11	0.92	1.06	1.01	0.93	0.92
5,000 members or more	1.00	0.85	1.20	0.85	1.04	0.97	0.93	0.85
Size by TPs								
Less than £5m	0.91	0.58	0.69	0.73	0.60	0.86	0.80	0.73
£5m to £19m	1.12	0.79	1.00	1.00	0.89	1.05	1.04	1.00
£20m to £99m	1.13	0.88	1.10	0.98	0.99	1.09	1.01	0.98
£100m to £299m	1.05	0.80	1.09	0.88	1.01	0.99	0.90	0.88
£300m or greater	1.02	0.84	1.16	0.82	0.99	0.94	0.87	0.82
Maturity (ratio of pensioner TPs to total TPs)								
Less than 25%	0.99	0.72	0.93	0.78	0.72	0.96	0.83	0.78
25% to less than 50%	1.14	0.83	1.09	0.99	1.01	1.08	1.03	0.99
50% to less than 75%	1.04	0.75	0.95	0.96	0.87	0.98	0.99	0.96
75% or greater	0.74	0.32	0.34	0.45	0.49	0.60	0.50	0.45
TPs for active members								
TPs reported for active members	1.08	0.83	1.09	0.98	0.99	1.07	1.03	0.98
TPs not reported for active members	0.96	0.67	0.87	0.85	0.77	0.94	0.88	0.85

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Covenant Group (schemes in deficit only)								
Covenant Group 1 (Strong)	–	–	1.02	0.87	1.06	1.00	0.90	0.87
Covenant Group 2 (Tending to strong)	–	–	1.10	0.90	0.94	1.04	0.95	0.90
Covenant Group 3 (Tending to weak)	–	–	1.02	0.99	0.93	1.04	1.04	0.99
Covenant Group 4 (Weak)	–	–	0.86	0.87	0.74	0.92	0.89	0.87
RP length								
Less than 5 years	1.00	0.68	0.90	0.79	0.79	0.94	0.84	0.79
5 to less than 7.5 years	1.04	0.73	1.03	0.95	0.89	1.04	1.02	0.95
7.5 to less than 10 years	1.05	0.85	1.09	1.02	0.95	1.09	1.04	1.02
10 years or greater	1.13	0.81	1.04	1.01	1.03	1.06	1.04	1.01
Return-seeking assets								
Less than 20%	0.63	0.21	0.22	0.30	0.10	0.36	0.34	0.30
20% to less than 40%	0.75	0.48	0.69	0.74	0.52	0.74	0.81	0.74
40% to less than 60%	1.00	0.73	0.99	1.00	0.84	1.03	1.03	1.00
60% to less than 80%	1.07	0.89	1.14	1.18	1.10	1.21	1.21	1.18
80% or greater	1.18	0.89	1.27	1.25	1.06	1.37	1.31	1.25
Presence of contingent assets								
No contingent asset	–	0.74	0.97	0.91	0.87	1.00	0.95	0.91
At least one contingent asset	–	0.86	1.07	0.88	0.94	1.02	0.92	0.88

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Funding level (TPs)								
Less than 70%	0.81	0.63	0.79	0.79	0.64	0.83	0.83	0.79
70% to less than 80%	1.04	0.83	1.09	1.03	0.87	1.03	1.06	1.03
80% to less than 90%	1.09	0.81	1.09	1.00	0.96	1.04	1.05	1.00
90% to less than 100%	1.13	0.80	1.05	0.84	0.97	1.05	0.89	0.84
100% or greater	–	–	0.79	0.81	0.81	0.96	0.83	0.81
PPF Standard stressed/Unstressed asset ratio								
Less than 90%	–	–	1.15	1.20	1.06	1.29	1.25	1.20
90% to less than 95%	–	–	1.10	1.06	1.03	1.12	1.07	1.06
95% to less than 100%	–	–	0.94	0.94	0.75	0.98	0.97	0.94
100% to less than 105%	–	–	0.69	0.68	0.59	0.75	0.75	0.68
105% or greater	–	–	0.25	0.35	0.37	0.59	0.41	0.35
PPF Combined stressed/Unstressed asset ratio								
Less than 90%	–	–	1.14	1.19	1.06	1.29	1.24	1.19
90% to less than 95%	–	–	1.10	1.06	1.03	1.12	1.07	1.06
95% to less than 100%	–	–	0.93	0.97	0.76	0.98	1.01	0.97
100% to less than 105%	–	–	0.78	0.74	0.66	0.80	0.79	0.74
105% or greater	–	–	0.39	0.45	0.39	0.66	0.52	0.45

Table 4.5 Average outperformance of the nominal SEDR over greater than 15 year AA rated corporate bonds by scheme characteristics (Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Size by number of members								
Fewer than 100 members	0.00	-0.36	-0.20	-0.17	-0.03	0.05	-0.11	-0.17
100 to 499 members	0.23	-0.12	0.07	0.00	0.23	0.24	0.03	0.00
500 to 999 members	0.27	0.00	0.16	-0.07	0.30	0.18	-0.04	-0.07
1,000 to 4,999 members	0.18	-0.10	0.11	-0.09	0.34	0.16	-0.08	-0.09
5,000 members or more	0.11	-0.05	0.20	-0.16	0.32	0.12	-0.08	-0.16
Size by TPs								
Less than £5m	0.01	-0.38	-0.29	-0.25	-0.11	0.00	-0.19	-0.25
£5m to £19m	0.22	-0.15	0.02	0.01	0.17	0.20	0.05	0.01
£20m to £99m	0.23	-0.07	0.12	-0.01	0.27	0.24	0.02	-0.01
£100m to £299m	0.16	-0.13	0.10	-0.12	0.29	0.13	-0.10	-0.12
£300m or greater	0.13	-0.06	0.17	-0.19	0.26	0.09	-0.14	-0.19
Maturity (ratio of pensioner TPs to total TPs)								
Less than 25%	0.09	-0.23	-0.05	-0.22	0.00	0.11	-0.17	-0.22
25% to less than 50%	0.23	-0.11	0.11	0.00	0.29	0.22	0.04	0.00
50% to less than 75%	0.14	-0.17	-0.04	-0.04	0.16	0.12	0.00	-0.04
75% or greater	-0.15	-0.59	-0.63	-0.55	-0.22	-0.26	-0.50	-0.55
TPs for active members								
TPs reported for active members	0.19	-0.12	0.11	-0.01	0.27	0.22	0.04	-0.01
TPs not reported for active members	0.05	-0.27	-0.11	-0.14	0.05	0.09	-0.11	-0.14

