

# Supporting analysis and evidence

Defined benefit annual funding statement 2013

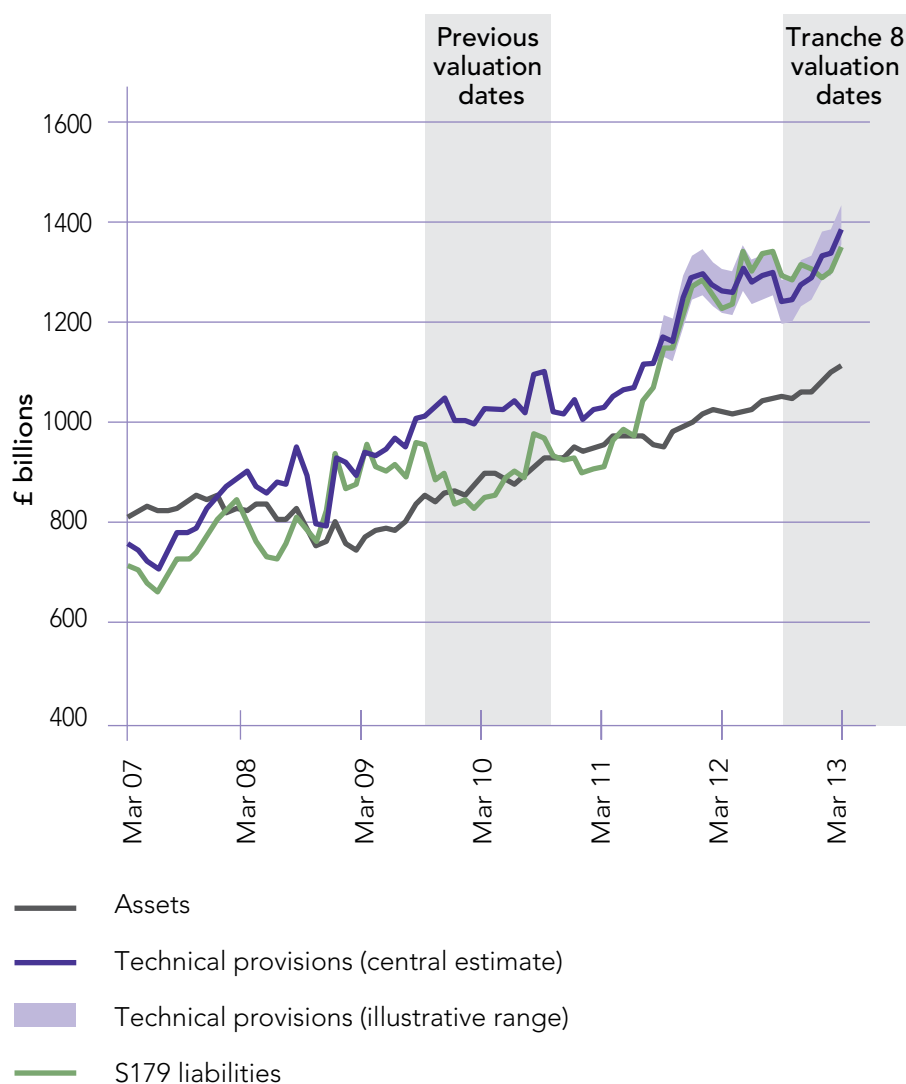


May 2013

The Pensions  
Regulator

# Defined benefit (DB) schemes

## Estimated assets and liability positions of DB pension schemes



Source: PPF, The Pensions Regulator estimates

This is aggregate analysis for schemes in the PPF 7800 Index, based on highly summarised data. It may not be representative of individual schemes whose results will depend on many scheme-specific factors.

