Scheme funding statistics

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

June 2016

The Pensions Regulator

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Overview

This is the 2016 update to the regulator's annual funding statistics for UK defined benefit (DB) and hybrid schemes. The tables in the appendix are prepared in accordance with the UK Code of Practice for Official Statistics[1]. The underlying data are sourced from valuations and recovery plans (RPs) submitted to the regulator by schemes with deficit positions, and from annual scheme returns for schemes with surplus positions.

The update is based on Tranche 9 schemes (with effective valuation dates falling from 22 September 2013 to 21 September 2014 inclusive). These valuations (with due dates for receipt falling within the period December 2014 to December 2015) bring to a close the third triennial cycle of the scheme funding regime.

The update shows funding trends in the context of market conditions, assumptions and scheme characteristics that impact on valuations. It also describes existing arrangements for recovery plans, employer deficit repair contributions (DRCs) and contingent security.

Data summaries (tables) in the appendix provide more detail on the high-level trends presented in this document.

Tranche 9 summary

By end-January 2016, the regulator had received over 1,800 valuations with an effective valuation date for Tranche 9. Of schemes submitting these valuations, 86% had previously submitted valuations in respect of Tranche 6 and Tranche 3. Over one fifth of Tranche 9 schemes analysed reported a surplus of assets over technical provisions (TPs).

As was anticipated in the analysis underpinning the regulator's 2014 Annual Funding Statement[2], deficits are higher for Tranche 9 relative to Tranche 6. However, due to assets and liabilities growing by approximately the same proportion between Tranche 6 and 9 valuation dates, the average[3] funding ratio on a TPs basis is relatively unchanged. Deficit repair contributions are higher for Tranche 9 in nominal terms while half of schemes extended recovery plans by less than two years with half reporting recovery plans of seven years or less.

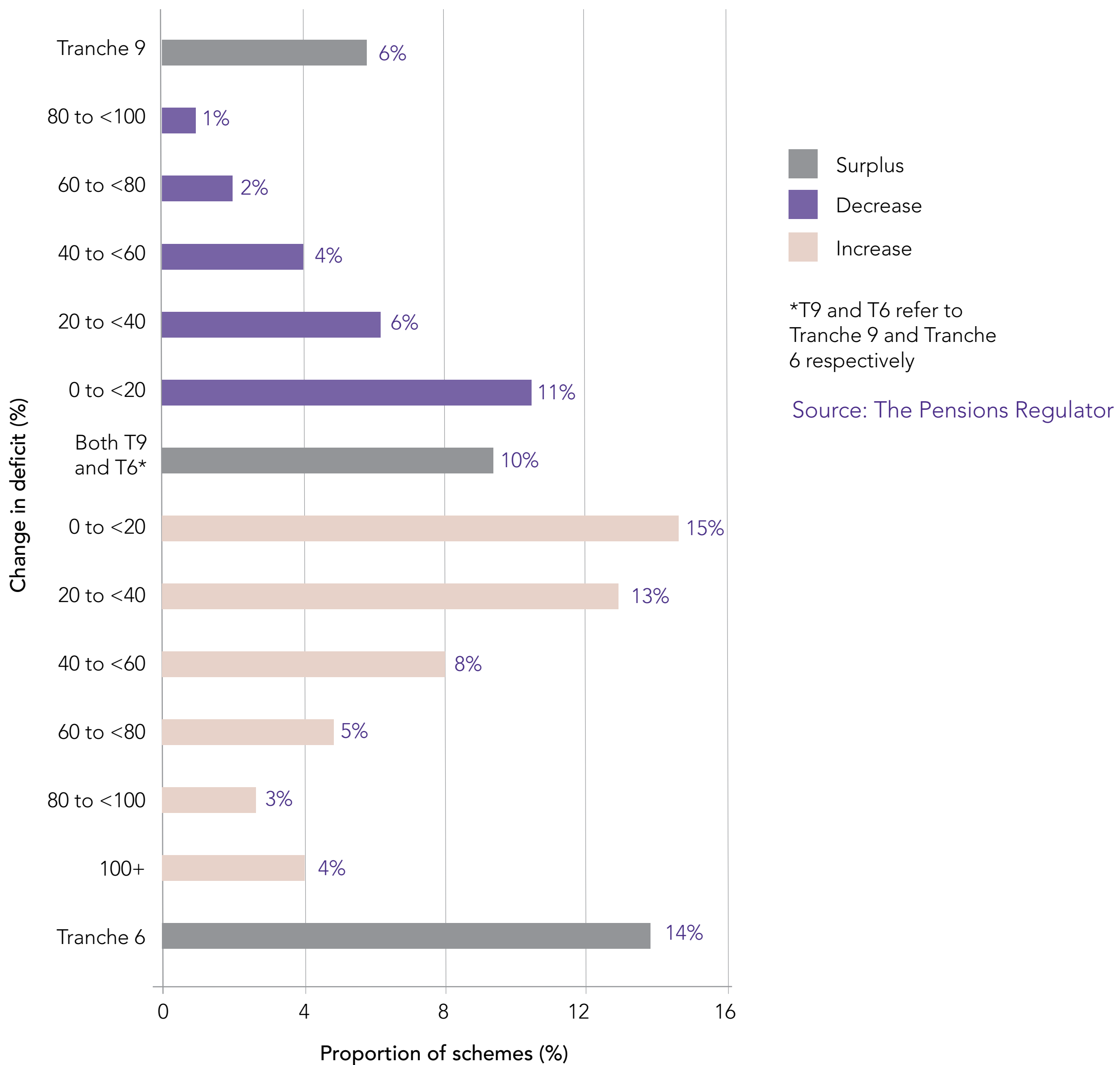
1
http://bit.ly/CoPStat

2
www.tpr.gov.uk/forward2014

3
Averages are unweighted unless stated otherwise.

Figure 1 illustrates the distribution of changes in deficits measured on a broadly consistent 'reference'[4] basis faced by Tranche 9 schemes that previously submitted Tranche 6 valuations. Around 40% of schemes with valuations in both Tranche 6 and 9 have seen a reduction in their deficit calculated on a reference basis or have remained or moved into surplus.