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Covenant (schemes in deficit only)								
Covenant Group 1 (Strong)	–	–	0.04	-0.13	0.35	0.15	-0.09	-0.13
Covenant Group 2 (Tending to strong)	–	–	0.12	-0.09	0.22	0.19	-0.03	-0.09
Covenant Group 3 (Tending to weak)	–	–	0.04	0.00	0.21	0.18	0.05	0.00
Covenant Group 4 (Weak)	–	–	-0.12	-0.14	0.02	0.06	-0.12	-0.14
RP length								
Less than 5 years	0.10	-0.25	-0.09	-0.21	0.07	0.08	-0.15	-0.21
5 to less than 7.5 years	0.14	-0.20	0.05	-0.05	0.17	0.19	0.03	-0.05
7.5 to less than 10 years	0.16	-0.11	0.11	0.03	0.23	0.24	0.05	0.03
10 years or greater	0.23	-0.14	0.06	0.01	0.32	0.21	0.04	0.01
Return seeking assets								
Less than 20%	-0.26	-0.71	-0.76	-0.69	-0.61	-0.50	-0.64	-0.69
20% to less than 40%	-0.15	-0.45	-0.30	-0.25	-0.20	-0.12	-0.18	-0.25
40% to less than 60%	0.11	-0.19	0.01	0.01	0.13	0.18	0.03	0.01
60% to less than 80%	0.17	-0.06	0.16	0.19	0.38	0.36	0.21	0.19
80% or greater	0.29	-0.07	0.29	0.26	0.34	0.52	0.31	0.26
Presence of contingent assets								
No contingent asset	–	-0.20	-0.01	-0.08	0.15	0.14	-0.04	-0.08
At least one contingent asset	–	-0.07	0.08	-0.12	0.22	0.17	-0.08	-0.12

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Funding level (TPs)								
Less than 70%	-0.10	-0.35	-0.21	-0.21	-0.08	-0.03	-0.17	-0.21
70% to less than 80%	0.14	-0.12	0.11	0.04	0.14	0.18	0.07	0.04
80% to less than 90%	0.20	-0.12	0.11	0.01	0.24	0.20	0.06	0.01
90% to less than 100%	0.23	-0.12	0.07	-0.15	0.25	0.20	-0.10	-0.15
100% or greater	–	–	-0.18	-0.18	0.10	0.10	-0.16	-0.18
PPF Standard stressed/Unstressed asset ratio								
Less than 90%	–	–	0.17	0.20	0.33	0.43	0.25	0.20
90% to less than 95%	–	–	0.12	0.07	0.31	0.27	0.08	0.07
95% to less than 100%	–	–	-0.05	-0.06	0.03	0.13	-0.02	-0.06
100% to less than 105%	–	–	-0.29	-0.31	-0.13	-0.10	-0.24	-0.31
105% or greater	–	–	-0.73	-0.64	-0.34	-0.27	-0.58	-0.64
PPF Combined stressed/Unstressed asset ratio								
Less than 90%	–	–	0.17	0.20	0.34	0.44	0.25	0.20
90% to less than 95%	–	–	0.12	0.08	0.32	0.26	0.09	0.08
95% to less than 100%	–	–	-0.06	-0.03	0.04	0.13	0.01	-0.03
100% to less than 105%	–	–	-0.20	-0.25	-0.06	-0.06	-0.20	-0.25
105% or greater	–	–	-0.59	-0.54	-0.32	-0.20	-0.48	-0.54

Table 4.6 Average real SEDR by scheme characteristics (Tranches 1-7 – schemes in deficit only; Tranches 8-11 – all schemes)

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Size by number of members								
Fewer than 100 members	2.10	1.59	0.79	0.07	0.88	0.32	0.26	0.07
100 to 499 members	2.37	1.82	0.94	0.17	1.08	0.39	0.29	0.17
500 to 999 members	2.46	1.93	0.91	0.06	1.13	0.30	0.21	0.06
1,000 to 4,999 members	2.37	1.82	0.88	0.04	1.19	0.25	0.16	0.04
5,000 members or more	2.31	1.79	0.88	-0.13	1.17	0.21	0.18	-0.13
Size by TPs								
Less than £5m	2.10	1.57	0.76	0.04	0.84	0.31	0.23	0.04
£5m to £19m	2.35	1.80	0.91	0.20	1.04	0.39	0.35	0.20
£20m to £99m	2.40	1.86	0.93	0.15	1.12	0.38	0.28	0.15
£100m to £299m	2.34	1.78	0.83	-0.02	1.12	0.23	0.12	-0.02
£300m or greater	2.33	1.79	0.87	-0.12	1.10	0.19	0.10	-0.12
Maturity (ratio of pensioner TPs to total TPs)								
Less than 25%	2.21	1.70	0.85	0.03	0.90	0.34	0.19	0.03
25% to less than 50%	2.39	1.83	0.94	0.14	1.14	0.36	0.28	0.14
50% to less than 75%	2.28	1.75	0.82	0.11	1.02	0.29	0.29	0.11
75% or greater	1.98	1.43	0.35	-0.29	0.79	0.05	0.03	-0.29
TPs for active members								
TPs reported for active members	2.33	1.81	0.95	0.16	1.15	0.37	0.31	0.16
TPs not reported for active members	2.18	1.68	0.78	0.03	0.91	0.28	0.20	0.03