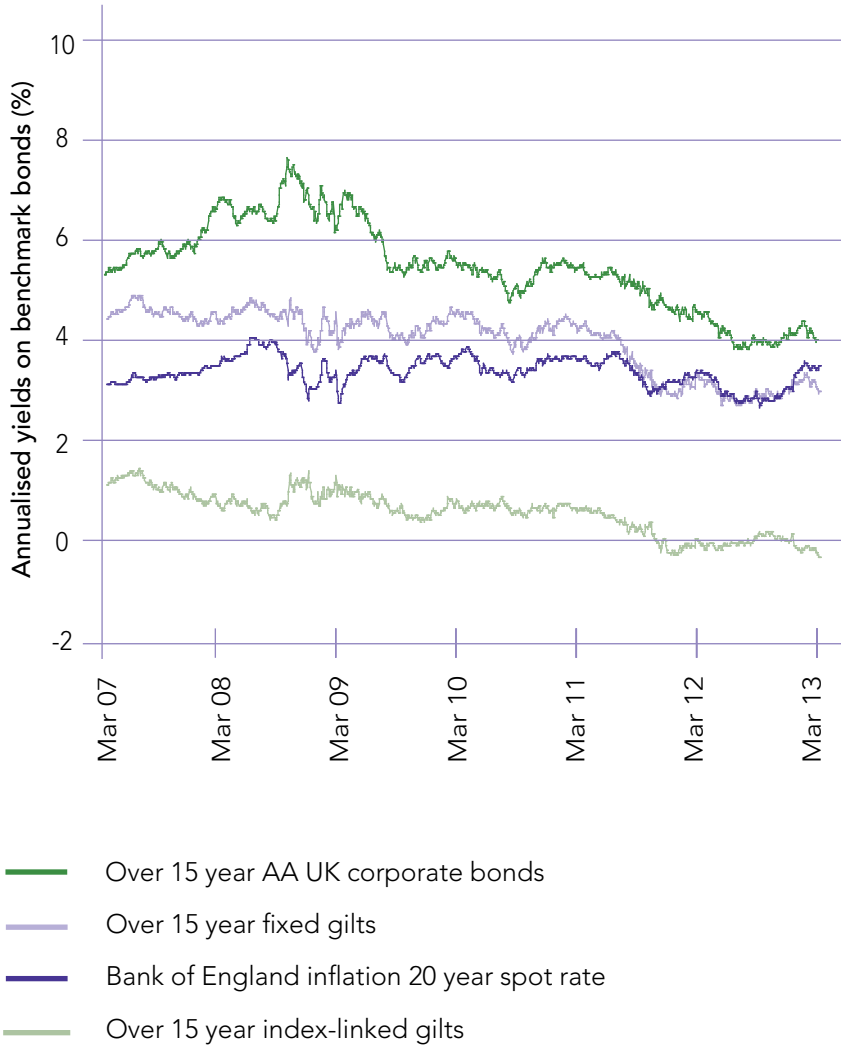
## Defined benefit schemes

- This graph shows estimates of assets, S179 liabilities and technical provisions derived from the PPF 7800 index
- It shows an illustrative range for technical provisions since the actual position will be dependent on market conditions and how schemes use the flexibility available to them to measure their liabilities
- The change in market conditions since their last valuation means that deficits are expected to have increased for many schemes in Tranche 8, although schemes with hedging strategies may have fared better.

A scheme's funding position will be highly dependent on its individual circumstances. However, we expect that for most Tranche 8 schemes the growth in liabilities will have outpaced their growth in assets.

# Market indicators

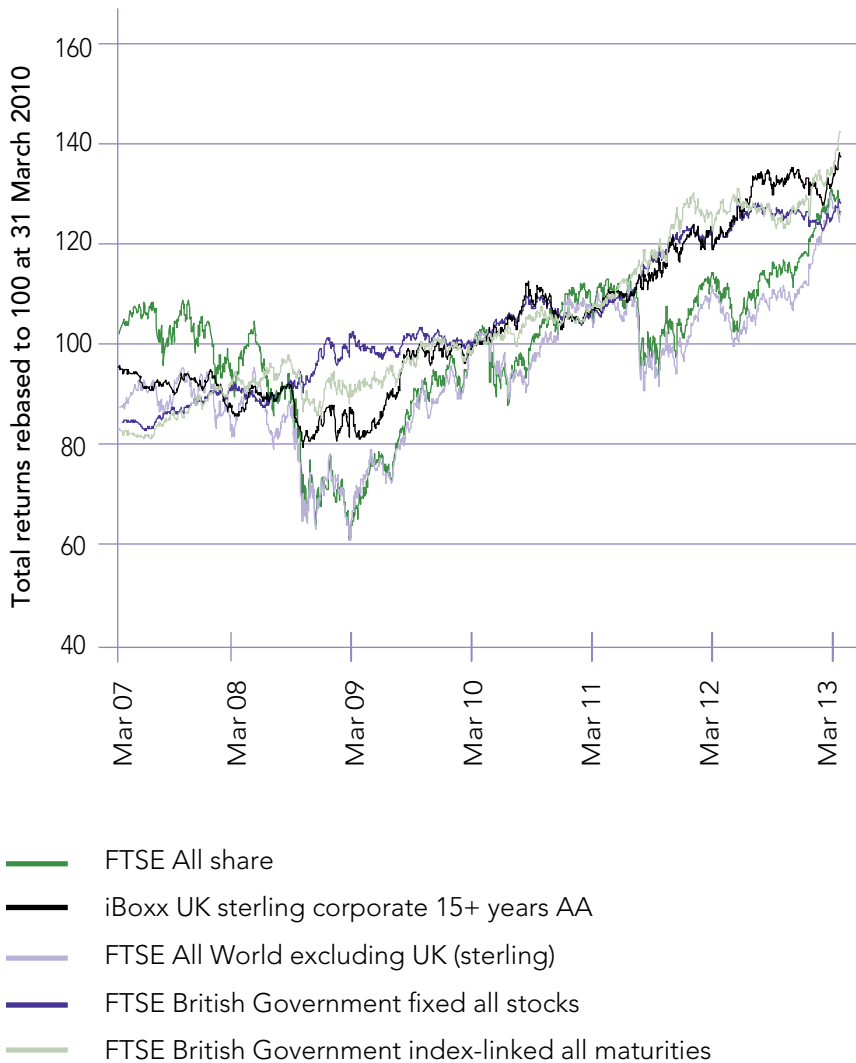
## Benchmark bond yields



Source: Thomson Reuters

This chart shows the volatility and changing relationships between bond yields and break-even inflation over the last six years.