Figure 1: Distribution of percentage change in deficit calculated on a reference basis

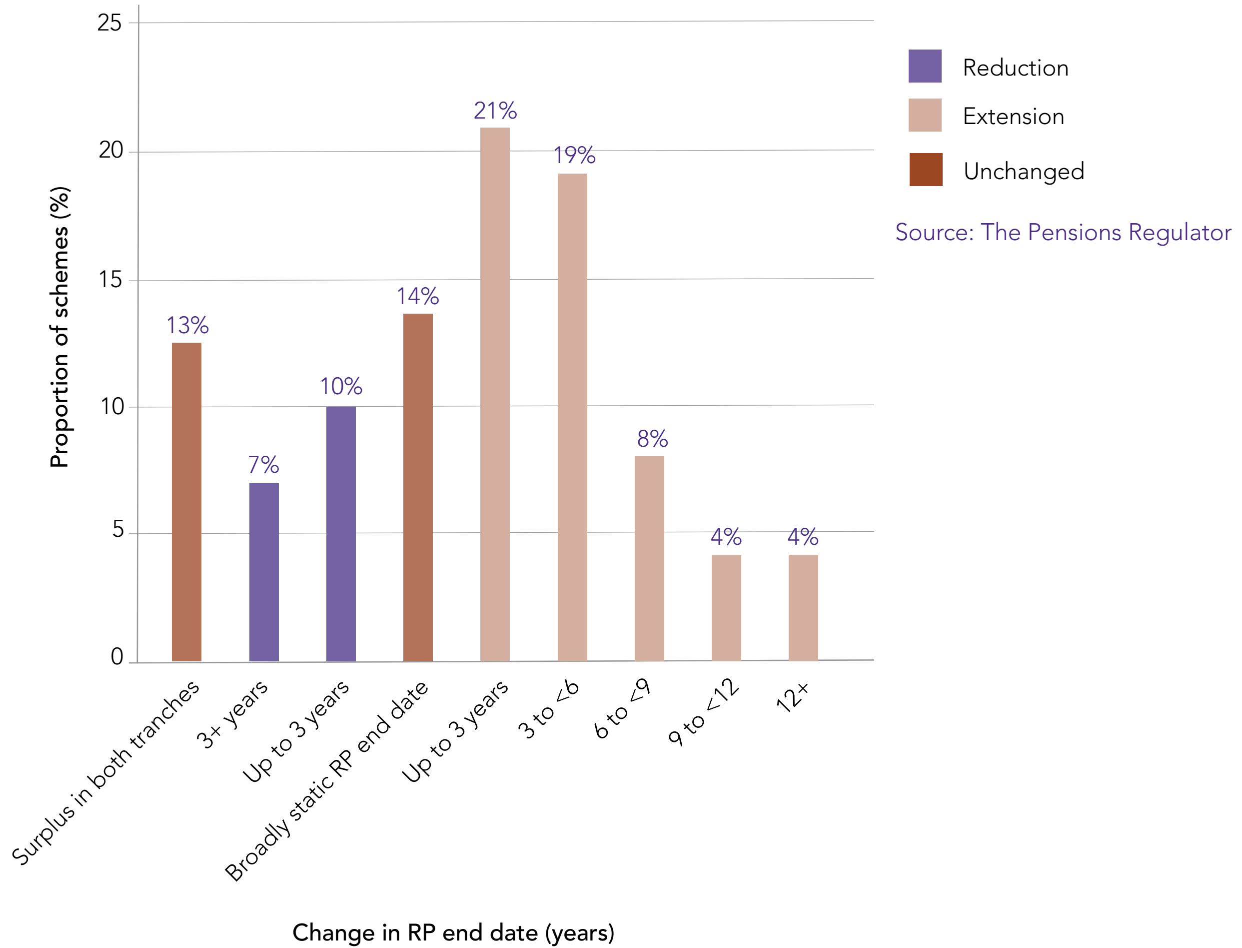


Source: The Pensions Regulator

4 For comparability, liabilities are estimated using gilts with an excess return of 50 basis points.

Figure 2 shows the distribution of changes to RP end dates for Tranche 9 schemes that had previously submitted Tranche 6 RPs. Nearly a third of schemes have brought forward their RP plan end dates or left them unchanged, while just over a third have extended their RP end dates by more than three years.

Figure 2: Distribution of changes to RP end dates



Source: The Pensions Regulator

Key figures

- 88.9%: average ratio of assets to TPs for schemes in deficit and surplus
- 108.7%: average ratio of assets to TPs for schemes in surplus
- 83.6%: average ratio of assets to TPs for schemes in deficit
- 4.48%: average nominal single effective discount rate (SEDR) for schemes in deficit and surplus; with 50% of assumptions falling on or between 4.15% and 4.80%
- 1.06%: average real SEDR for schemes in deficit and surplus; with 50% of assumptions falling on or between 0.68% and 1.39%
- 87.7/89.9 years: median life expectancy of a current male/female pensioner aged 65 for schemes in deficit and surplus.
- 89.9/92.1 years: median life expectancy of a future male/female pensioner currently aged 45 for schemes in deficit and surplus
- 8.0 years: average RP length for schemes in deficit