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Covenant (schemes in deficit only)								
Covenant Group 1 (Strong)	–	–	0.85	-0.01	1.22	0.28	0.16	-0.01
Covenant Group 2 (Tending to strong)	–	–	0.93	0.08	1.09	0.35	0.23	0.08
Covenant Group 3 (Tending to weak)	–	–	0.90	0.15	1.06	0.35	0.34	0.15
Covenant Group 4 (Weak)	–	–	0.76	0.03	0.91	0.22	0.23	0.03
RP length								
Less than 5 years	2.23	1.65	0.75	0.00	0.94	0.25	0.16	0.00
5 to less than 7.5 years	2.30	1.72	0.91	0.10	1.03	0.36	0.32	0.10
7.5 to less than 10 years	2.29	1.84	0.95	0.12	1.09	0.39	0.27	0.12
10 years or greater	2.38	1.82	0.92	0.19	1.21	0.36	0.34	0.19
Return-seeking assets								
Less than 20%	1.84	1.17	0.15	-0.42	0.32	-0.25	-0.27	-0.42
20% to less than 40%	1.98	1.44	0.56	-0.10	0.67	0.03	0.13	-0.10
40% to less than 60%	2.26	1.72	0.86	0.15	0.98	0.32	0.29	0.15
60% to less than 80%	2.30	1.88	1.03	0.36	1.27	0.56	0.50	0.36
80% or greater	2.42	1.88	1.16	0.52	1.22	0.70	0.68	0.52
Presence of contingent assets								
No contingent asset	–	1.74	0.87	0.11	1.03	0.32	0.26	0.11
At least one contingent asset	–	1.82	0.88	-0.02	1.07	0.32	0.19	-0.02

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Funding level (TPs)								
Less than 70%	2.01	1.59	0.70	0.00	0.82	0.14	0.14	0.00
70% to less than 80%	2.27	1.81	0.94	0.20	1.02	0.36	0.35	0.20
80% to less than 90%	2.34	1.80	0.94	0.16	1.10	0.32	0.34	0.16
90% to less than 100%	2.39	1.82	0.89	-0.01	1.13	0.37	0.17	-0.01
100% or greater	–	–	0.85	0.06	0.97	0.32	0.20	0.06
PPF Standard stressed/Unstressed asset ratio								
Less than 90%	–	–	1.04	0.42	1.22	0.64	0.58	0.42
90% to less than 95%	–	–	0.99	0.23	1.20	0.46	0.33	0.23
95% to less than 100%	–	–	0.80	0.10	0.89	0.27	0.28	0.10
100% to less than 105%	–	–	0.55	-0.14	0.70	0.04	0.10	-0.14
105% or greater	–	–	0.09	-0.46	0.51	-0.11	-0.28	-0.46
PPF Combined stressed/Unstressed asset ratio								
Less than 90%	–	–	1.04	0.42	1.23	0.64	0.58	0.42
90% to less than 95%	–	–	1.00	0.22	1.20	0.46	0.32	0.22
95% to less than 100%	–	–	0.82	0.13	0.91	0.28	0.31	0.13
100% to less than 105%	–	–	0.61	-0.07	0.76	0.09	0.16	-0.07
105% or greater	–	–	0.21	-0.37	0.53	-0.05	-0.19	-0.37

Table 4.7 Average outperformance of the real SEDR over the 20 year spot rate on UK gilts by scheme characteristics (Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Size by number of members								
Fewer than 100 members	0.83	0.74	0.99	0.97	0.85	1.14	1.16	0.97
100 to 499 members	1.09	0.96	1.19	1.08	1.06	1.22	1.20	1.08
500 to 999 members	1.17	1.08	1.19	0.97	1.11	1.14	1.12	0.97
1,000 to 4,999 members	1.09	0.97	1.16	0.94	1.15	1.10	1.07	0.94
5,000 members or more	1.03	0.95	1.20	0.78	1.13	1.05	1.08	0.78
Size by TPs								
Less than £5m	0.83	0.71	0.96	0.93	0.82	1.13	1.12	0.93
£5m to £19m	1.08	0.95	1.15	1.12	1.02	1.22	1.27	1.12
£20m to £99m	1.12	1.01	1.19	1.05	1.09	1.21	1.18	1.05
£100m to £299m	1.07	0.92	1.11	0.91	1.08	1.08	1.04	0.91
£300m or greater	1.04	0.95	1.20	0.78	1.07	1.03	1.00	0.78
Maturity (ratio of pensioner TPs to total TPs)								
Less than 25%	0.94	0.84	1.10	0.92	0.88	1.17	1.08	0.92
25% to less than 50%	1.12	0.97	1.19	1.05	1.12	1.19	1.19	1.05
50% to less than 75%	1.00	0.91	1.08	1.03	0.99	1.12	1.21	1.03
75% or greater	0.73	0.57	0.62	0.62	0.74	0.88	0.95	0.62
TPs for active members								
TPs reported for active members	1.06	0.95	1.20	1.05	1.12	1.21	1.20	1.05
TPs not reported for active members	0.90	0.82	1.04	0.95	0.89	1.11	1.12	0.95