## Asset returns



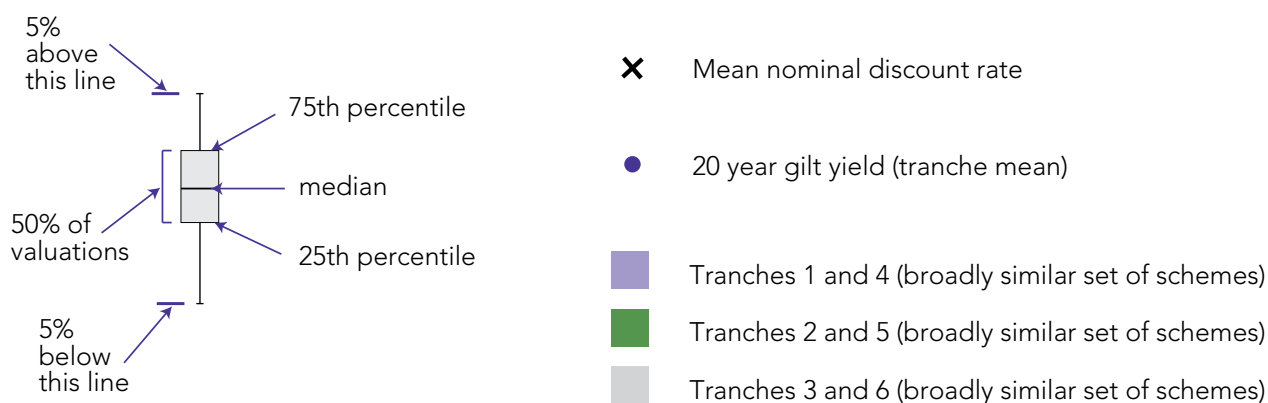
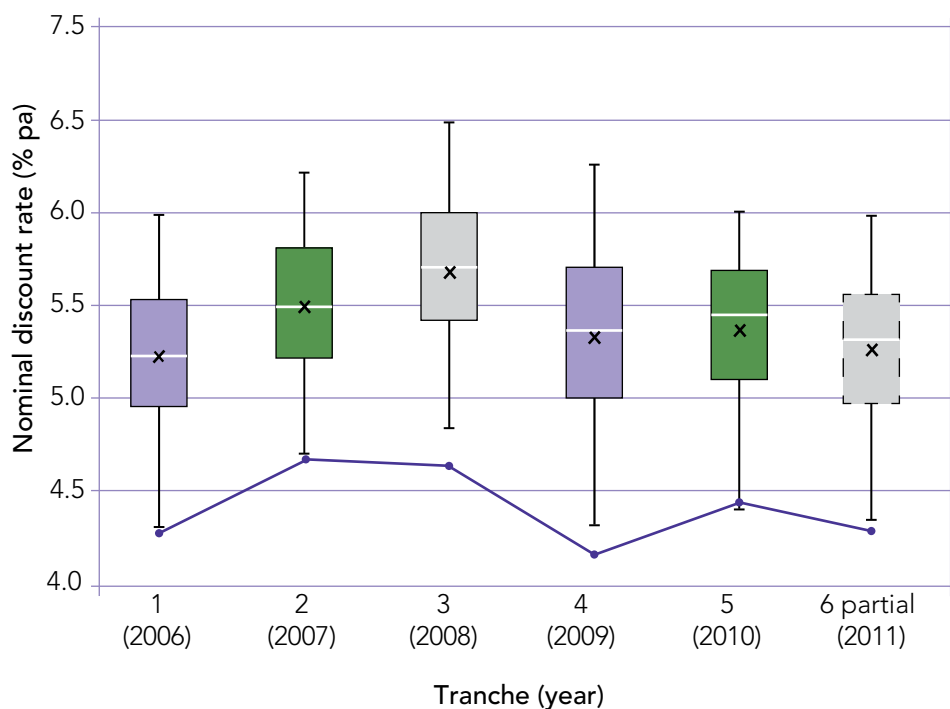
Source: Thomson Reuters

This chart shows total returns (increases in value with income reinvested) for a range of asset class indices since 2007.

The returns have been rebased to 100 at 31 March 2010, so that if you had invested equal amounts into each asset class index at that date, the chart shows the relative change from that point.