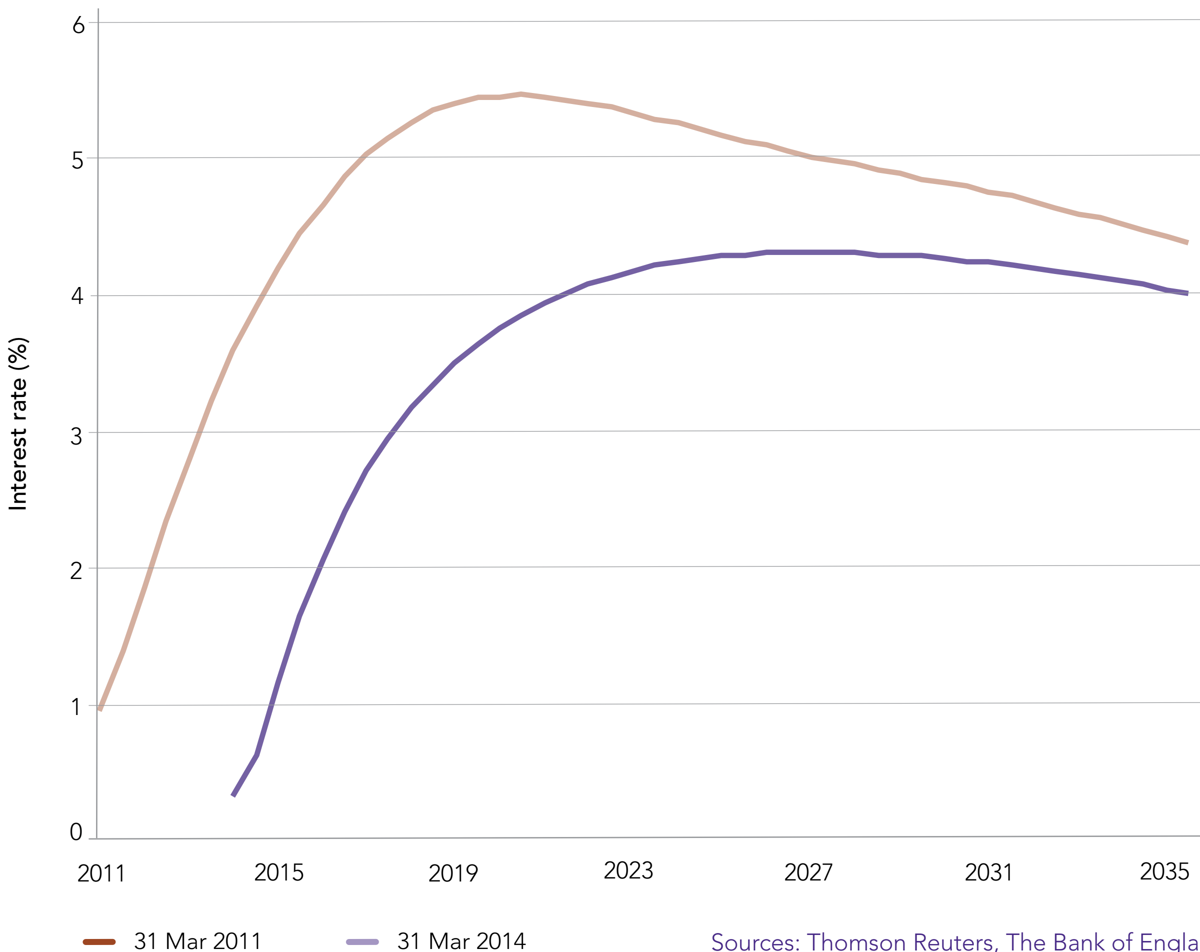
Market conditions

In the three years to 31 March 2014 (the effective date of many Tranche 9 valuations), the UK economy experienced modest recovery such that growth in the early part of 2014 was higher than that at the start of 2011. Equity markets also generally rose during this time and at the end of March 2014 the FTSE All-Share Index was 15.6% above its level three years earlier.

During the same period, yields on corporate and government bonds declined overall, with index-linked gilts showing negative yields while estimates of market expectations for future interest rates were revised downward.

Figure 3 shows market expectations for interest rates as estimated by the Bank of England. Compared to March 2011, forward interest rates at the end of March 2014 show an expectation for lower yields over the horizon depicted.