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Covenant (schemes in deficit only)								
Covenant Group 1 (Strong)	–	–	1.09	0.90	1.17	1.12	1.07	0.90
Covenant Group 2 (Tending to strong)	–	–	1.20	0.99	1.07	1.19	1.15	0.99
Covenant Group 3 (Tending to weak)	–	–	1.15	1.06	1.04	1.18	1.25	1.06
Covenant Group 4 (Weak)	–	–	1.02	0.93	0.88	1.04	1.12	0.93
RP length								
Less than 5 years	0.96	0.79	1.01	0.90	0.91	1.08	1.05	0.90
5 to less than 7.5 years	1.02	0.86	1.13	1.00	1.01	1.19	1.21	1.00
7.5 to less than 10 years	1.02	0.98	1.19	1.06	1.08	1.23	1.21	1.06
10 years or greater	1.11	0.97	1.19	1.11	1.18	1.21	1.26	1.11
Return seeking assets								
Less than 20%	0.58	0.32	0.40	0.48	0.26	0.56	0.63	0.48
20% to less than 40%	0.70	0.58	0.85	0.81	0.64	0.87	1.03	0.81
40% to less than 60%	0.97	0.87	1.11	1.06	0.96	1.17	1.21	1.06
60% to less than 80%	1.03	1.02	1.27	1.27	1.24	1.39	1.40	1.27
80% or greater	1.16	1.02	1.42	1.38	1.20	1.51	1.54	1.38
Presence of contingent assets								
No contingent asset	–	0.88	1.12	1.02	1.01	1.15	1.17	1.02
At least one contingent asset	–	0.97	1.15	0.88	1.04	1.15	1.09	0.88

	Mean percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Funding level (TPs)								
Less than 70%	0.75	0.74	0.94	0.92	0.79	1.01	1.06	0.92
70% to less than 80%	1.00	0.95	1.20	1.13	1.00	1.20	1.28	1.13
80% to less than 90%	1.06	0.95	1.21	1.07	1.08	1.16	1.24	1.07
90% to less than 100%	1.10	0.96	1.13	0.90	1.09	1.19	1.07	0.90
100% or greater	–	–	1.08	0.94	0.94	1.14	1.07	0.94
PPF Standard stressed/Unstressed asset ratio								
Less than 90%	–	–	1.29	1.32	1.21	1.45	1.48	1.32
90% to less than 95%	–	–	1.22	1.14	1.17	1.29	1.24	1.14
95% to less than 100%	–	–	1.08	1.01	0.86	1.11	1.18	1.01
100% to less than 105%	–	–	0.84	0.77	0.66	0.89	1.01	0.77
105% or greater	–	–	0.37	0.46	0.47	0.73	0.63	0.46
PPF Combined stressed/Unstressed asset ratio								
Less than 90%	–	–	1.28	1.31	1.22	1.46	1.47	1.31
90% to less than 95%	–	–	1.23	1.14	1.17	1.29	1.24	1.14
95% to less than 100%	–	–	1.08	1.04	0.88	1.12	1.22	1.04
100% to less than 105%	–	–	0.92	0.83	0.73	0.94	1.06	0.83
105% or greater	–	–	0.49	0.54	0.48	0.79	0.71	0.54

Table 4.8 Distribution of the nominal SEDR (Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
95th percentile	6.23	6.03	5.02	4.36	5.40	4.50	4.34	4.36
Upper quartile	5.83	5.68	4.50	3.70	4.80	3.84	3.70	3.70
Median	5.50	5.41	4.13	3.29	4.48	3.47	3.33	3.29
Lower quartile	5.23	5.06	3.74	2.89	4.10	3.10	2.95	2.89
5th percentile	4.67	4.35	2.90	2.18	3.45	2.40	2.20	2.18

Table 4.9 Distribution of the outperformance of the nominal SEDR over 20 year spot rate on UK gilts and greater than 15 year AA corporate bond yield (Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Excess return over 20-year nominal spot rate								
95th percentile	1.76	1.50	1.90	1.92	1.85	1.94	1.91	1.92
Upper quartile	1.38	1.09	1.37	1.28	1.23	1.36	1.29	1.28
Median	1.03	0.84	1.05	0.92	0.92	1.01	0.97	0.92
Lower quartile	0.81	0.51	0.65	0.52	0.55	0.67	0.59	0.52
5th percentile	0.23	-0.23	-0.18	-0.15	-0.13	-0.05	-0.10	-0.15

	Percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
Excess return over the greater than 15-year AA corporate bond yield								
95th percentile	0.88	0.51	0.92	0.95	1.11	1.10	0.92	0.95
Upper quartile	0.48	0.17	0.40	0.29	0.51	0.50	0.30	0.29
Median	0.13	-0.10	0.07	-0.08	0.19	0.17	-0.05	-0.08
Lower quartile	-0.09	-0.46	-0.33	-0.49	-0.17	-0.18	-0.42	-0.49
5th percentile	-0.66	-1.15	-1.17	-1.15	-0.84	-0.91	-1.08	-1.15

Table 4.10 Distribution of the real SEDR
(Tranches 1-7 = schemes in deficit only; Tranches 8-11 = all schemes)

	Percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
95th percentile	3.05	2.58	1.89	1.16	1.98	1.29	1.26	1.16
Upper quartile	2.62	2.10	1.28	0.48	1.38	0.68	0.58	0.48
Median	2.29	1.79	0.88	0.10	1.03	0.31	0.23	0.10
Lower quartile	2.03	1.46	0.48	-0.26	0.67	-0.05	-0.13	-0.26
5th percentile	1.36	0.77	-0.29	-0.91	0.00	-0.71	-0.78	-0.91

Table 4.11 Distribution of the outperformance of the real SEDR over the real 20 year UK gilt (Tranches 1-7 = schemes in deficit only; Tranches 8-11= all schemes)

	Percentage – Tranche							
	2	5	8	11 new	9	10	11 old	11 new
95th percentile	1.76	1.71	2.08	2.01	1.99	2.07	2.17	2.01
Upper quartile	1.35	1.24	1.49	1.36	1.35	1.50	1.50	1.36
Median	1.01	0.94	1.14	1.02	1.01	1.15	1.15	1.02
Lower quartile	0.76	0.62	0.77	0.64	0.63	0.79	0.76	0.64
5th percentile	0.13	-0.09	0.00	-0.01	-0.03	0.09	0.17	-0.01

Mortality assumptions (schemes in deficit only)

Table 5.1 Base mortality tables (schemes in deficit only)

	Tranche (percentage of schemes)						
	2	5	8	11	9	10	11
92 series	74	6	0	0	0	0	0
00 series	24	32	9	2	8	5	2
SAPS series	1	60	87	94	89	92	94
Other series	1	2	4	4	3	3	4

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

	Tranche (percentage of schemes)						
	2	5	8	11	9	10	11
No loading	63	50	50	45	49	43	45
Rating by age	24	13	9	6	9	9	6
Percentage adjustment to q(x)	13	27	30	36	30	37	36
SAPS Series Light/Heavy	–*	5	6	5	5	5	5
Combination of two or more of the above	–	5	6	7	6	7	7

*
Not used in earlier tranches.