# Scheme-specific outcomes

## Distribution of discount rates 2006-2011



Source: The Pensions Regulator, FTSE Group

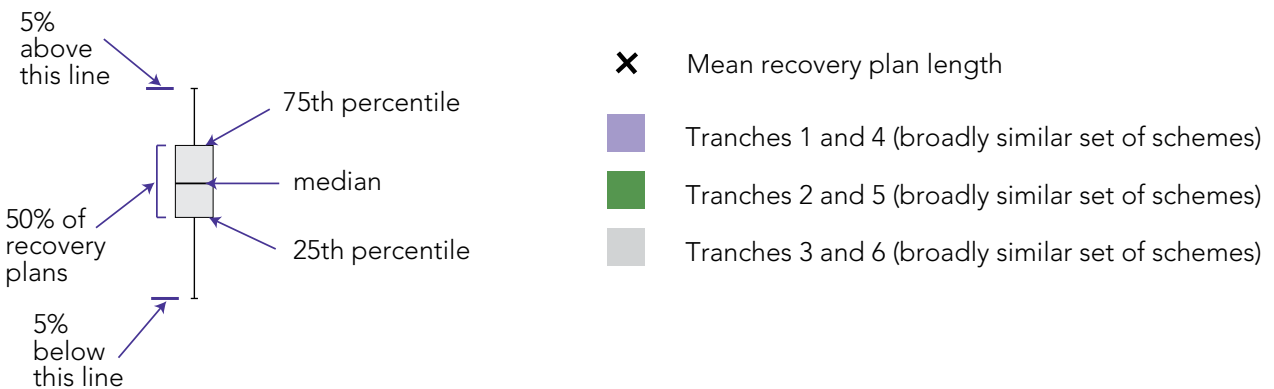
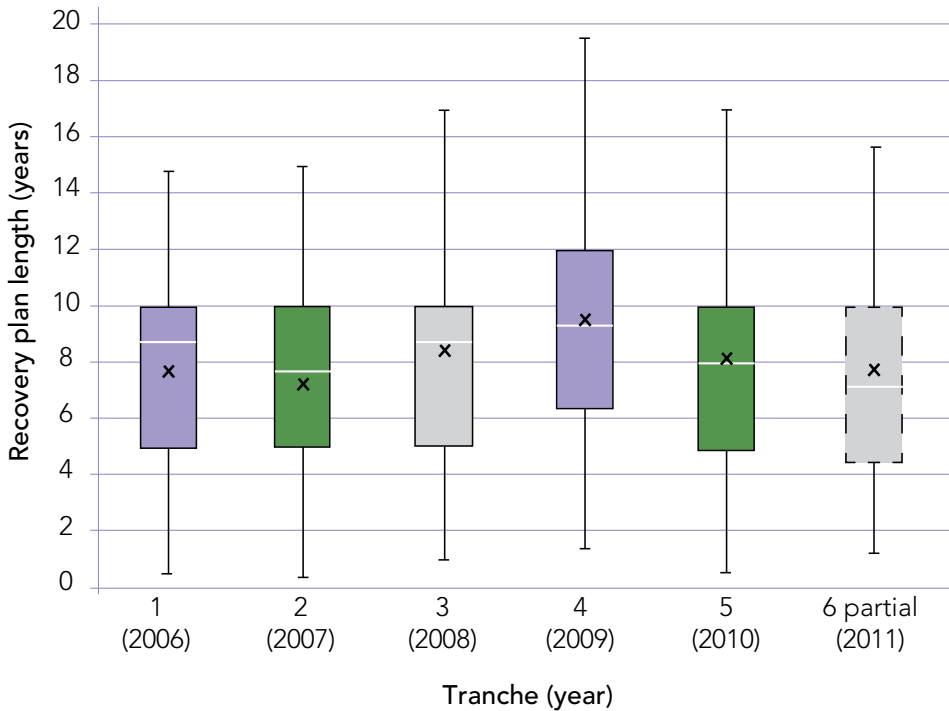
- The chart shows the distribution of assumptions used by schemes for their discount rate in nominal terms, and the gilt yields for comparison
- Historical behaviour of pension schemes suggests that:
  - there is a range of assumptions used for the discount rate at any one time, and
  - when market conditions change, schemes re-assess their expected returns from pension scheme assets, resulting in movements in both directions.
- For example, the median discount rate outperformance over gilts increased by 26 bps from Tranche 1 (2006) to Tranche 4 (2009) for a broadly similar set of schemes, reflecting the changed outlook in 2009
- Between 2006 and 2011 discount rates at the median level used by schemes were in the range 84-122 bps in excess of gilt yields

### Additional note

- Tranche 6 data is partial and provisional ahead of the scheme funding publication later in 2013. It is based upon the Tranche 6 valuations received by The Pensions Regulator up to the 31 December 2012, numbering approximately 1,400 valuations.

When market conditions change discount rates may also change in either direction. Schemes use this flexibility to make changes to their assumptions in subsequent valuations.

# Distribution of recovery plan lengths from 2006-11



Source: The Pensions Regulator



## Scheme-specific outcomes

- This chart highlights the range of outcomes and distribution of recovery plan lengths in years across Tranches
- For example, from Tranche 1 (2006) to Tranche 4 (2009), recovery plans extended on average and show a wider range for a broadly similar set of schemes
- Analysis of individual schemes shows that they extend or shorten their recovery plan as their circumstances require