Figure 3: UK instantaneous nominal forward curve



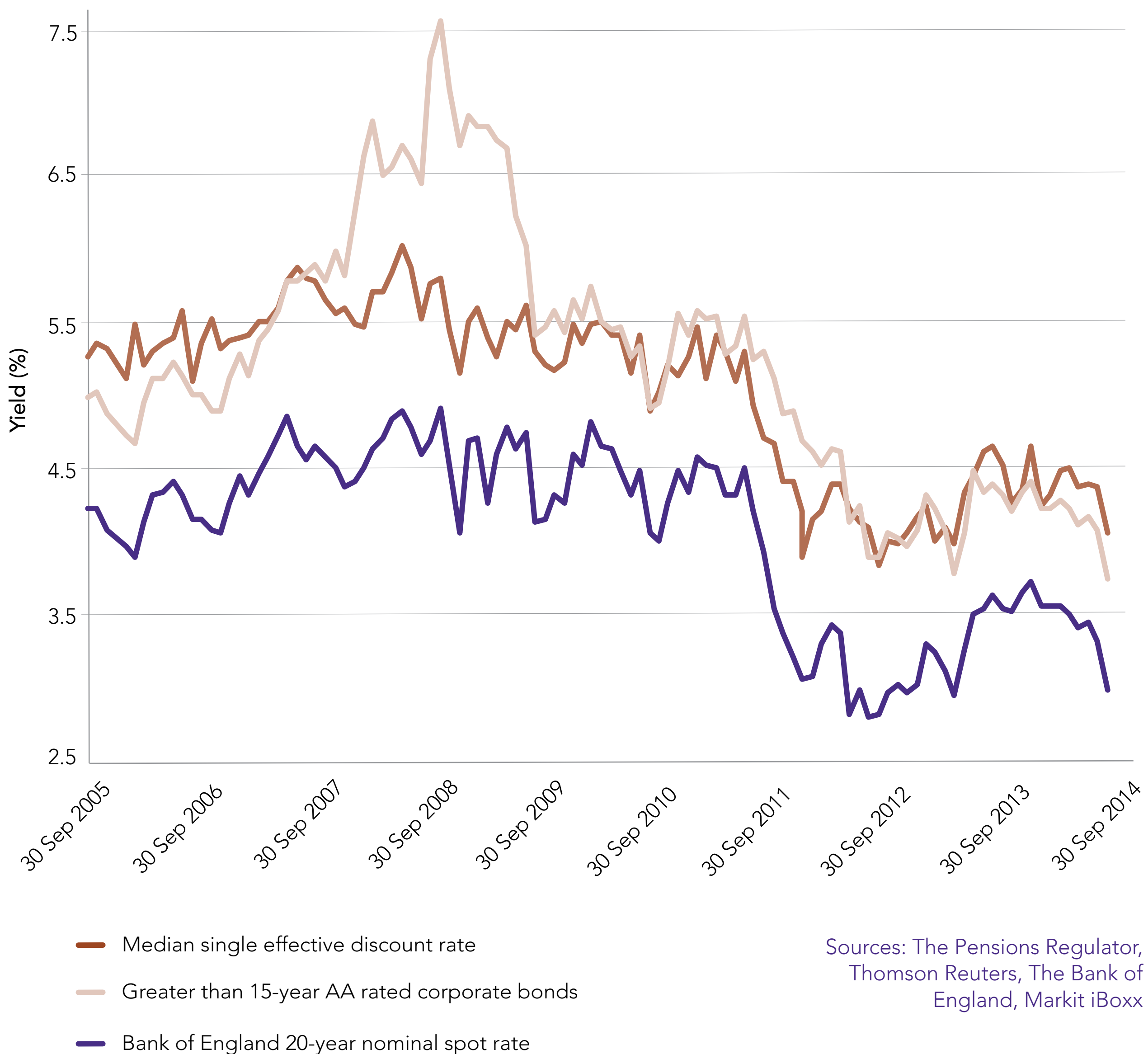
Sources: Thomson Reuters, The Bank of England

Discount rates

The impact of market expectations in 2014 on Tranche 9 valuations will be reflected in the TPs discount rate assumption. Figure 4 shows the median SEDR relative to 20-year UK gilts and greater than 15-year AA rated corporate bonds (schemes in deficit in Tranches 1 to 7 and for all schemes in Tranche 8 and 9).

Although the 20-year nominal spot rate generally declined over the inter-valuation period with its lowest point in September 2012, it remained relatively stable from month to month during the Tranche 9 valuation period. On 31 December 2013 and 31 March 2014 (the two most common valuation dates) the 20-year spot rate is 3.73% and 3.55% respectively, while the corresponding median SEDR for valuations is 4.68% and 4.48% respectively.

Figure 4: Median (nominal) SEDR, Bank of England 20-year nominal spot rates, greater than 15-year AA rated corporate bonds



Sources: The Pensions Regulator, Thomson Reuters, The Bank of England, Markit iBoxx

The average real SEDR is 1.06% in Tranche 9 compared to 1.73% in Tranche 6 (Table 4.2, appendix). It is generally higher for schemes with a greater proportion of scheme assets invested in return-seeking asset classes.

The average assumed return over gilts is slightly higher for Tranche 9, compared to Tranche 6. The average outperformance of the real SEDR over the 20-year real government spot rate is 1.03% for Tranche 9, compared to 0.99% for Tranche 6 (Table 4.2, appendix).

Life expectancies and mortality assumptions

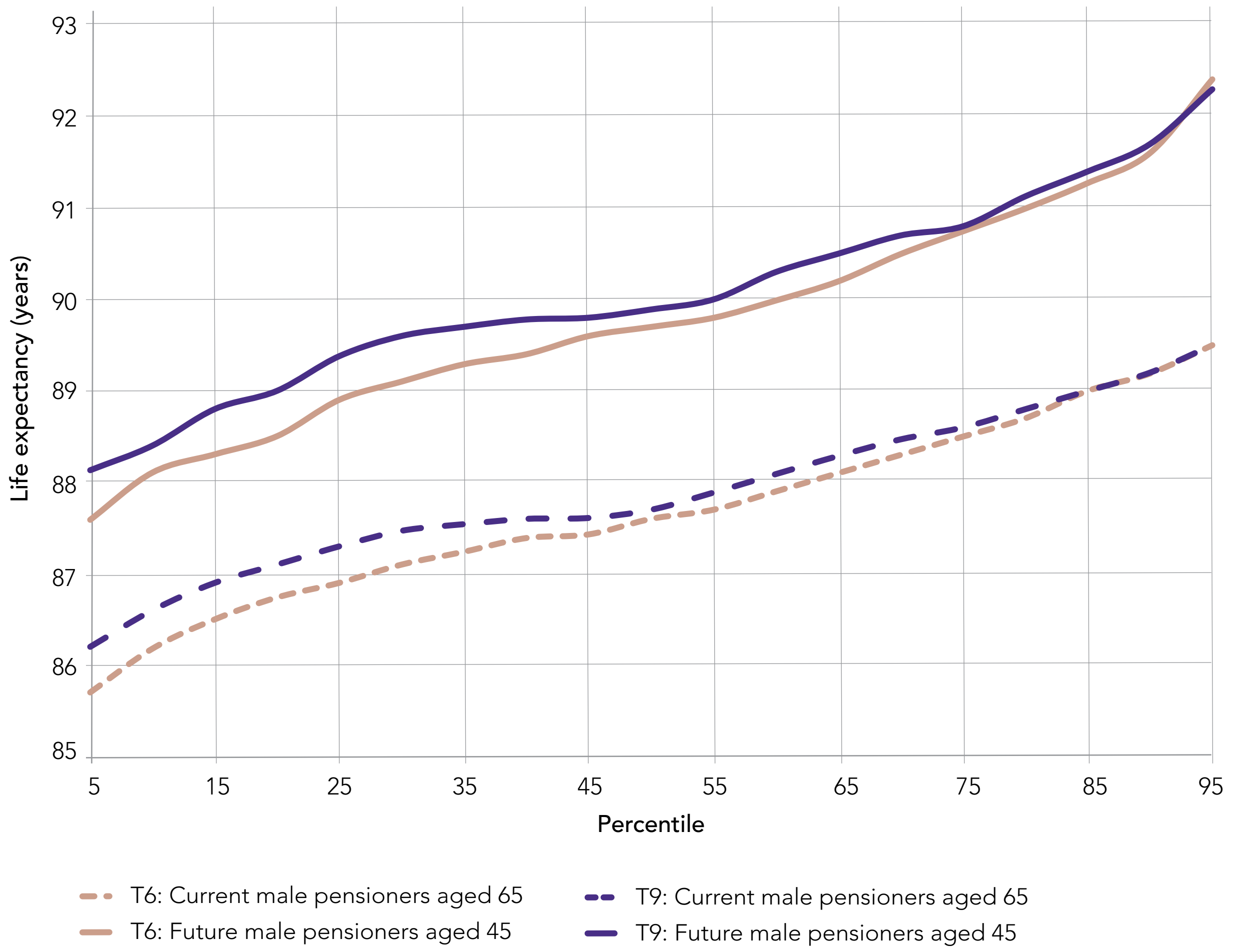
For some schemes, higher life expectancy assumptions may add to the growth in TPs between tranches, where assumptions are higher than previously expected. Tranche 9 mortality assumptions reflect the widespread adoption of more recently released life tables and projections compared to those used for valuations in the first valuation cycle of scheme specific funding.