⁷
Usually used in conjunction with other items.

Table 5.3 q(x) adjustments to base mortality tables (Tranche 11 schemes in deficit only)

	Base table (percentage of schemes)			
	00 Series	SAPS Series	Other series	Total
No q(X) loading	87	54	98	57
Less than 80%	4	1	2	1
80% to 100%	4	28	0	27
100% to 120%	4	15	0	14
Over 120%	0	2	0	2
Total	2	94	4	100

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

	Tranche (percentage of schemes)						
	2	5	8	11	9	10	11
None/not stated	2	3	3	3	4	4	3
92 base adjustment	11	0	0	0	0	0	0
Short cohort projection	3	0	0	0	0	0	0
Medium cohort projection	69	35	4	0	2	0	0
Long cohort projection	13	29	2	0	1	1	0
CMI projection	–	31	91	96	92	93	96
Other projection	2	2	2	1	2	2	1
Use of a long-term rate of improvement ⁷	23	92	96	95	95	95	95

Table 5.5 Size of improvement adopted in combination with various adjustments to base tables (Tranche 11 schemes in deficit only)

Size of improvement	Adjustments to base tables (percentage of schemes)				
	None/Not stated	Medium cohort projection	Long cohort projection	CMI projection	Other projection
None/not stated	2.6	0.0	0.0	1.1	1.1
1% or less	0.0	0.1	0.1	1.8	0.0
Greater than 1% to less than 1.5%	0.0	0.1	0.0	8.1	0.0
1.5%	0.0	0.0	0.2	71.0	0.1
Greater than 1.5% to less than 1.75%	0.0	0.0	0.0	0.1	0.0
1.75% to less than 2%	0.0	0.1	0.0	7.4	0.0
2% or greater	0.0	0.0	0.0	6.3	0.0
Total	2.6	0.2	0.3	95.8	1.2

Life expectancy

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

	Percentage – Tranche						
	2	5	8	11	9	10	11
Future male pensioners aged 45							
95th percentile	90.8	92.0	92.4	91.9	92.3	92.2	91.9
Upper quartile	88.6	90.4	90.8	90.6	90.8	90.8	90.6
Median	88.0	89.5	89.9	89.7	89.8	89.8	89.7
Lower quartile	87.1	88.5	89.3	89.4	89.3	89.4	89.4
5th percentile	84.9	87.2	88.1	88.0	88.2	88.2	88.0

	Percentage – Tranche						
	2	5	8	11	9	10	11
Current male pensioners aged 65							
95th percentile	88.6	89.3	89.6	89.4	89.5	89.6	89.4
Upper quartile	87.0	88.1	88.6	88.3	88.6	88.5	88.3
Median	86.9	87.3	87.8	87.6	87.7	87.7	87.6
Lower quartile	85.9	86.6	87.4	87.4	87.3	87.4	87.4
5th percentile	84.0	85.4	86.2	86.2	86.2	86.4	86.2

	Percentage – Tranche						
	2	5	8	11	9	10	11
Future female pensioners aged 45							
95th percentile	93.0	93.7	94.4	94.0	94.3	94.2	94.0
Upper quartile	91.1	92.5	92.9	92.7	92.8	92.9	92.7
Median	90.8	91.6	92.3	91.9	92.1	92.0	91.9
Lower quartile	89.8	90.8	91.6	91.6	91.3	91.5	91.6
5th percentile	87.8	89.4	90.6	90.3	90.4	90.5	90.3

	Percentage – Tranche						
	2	5	8	11	9	10	11
Current female pensioners aged 65							
95th percentile	91.5	91.4	91.6	91.4	91.6	91.5	91.4
Upper quartile	89.9	90.5	90.6	90.3	90.5	90.5	90.3
Median	89.7	89.6	90.0	89.6	89.8	89.8	89.6
Lower quartile	88.4	88.9	89.6	89.4	89.3	89.4	89.4
5th percentile	86.9	87.6	88.5	88.3	88.3	88.4	88.3

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

	Tranche (Years)						
	2	5	8	11	9	10	11
Current male pensioners aged 65							
Mean	86.5	87.4	87.9	87.8	87.9	87.9	87.8
Size by number of members							
Fewer than 100 members	86.7	87.7	88.0	87.8	88.0	88.0	87.8
100 to fewer than 500 members	86.6	87.2	87.8	87.7	87.8	87.9	87.7
500 to fewer than 1,000 members	86.5	87.2	87.9	87.9	87.9	87.9	87.9
1,000 to fewer than 5,000 members	86.3	87.4	88.0	87.9	87.8	87.9	87.9
5,000 members or more	86.1	87.2	88.1	88.0	87.9	88.0	88.0
Size by TPs							
Less than £5m	86.6	87.6	88.0	87.6	87.8	87.8	87.6
£5m to less than £20m	86.6	87.3	87.7	87.6	87.8	87.9	87.6
£20m to less than £100m	86.6	87.4	87.9	87.8	88.0	88.0	87.8
£100m to less than £300m	86.3	87.2	88.1	88.1	88.0	88.0	88.1
£300m or greater	86.2	87.4	88.2	88.1	88.0	88.1	88.1
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	86.7	87.6	88.0	87.8	88.0	87.9	87.8
25% to less than 50%	86.4	87.2	87.9	87.7	87.8	87.9	87.7
50% to less than 75%	86.4	87.3	87.9	87.8	87.9	87.9	87.8
75% or greater	87.3	87.7	88.5	88.2	88.4	88.4	88.2