### Additional note

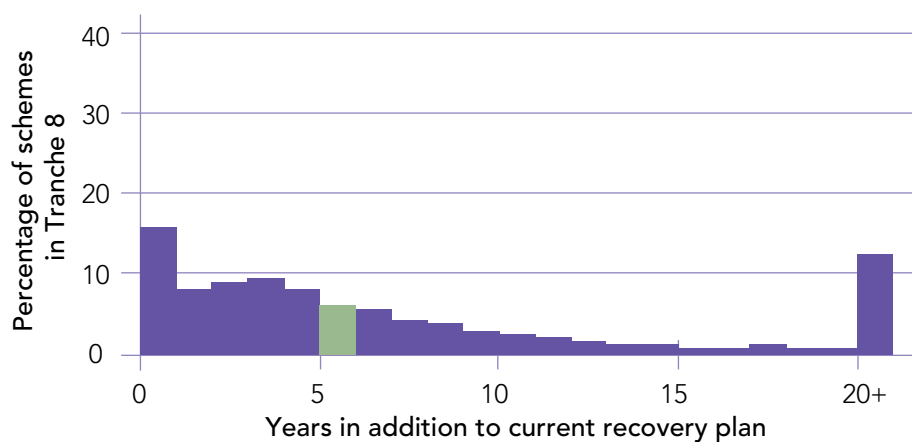
- Tranche 6 data is partial and provisional ahead of the scheme funding publication later in 2013. It is based upon the Tranche 6 valuations received by the regulator up to the 31 December 2012, numbering approximately 1,400 valuations.

Schemes agree new recovery plans at subsequent valuations reflecting changes in their individual circumstances.

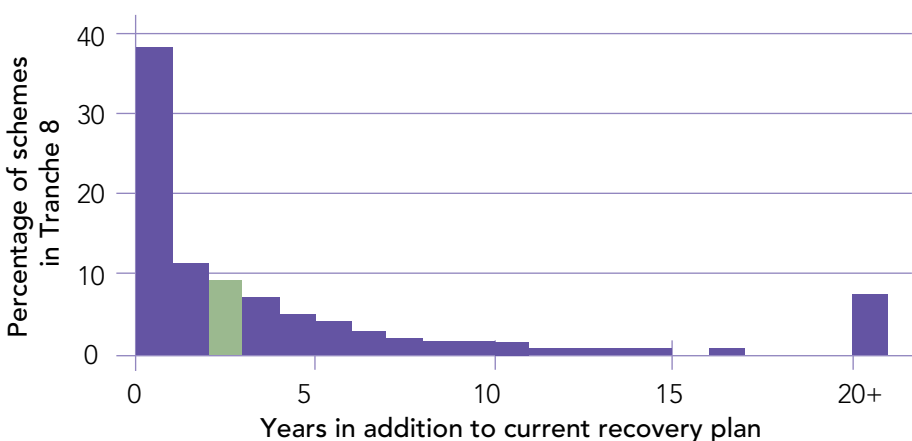
# Illustrating the impact of increased deficits

The following charts show how many extra years of contributions would pay off the estimated increase in deficit from Tranche 5 to Tranche 8 under the scenarios described.

## Extra years of currently planned deficit recovery contributions (DRCs) required to meet the increase in deficit if no other flexibilities are used



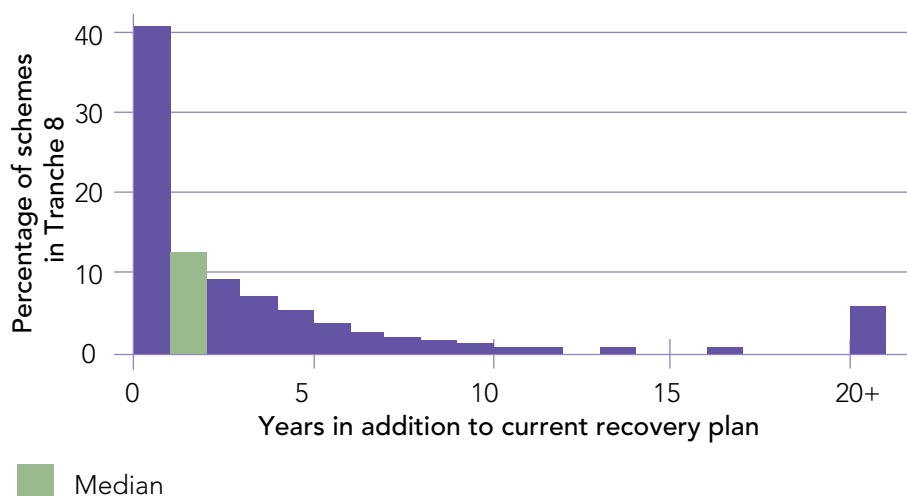
## Extra years of currently planned DRCs required to meet the increase in deficit if the discount rate increased by 25bps



■ Median

Source: The Pensions Regulator

## Extra years to meet the increase in deficit if currently planned DRCs are increased by 25% and the discount rate is also increased by 25bps



Source: The Pensions Regulator

These charts imply that some schemes would need over 20 years of additional DRCs to meet the increase in deficit. Many of the sponsors for these schemes are likely to be able to reasonably afford increases. However, some schemes with limited support may need to make greater use of other flexibilities in order to agree viable recovery plans.