While a significant shift in assumptions took place between Tranche 3 and 6 valuations, Tranche 9 average assumptions appear relatively unchanged compared to Tranche 6 particularly with regard to current pensioners. This could reflect a weakening in mortality as average life expectancies would be expected to increase three years along with the turnover of members aged 65. The average assumed life expectancy for a future male pensioner currently aged 45 is 90.1 years (compared to 89.8 years in Tranche 6). Average assumed life expectancy is 92.1 for a future female pensioner aged 45 (compared to 91.9 years in Tranche 6).

89% of Tranche 9 schemes use the SAPS tables, 56% apply a scaling factor or rating to base tables to adjust for scheme experience, 93% use the continuous mortality investigation (CMI) projection model (first published in 2009) to allow for future improvements, while nearly 80% of schemes assume a long term rate of improvement/underpin of 1.5% or higher. Tranche 9 life expectancy assumptions do not vary much by employer industry or location.

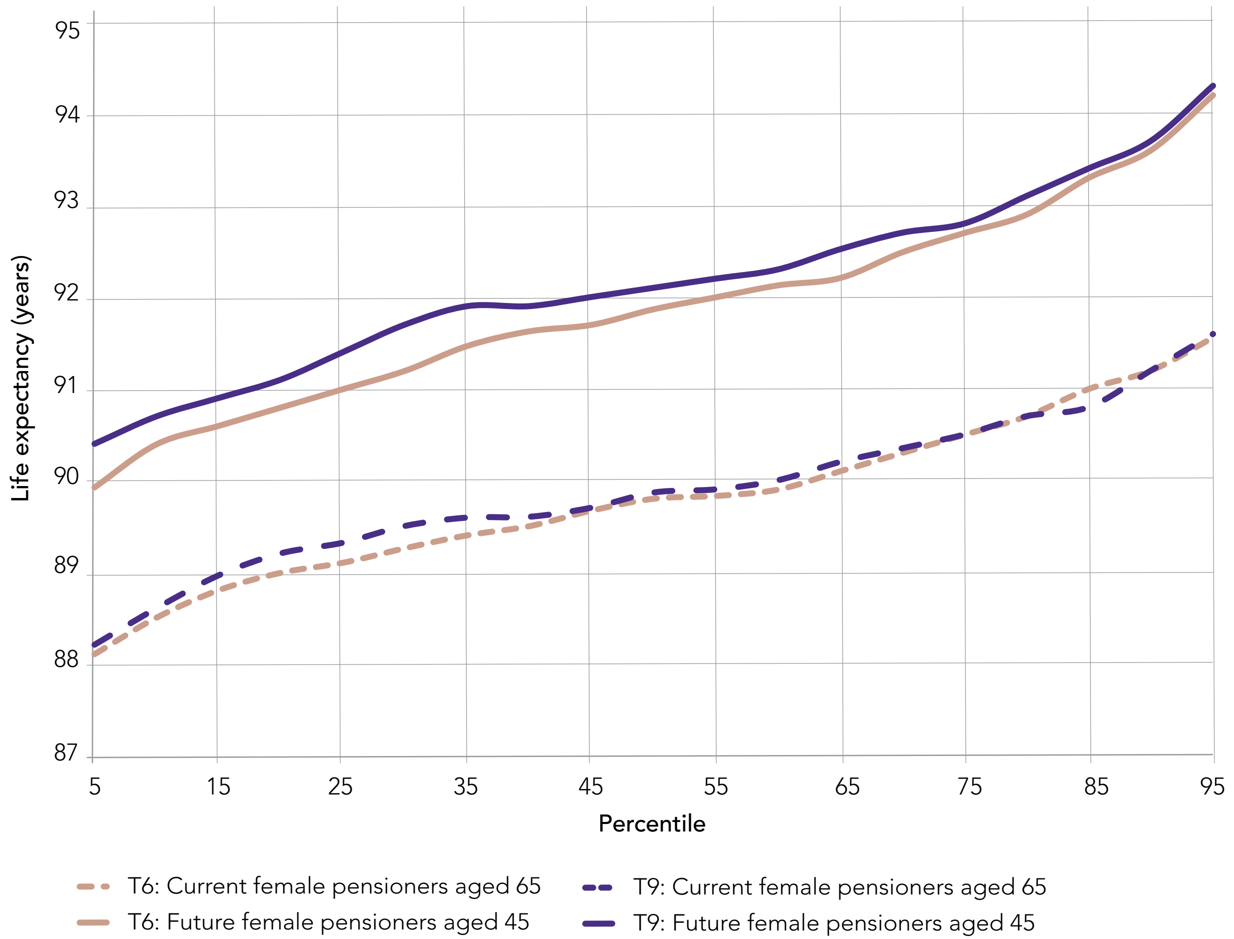
Figures 5(a) and 5(b) show the distribution of assumed life expectancies for future and current pensioners aged 45 and 65 (male and female) respectively, in Tranches 6 and 9. At the median, the assumed life expectancy of a current male pensioner aged 65 for Tranche 6 is 87.6 years, compared to 87.7 years for Tranche 9. The median life expectancy of a current female pensioner aged 65 for Tranche 6 is 89.8 years, compared to 89.9 years for Tranche 9.