	Tranche (Years)						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (Strong)	–	–	88.1	88.0	88.0	88.3	88.0
Covenant Group 2 (Tending to strong)	–	–	87.9	87.8	87.9	87.9	87.8
Covenant Group 3 (Tending to weak)	–	–	87.9	87.7	87.8	87.9	87.7
Covenant Group 4 (Weak)	–	–	87.8	87.5	87.9	87.8	87.5
TPs for active members							
TPs reported for active members	86.5	87.4	88.0	87.8	87.9	87.9	87.8
TPs not reported for active members	86.6	87.4	87.9	87.7	87.9	87.9	87.7
Return-seeking assets							
Less than 20%	86.9	87.6	88.1	88.0	87.8	88.0	88.0
20% to less than 40%	86.6	87.7	88.1	87.9	88.1	88.1	87.9
40% to less than 60%	86.6	87.5	88.0	87.8	87.9	88.0	87.8
60% to less than 80%	86.6	87.3	87.8	87.6	87.8	87.8	87.6
80% or greater	86.3	87.2	87.7	87.7	87.6	87.8	87.7
Presence of contingent assets							
No contingent asset	–	87.4	87.9	87.8	87.9	87.9	87.8
At least one contingent asset	–	87.2	87.9	87.8	88.0	87.9	87.8
RP length							
Fewer than 5 years	86.7	87.5	88.1	87.9	88.1	88.2	87.9
5 to fewer than 7.5 years	86.6	87.4	88.0	87.8	87.9	87.9	87.8
7.5 to fewer than 10 years	86.6	87.3	87.9	87.8	87.8	87.8	87.8
10 years or more	86.6	87.2	87.8	87.5	87.7	87.7	87.5

	Tranche (Years)						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	86.9	87.4	87.8	87.7	87.8	87.9	87.7
70% to less than 80%	86.7	87.3	87.9	87.7	87.9	87.8	87.7
80% to less than 90%	86.5	87.4	87.9	87.7	87.9	88.1	87.7
90% to less than 100%	86.4	87.4	88.0	87.9	88.0	88.0	87.9
100% or greater	86.4	87.6	88.0	87.9	87.8	87.8	87.9
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	87.6	87.5	87.7	87.7	87.5
90% to less than 95%	–	–	88.0	87.7	87.9	88.0	87.7
95% to less than 100%	–	–	88.0	87.8	88.0	87.9	87.8
100% to less than 105%	–	–	88.1	87.9	88.1	88.2	87.9
105% or greater	–	–	88.3	88.1	88.0	87.9	88.1
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	87.6	87.5	87.7	87.7	87.5
90% to less than 95%	–	–	88.0	87.7	87.9	88.0	87.7
95% to less than 100%	–	–	88.0	87.8	87.9	87.9	87.8
100% to less than 105%	–	–	88.1	87.8	88.0	88.1	87.8
105% or greater	–	–	88.3	88.1	88.0	87.9	88.1

	Tranche (Years)						
	2	5	8	11	9	10	11
Employer industry classification							
Agricultural production	86.7	87.3	88.0	87.7	88.0	87.8	87.7
Communications	87.0	87.8	88.3	88.0	87.7	88.0	88.0
Construction	86.6	87.5	87.9	87.8	87.7	87.7	87.8
Finance, insurance and real estate	86.7	87.7	88.3	88.2	88.3	88.3	88.2
Manufacturing	86.4	87.2	87.7	87.6	87.7	87.8	87.6
Mining	85.0	85.9	87.3	87.6	88.0	88.3	87.6
Non-classifiable establishments	86.6	88.2	88.4	86.6	88.1	87.9	86.6
Public administration	86.0	87.3	88.4	87.6	87.6	88.3	87.6
Retail trade	86.5	87.5	87.9	87.7	87.8	88.1	87.7
Services	86.6	87.5	88.0	87.8	88.0	87.9	87.8
Transportation	86.3	87.1	87.7	87.5	87.5	87.8	87.5
Unknown	86.7	88.3	88.7	87.8	85.9	88.2	87.8
Utilities	86.1	87.1	88.0	88.1	88.0	88.3	88.1
Wholesale trade	86.5	87.3	87.8	87.6	87.8	87.9	87.6

	Tranche (Years)						
	2	5	8	11	9	10	11
Employer geographical area							
East Anglia	86.5	87.5	88.0	87.8	87.9	88.0	87.8
East Midlands	86.5	87.3	87.8	87.7	87.7	87.9	87.7
London	86.8	87.8	88.4	88.2	88.2	88.2	88.2
North East England	86.1	86.9	87.5	87.3	87.5	87.5	87.3
North West England	86.3	87.1	87.6	87.4	87.6	87.6	87.4
Northern Ireland	86.2	86.7	87.6	87.5	87.5	87.9	87.5
Scotland	86.0	87.3	87.6	87.6	87.6	87.5	87.6
South East England	86.7	87.4	88.0	87.9	88.0	88.0	87.9
South West England	86.6	87.5	87.8	87.8	88.0	87.9	87.8
Wales	87.1	87.7	87.6	87.3	87.1	87.5	87.3
West Midlands	86.4	87.0	87.6	87.5	87.7	88.0	87.5