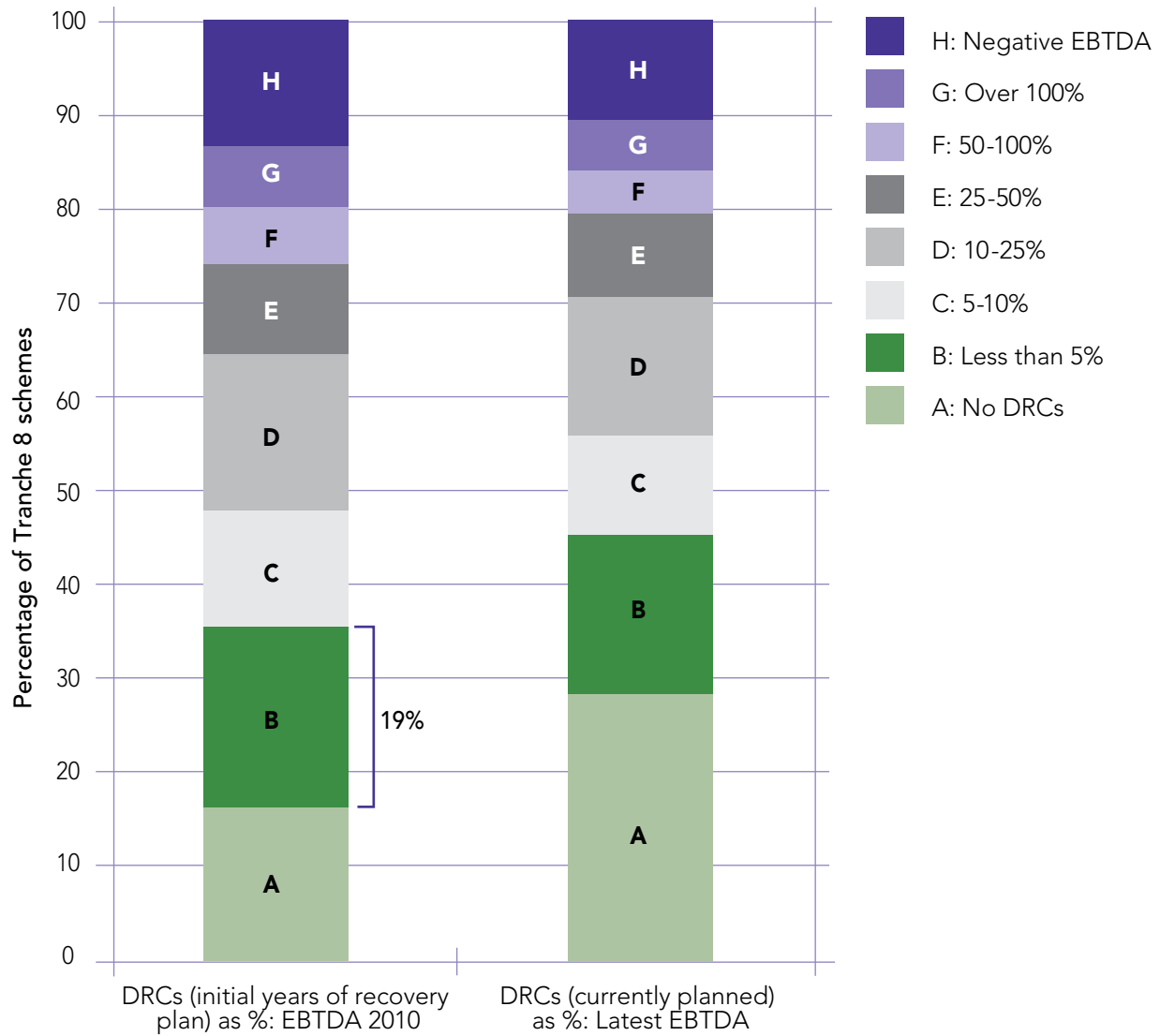
### Additional notes

- These charts exclude schemes with no DRCs planned after four years from the last valuation (about 25% of Tranche 8 schemes)
- The baseline for estimating the deficit is based on the last valuation, adjusted approximately for contributions paid and movements in gilt yields, inflation and assets to 31 March 2013
- Calculations are highly sensitive to the valuation date used and other scheme-specific characteristics
- The extra years in these charts are not exactly the same as extensions to the recovery plan lengths because of the simplified calculation (eg ignoring investment returns during the recovery period).

Trustees should use the flexibilities within the funding framework to most appropriately fit their individual circumstances.