Figure 5a: Distribution of life expectancies for future and current male pensioners aged 45 and 65, respectively (Tranches 6 and 9)



Source: The Pensions Regulator

Figure 5b: Distribution of life expectancies for future and current female pensioners aged 45 and 65, respectively (Tranches 6 and 9)



Source: The Pensions Regulator

Scheme indexation and revaluation

Another assumption which will have affected some Tranche 9 valuations is the use of Consumer Price Index (CPI) inflation for pension increases where Retail Price Index (RPI) indexation was previously in use. RPI has historically been higher than CPI and the impact for some schemes would be a reduction (all things remaining equal) in liabilities.

However the actual impact will depend on the extent to which liabilities are linked to inflation and will reflect market expectations at the time of valuations for future RPI and CPI.

For Tranche 9 schemes where increases on pensions in payment and deferment are with reference to prices, the average CPI assumption is 2.7%. This compares to an average RPI assumption of 3.4%.

Funding

Due to the sensitivity of assets and liabilities to market developments over the inter-valuation period, the assets of Tranche 9 schemes have grown as a result of (overall) favourable returns, as well as employer DRCs. Liabilities have also grown due to lower investment return assumptions, and in particular revised (lower) expectations for long dated gilt yields since the Tranche 6 valuation period. A switch from RPI to CPI indexation by some schemes which adopt a full or partial indexation in line with prices approach may have impacted liabilities in the opposite direction, albeit to a lesser extent, as might relatively lower life expectancy assumptions.

For schemes submitting valuations in respect of both Tranche 6 and Tranche 9, the median increase in assets and TPs between valuations is 22% and 20% respectively.

The average ratio of assets to TPs for Tranche 9 is 88.9% (89.0% weighted[5]), relatively unchanged from Tranche 6 due to an increase in assets and liabilities of similar proportion. The ratio is generally higher for schemes:

- that report liabilities in respect of active memberships
- with stronger covenant support[6]
- with assets that are relatively more robust to downside investment risk
- without a contingent asset
- with shorter RPs

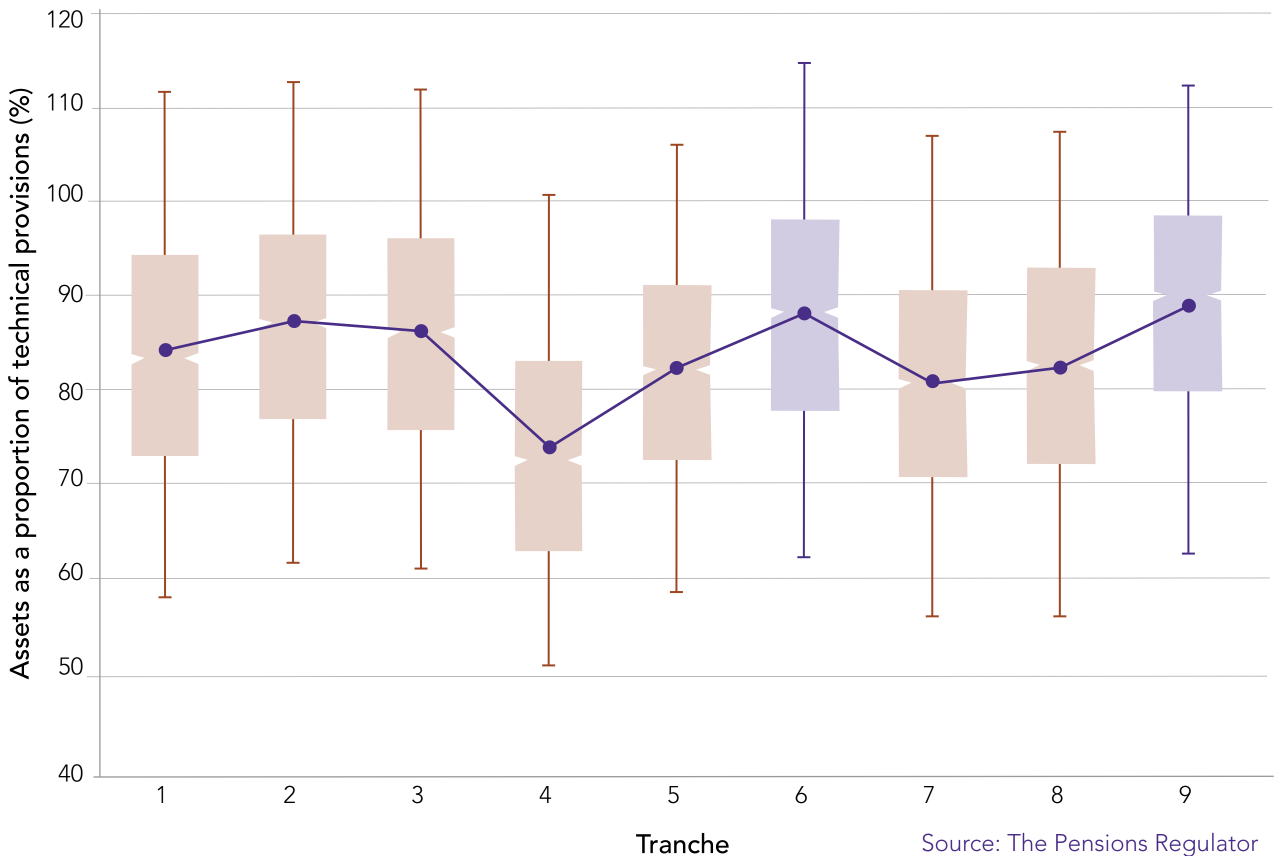
5 Weighted by TPs.