	Tranche (Years)						
	2	5	8	11	9	10	11
Future male pensioners aged 45							
Mean	87.9	89.5	89.9	90.0	90.0	90.1	89.9
Size by number of members							
Fewer than 100 members	87.9	89.7	90.2	89.9	90.2	90.0	89.9
100 to fewer than 500 members	87.9	89.3	89.9	89.8	90.0	90.0	89.8
500 to fewer than 1,000 members	88.0	89.2	90.0	90.1	90.1	90.1	90.1
1,000 to fewer than 5,000 members	87.8	89.3	90.1	90.0	89.9	90.0	90.0
5,000 members or more	87.7	89.4	90.1	90.1	90.1	90.1	90.1
Size by TPs							
Less than £5m	87.8	89.6	90.2	89.8	89.9	89.8	89.8
£5m to less than £20m	87.8	89.4	89.9	89.7	89.9	90.0	89.7
£20m to less than £100m	88.1	89.4	90.0	89.9	90.2	90.1	89.9
£100m to less than £300m	87.8	89.3	90.2	90.2	90.2	90.2	90.2
£300m or greater	87.9	89.6	90.3	90.2	90.2	90.2	90.2
Maturity (ratio of pensioner TPs to total TPs)							
Less than 25%	87.9	89.6	90.1	90.0	90.2	90.0	90.0
25% to less than 50%	87.8	89.3	90.0	89.8	89.9	90.0	89.8
50% to less than 75%	87.8	89.4	90.0	89.9	90.1	90.0	89.9
75% or greater	89.1	89.8	90.6	90.5	90.6	90.5	90.5

	Tranche (Years)						
	2	5	8	11	9	10	11
Covenant (schemes in deficit only)							
Covenant Group 1 (Strong)	–	–	90.2	90.2	90.3	90.5	90.2
Covenant Group 2 (Tending to strong)	–	–	90.0	89.9	90.1	90.0	89.9
Covenant Group 3 (Tending to weak)	–	–	90.0	89.8	89.9	90.0	89.8
Covenant Group 4 (Weak)	–	–	90.0	89.7	90.0	89.9	89.7
TPs for active members							
TPs reported for active members	87.9	89.5	90.1	90.0	90.0	90.1	90.0
TPs not reported for active members	87.9	89.5	90.0	89.9	90.1	90.1	89.9
Return-seeking assets							
Less than 20%	88.2	89.7	90.2	90.2	89.9	90.0	90.2
20% to less than 40%	88.0	89.8	90.3	90.1	90.2	90.2	90.1
40% to less than 60%	88.0	89.6	90.2	89.9	90.1	90.1	89.9
60% to less than 80%	87.9	89.4	89.9	89.7	90.0	90.0	89.7
80% or greater	87.6	89.2	89.8	89.8	89.8	89.9	89.8
Presence of contingent assets							
No contingent asset	–	89.5	90.1	89.9	90.0	90.1	89.9
At least one contingent asset	–	89.3	90.0	90.0	90.2	90.0	90.0
RP length							
Fewer than 5 years	88.1	89.6	90.2	90.0	90.3	90.3	90.0
5 to fewer than 7.5 years	88.0	89.6	90.1	89.9	90.1	90.1	89.9
7.5 to fewer than 10 years	87.9	89.4	90.0	90.0	90.0	89.9	90.0
10 years or more	87.9	89.2	89.9	89.6	89.8	89.9	89.6

	Tranche (Years)						
	2	5	8	11	9	10	11
Funding level (TPs)							
Less than 70%	88.2	89.5	90.0	89.8	90.0	90.0	89.8
70% to less than 80%	88.0	89.4	90.0	89.8	90.0	89.9	89.8
80% to less than 90%	87.8	89.5	90.1	89.9	90.0	90.2	89.9
90% to less than 100%	87.7	89.5	90.1	90.0	90.2	90.1	90.0
100% or greater	87.8	89.6	90.1	90.0	89.9	90.0	90.0
PPF Standard stressed/Unstressed asset ratio							
Less than 90%	–	–	89.7	89.6	89.8	89.8	89.6
90% to less than 95%	–	–	90.2	89.8	90.1	90.2	89.8
95% to less than 100%	–	–	90.1	90.0	90.2	90.0	90.0
100% to less than 105%	–	–	90.2	90.0	90.2	90.3	90.0
105% or greater	–	–	90.3	90.3	90.1	89.9	90.3
PPF Combined stressed/Unstressed asset ratio							
Less than 90%	–	–	89.8	89.6	89.8	89.8	89.6
90% to less than 95%	–	–	90.2	89.8	90.1	90.2	89.8
95% to less than 100%	–	–	90.1	90.0	90.1	90.0	90.0
100% to less than 105%	–	–	90.2	90.0	90.2	90.3	90.0
105% or greater	–	–	90.3	90.2	90.1	90.0	90.2

	Tranche (Years)						
	2	5	8	11	9	10	11
Employer industry classification							
Agricultural production	87.9	89.3	90.5	90.0	90.2	89.7	90.0
Communications	89.0	90.1	90.1	89.9	89.7	90.1	89.9
Construction	87.9	89.4	90.0	90.0	89.7	89.7	90.0
Finance, insurance and real estate	88.2	89.8	90.4	90.3	90.5	90.5	90.3
Manufacturing	87.7	89.4	89.8	89.7	89.9	89.9	89.7
Mining	86.2	88.0	89.4	89.6	90.3	90.5	89.6
Non-classifiable establishments	88.4	90.2	90.6	88.7	91.2	90.1	88.7
Public administration	87.4	89.2	90.2	89.5	89.6	90.5	89.5
Retail trade	87.8	89.3	90.0	89.8	90.0	90.3	89.8
Services	87.9	89.6	90.1	89.9	90.1	89.9	89.9
Transportation	87.7	89.1	89.8	89.7	89.7	89.9	89.7
Unknown	88.2	90.6	90.9	89.9	87.7	90.1	89.9
Utilities	87.5	89.2	90.2	90.1	90.2	90.4	90.1
Wholesale trade	87.8	89.3	89.8	89.7	90.0	90.1	89.7