# Scheme and employer analysis

## DRCs as a proportion of employer EBTDA



Source: The Pensions Regulator, BvD Fame, S&P Capital IQ

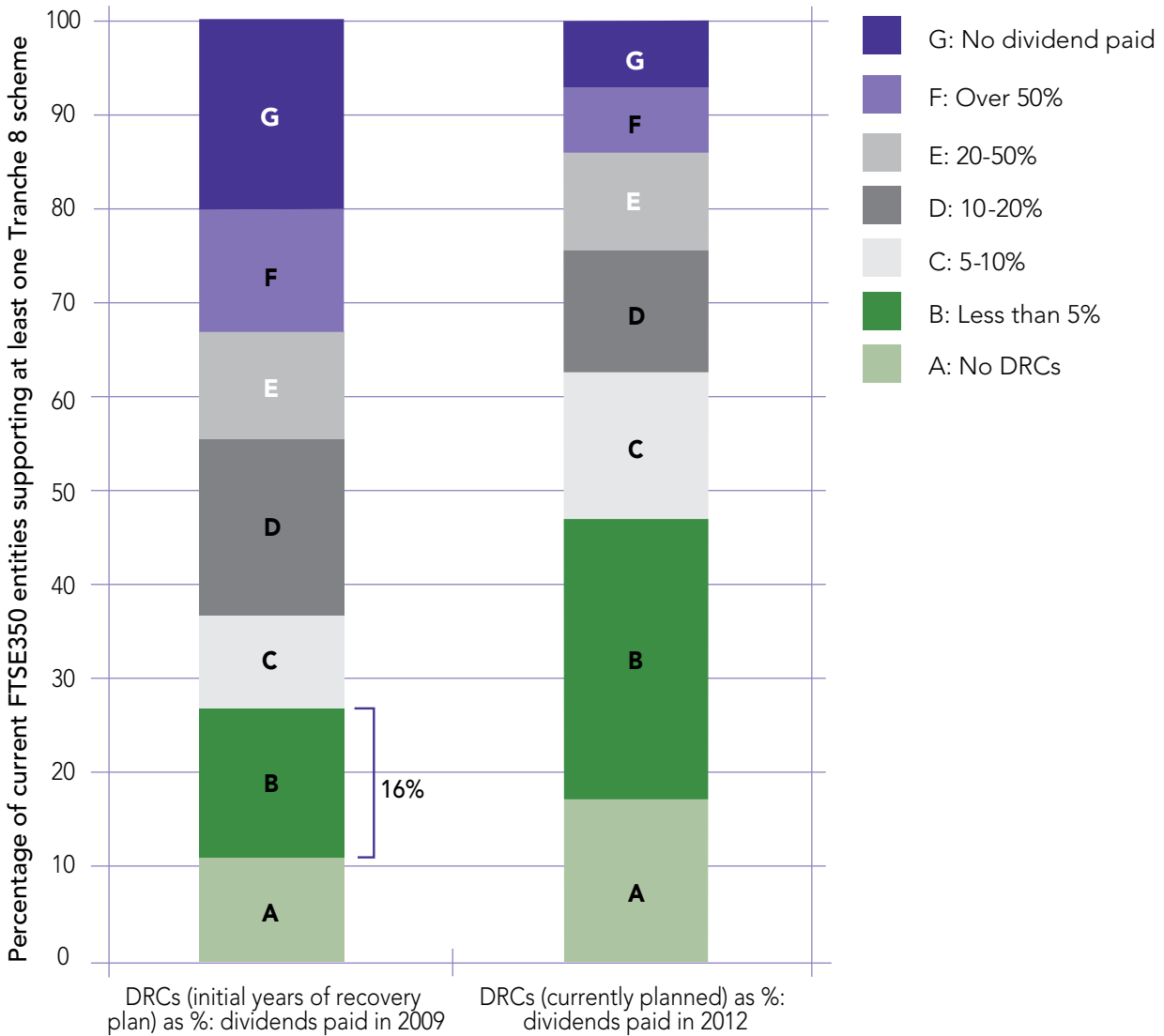
- This chart shows how schemes' DRCs compare to their employers' earnings
- The bar on the left shows the average annual DRCs in the initial years of the recovery plan, relative to employer EBTDA information relevant to that period (2010)
- For example, the left hand bar above shows that in the initial years of the recovery plan, 19% of schemes were receiving annual DRCs that were less than 5% of their employers' EBTDA in 2010
- The bar on the right shows the currently planned DRCs after four years from their last valuation relative to the latest available employer EBTDA information.

### Additional notes

- EBTDA has been used here for illustration. In practice other measures may be more appropriate since trustees need to balance their demands against other essential calls on the employer's business.
- About 15% of schemes with a Tranche 8 valuation date have been excluded due to insufficient EBTDA data
- The latest available EBTDA data is drawn from 2012 year ends for approximately 30% of employers and 2011 year ends for the remaining 70%, owing to Companies House filing requirements.

This analysis suggests in general that sponsors' capacity relative to EBTDA to meet planned contributions has increased. However, there are likely to be variable levels of affordability across individual employers and reasonable affordability is an employer-specific consideration.

## DRCs as a proportion of dividends paid for the subset of FTSE350 employers supporting at least one scheme with a Tranche 8 valuation date