6 Based on Covenant Group.

For schemes in surplus only, the average ratio of assets to TPs is 108.7%.

Figures 6(a)-6(c) below show the distributions for some key funding ratios. The average ratios of assets to liabilities on the s179 and buyout bases, 95.1% and 63.7% (95.4% and 64.3% weighted) respectively, have decreased compared with the corresponding ratios for Tranche 6 (Table 2.1, appendix).

Figure 6a: Ratio of assets to TPs



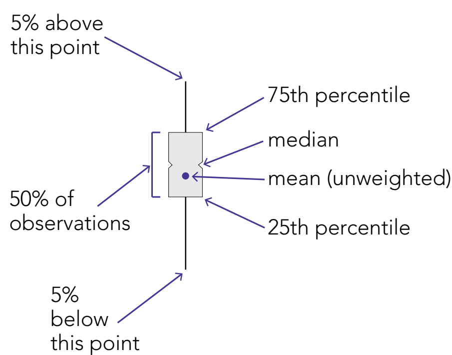
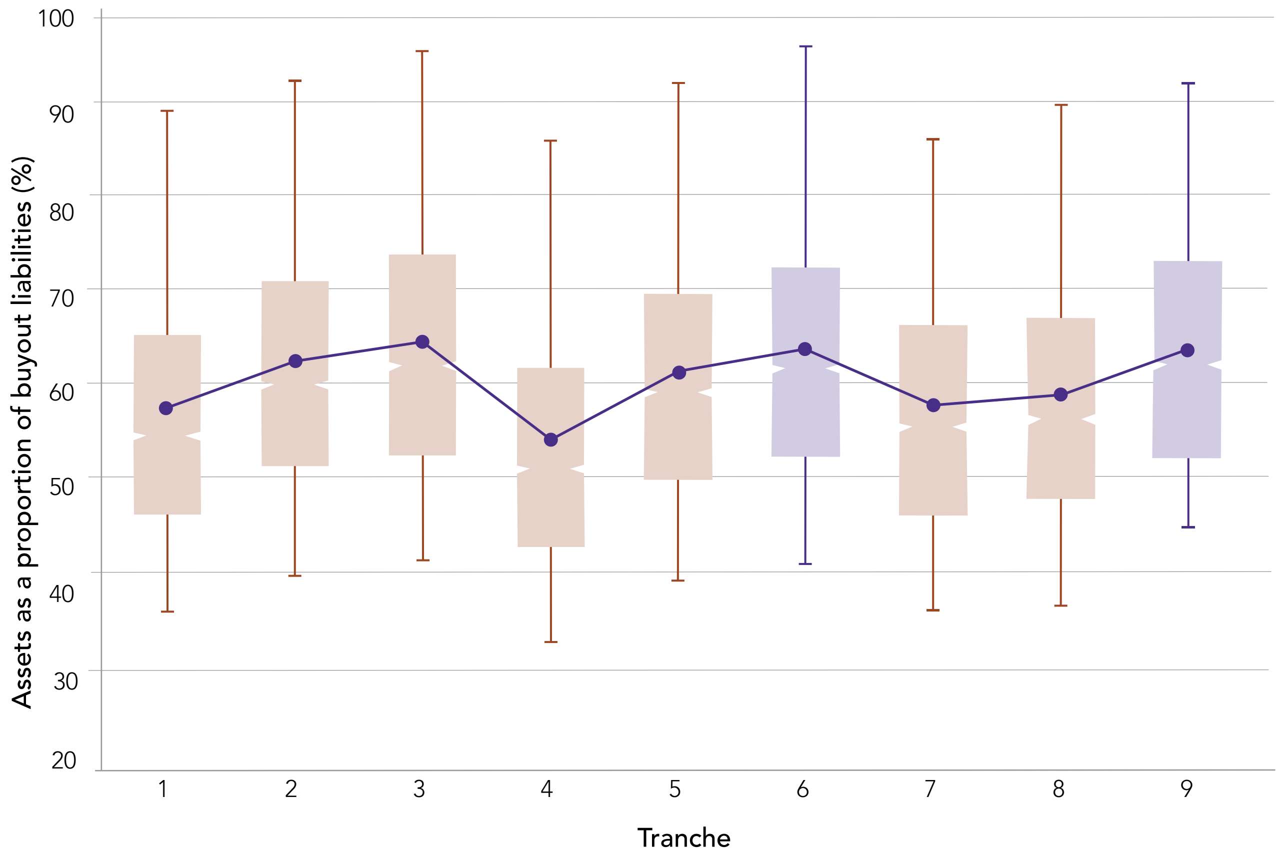
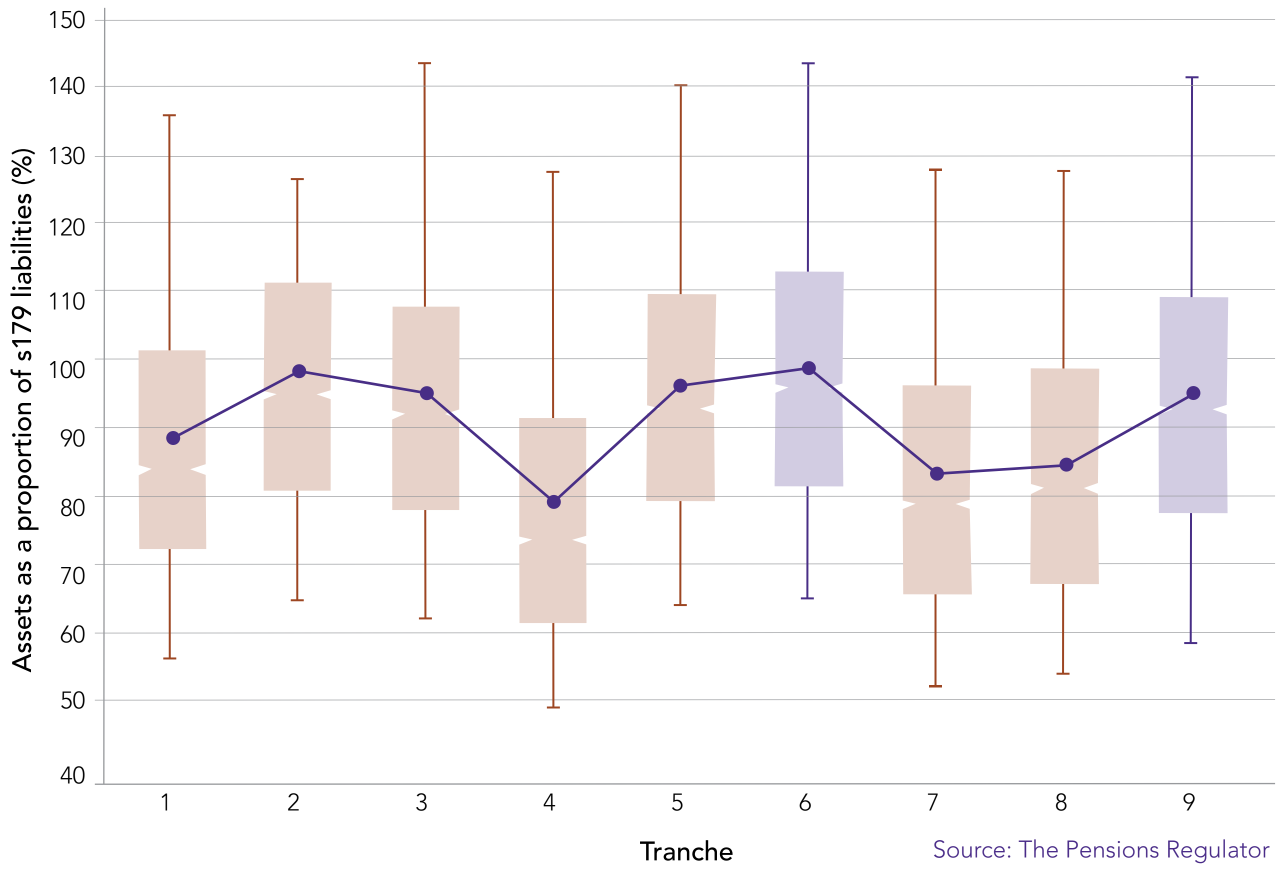