	Tranche (Years)						
	2	5	8	11	9	10	11
Employer geographical area							
East Anglia	87.8	89.7	90.3	90.0	90.1	90.2	90.0
East Midlands	87.8	89.4	89.9	89.9	89.8	90.0	89.9
London	88.2	89.9	90.6	90.4	90.4	90.3	90.4
North East England	87.5	88.9	89.5	89.4	89.6	89.6	89.4
North West England	87.6	89.2	89.7	89.6	89.8	89.7	89.6
Northern Ireland	87.3	88.8	89.6	89.6	89.5	90.0	89.6
Scotland	87.2	89.1	89.7	89.7	89.6	89.6	89.7
South East England	88.1	89.5	90.2	90.0	90.2	90.2	90.0
South West England	88.0	89.6	90.0	89.9	90.2	90.0	89.9
Wales	88.5	89.7	89.7	89.5	89.3	89.5	89.5
West Midlands	87.8	89.1	89.7	89.6	89.9	90.1	89.6

Table 6.3 Average change in life expectancies for current male pensioners aged 65 by scheme characteristics Tranche 8 versus Tranche 11 (surplus and deficit schemes)

	Change in assumed age at death (years)	Percentage of schemes
Mean	-0.13	100
Size by number of members		
Fewer than 100 members	-0.19	34
100 to fewer than 500 members	-0.11	35
500 to fewer than 1,000 members	-0.04	11
1,000 to fewer than 5,000 members	-0.12	13
5,000 members or more	-0.12	7
Size by TPs		
Less than £5m	-0.22	19
£5m to less than £20m	-0.12	27
£20m to less than £100m	-0.11	30
£100m to less than £300m	-0.09	12
£300m or greater	-0.12	13
Maturity (ratio of pensioner TPs to total TPs)		
Less than 25%	-0.22	23
25% to less than 50%	-0.12	45
50% to less than 75%	-0.08	27
75% or greater	-0.06	4
Covenant (schemes in deficit only)		
Covenant Group 1 (Strong)	-0.10	11
Covenant Group 2 (Tending to strong)	-0.11	48
Covenant Group 3 (Tending to weak)	-0.11	28
Covenant Group 4 (Weak)	-0.23	13

	Change in assumed age at death (years)	Percentage of schemes
TPs for active members		
TPs reported for active members	-0.14	43
TPs not reported for active members	-0.12	57
Return-seeking assets		
Less than 20%	-0.20	13
20% to less than 40%	-0.12	21
40% to less than 60%	-0.12	38
60% to less than 80%	-0.11	23
80% or greater	-0.16	4
Presence of contingent assets		
No contingent asset	-0.14	81
At least one contingent asset	-0.10	19
RP length		
Fewer than 5 years	-0.18	34
5 to fewer than 7.5 years	-0.13	19
7.5 to fewer than 10 years	-0.08	21
10 years or more	-0.10	26

	Change in assumed age at death (years)	Percentage of schemes
Funding level (TPs)		
Less than 70%	-0.02	13
70% to less than 80%	-0.07	17
80% to less than 90%	-0.13	28
90% to less than 100%	-0.19	25
100% or greater	-0.19	17
PPF Standard stressed/Unstressed asset ratio		
Less than 90%	-0.09	17
90% to less than 95%	-0.19	29
95% to less than 100%	-0.10	26
100% to less than 105%	-0.10	16
105% or greater	-0.18	12
PPF Combined stressed/Unstressed asset ratio		
Less than 90%	-0.09	17
90% to less than 95%	-0.20	27
95% to less than 100%	-0.10	22
100% to less than 105%	-0.09	16
105% or greater	-0.15	18

	Change in assumed age at death (years)	Percentage of schemes
Employer industry classification		
Agricultural production	-0.14	1
Communications	-0.20	1
Construction	-0.07	2
Finance, insurance and real estate	-0.12	18
Manufacturing	-0.13	26
Mining	0.10	1
Public administration	-0.73	1
Retail Trade	-0.18	6
Services	-0.16	27
Transportation	-0.14	5
Unknown	0.10	0
Utilities	-0.03	2
Wholesale trade	-0.04	10

	Change in assumed age at death (years)	Percentage of schemes
Employer geographical area		
East Anglia	-0.21	10
East Midlands	-0.07	5
London	-0.17	23
North East England	-0.13	11
North West England	-0.16	10
Northern Ireland	-0.12	2
Scotland	-0.04	5
South East England	-0.13	16
South West England	-0.07	6
Wales	-0.18	2
West Midlands	-0.02	8

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 may be used as the solvency estimate as part of the actuarial valuation for a scheme in wind-up. 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 the term 'buyout' is used. In a small number of cases, an alternative measure of solvency is submitted to the regulator, 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_2016, was published in March 2017.

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'

Where separate discount rates are reported in respect of pre-retirement and post-retirement benefits in the valuation of liabilities. (See also 'Single rates').

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. (See also 'Single rates', 'Different rates').

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 pension liabilities, 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.

PPF Stressed Asset Ratio

The ratio of the stressed value of assets (as per the PPF's standard stress approach) to the unstressed market value of assets. The standard approach is carried out by the PPF on behalf of schemes that are not required to and do not opt to carry out a bespoke stress. The stressed assets value is used as a measure of investment risk for the PPF levy calculations.

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 an 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.

SAPs base mortality tables (includes 'S1' and 'S2' series)

Based on mortality experience of UK self-administered pension schemes. In October 2008, the CMI published the 'S1' Series; the first mortality tables to be based on UK pension scheme data

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 and made up of constituents of the different rates reported, allowing approximately for the maturity of schemes. This approach is also used to normalise bases where the discount rate varies year-on-year. Please see the 'Methodology' section of this document for greater detail.

Single rates

Where a single discount rate has been reported in respect of the valuation of pre-retirement and post-retirement liabilities. (See also 'Different rates'.)

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 (TPR)

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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Scheme funding statistics

Annex

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