Figure 6b: Ratio of assets to buyout liabilities



Source: The Pensions Regulator

Figure 6c: Ratio of assets to s179 liabilities



Recovery plans

For many schemes, larger deficits have led to extended RPs and/or increased employer DRCs; the latter possibly affected by changes in sponsor affordability, among other factors.

The mean and median RP lengths for Tranche 9 are 8.0 and 7.0 years respectively. Tranche 9 RP end dates exceed those of Tranche 6 by 2.0 years at the median.

Longer plans tend to be associated with schemes:

- with weaker covenant support
- with lower TPs funding levels
- with assets that are relatively less robust to downside investment risk[7]
- with a greater proportion of scheme assets invested in return-seeking assets

(Tables 3.1, 3.3, appendix.)

The analysis for the 2014 annual funding statement estimated that, despite greater pressures on some employers, Tranche 9 deficits would be affordable for the majority.

Average annual DRCs as a proportion of liabilities calculated on a broadly consistent (reference) basis for Tranche 9 schemes is 2.0%, compared to 2.4% for Tranche 6 schemes. For the typical scheme in deficit with valuations in respect of both Tranches 6 and 9, average annual DRCs have increased by 7.4% in nominal terms at the median, while the median increase in liabilities calculated on a reference basis is 20%.

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

- with shorter RPs
- smaller in terms of memberships and TPs
- that do not reporting liabilities in respect of active members
- with lower TPs funding levels

7
As measured by the Pension Protection Fund (PPF) stressed asset ratio.

Contingent security

Over one sixth of Tranche 9 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 (although they may not be recognised as additional security in support of scheme funding).

About 11% of schemes have contingent assets that are formally recognised by the PPF in the calculation of the PPF risk-based levy. Approximately 8% of schemes have contingent assets that are not PPF-certified but are reported as additional security in support of scheme funding.

The presence of contingent assets (PPF-certified or other) is associated with schemes:

- larger in terms of memberships and TPs
- with weaker covenant support
- which do not report liabilities in respect of active members

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