Source: The Pensions Regulator, BvD Fame, Capita Registrars

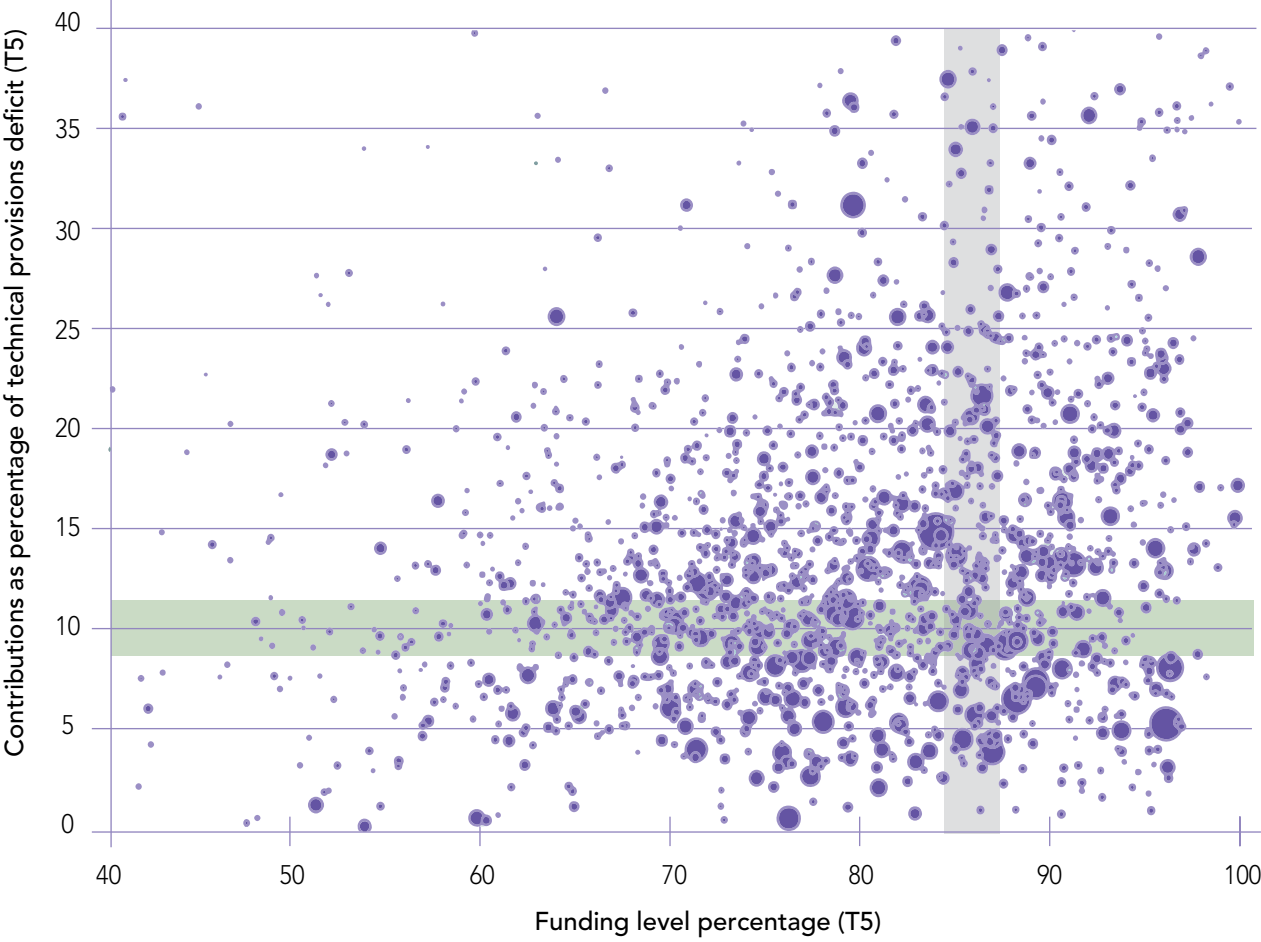
- This chart shows how schemes' DRCs compare to the total dividends paid by their FTSE350 listed employers
- The bar on the left shows the average annual DRCs in the initial years of the recovery plan relative to the dividends paid in 2009
- For example, the left hand bar shows that in the initial years of the recovery plan 16% of schemes were receiving annual DRCs that were less than 5% of their employers' dividend payments in 2009
- The bar on the right shows the currently planned DRCs after four years from their last valuation relative to the dividends paid in 2012
- It should be noted that 2012 was a record year for FTSE350 dividend payments. Data released by Capita Registrars on 22 April 2013 suggest that in the FTSE350, Q1 2013 dividends dropped by a quarter compared to the same period last year. However, Capita's forecast for 2013 is for headline dividends to be broadly flat compared to 2012.

### Additional notes

- Where a FTSE350 listed employer additionally supports schemes which do not have a Tranche 8 valuation date, we have assumed that all these schemes have a Tranche 8 valuation date so as not to understate the DRC requirements placed upon the FTSE350 employer
- Dividends shown are total dividends paid, including any special dividends.

The ratio of DRCs to dividends is variable. In many cases DRCs are relatively insignificant compared to dividends but for some they can be a material consideration.

# Scheme-specific funding outcomes



- Size of circle represents size of scheme liabilities
- Illustrative range of funding levels with similar contribution outcomes
- Illustrative range of contribution outcomes for schemes with similar levels of funding

Source: The Pensions Regulator



## Scheme-specific funding outcomes

- This chart compares the annual DRCs in the initial years of the recovery plan (expressed as a percentage of the technical provisions deficit) against the technical provisions funding level reported by Tranche 5 schemes following their last valuation
- If all schemes had a uniform 10 year recovery plan they would be on or near the green band
- The grey band shows how there is a range of contribution outcomes for schemes with the same level of funding.

Contributions have a limited correlation to the size of deficits because of the influence of other factors and the variety of different scheme circumstances mean a variety of different outcomes.

# Limitations

## Limitations of actuarial analysis

Compared with the more accurate calculations carried out for formal valuation and recovery plan reporting by scheme trustees, the roll-forward techniques we have used to estimate aggregate and individual funding positions involve various assumptions and simplifications.

Many of these assumptions or simplifications have been driven by data limitations. For example, we have used index-tracking of major asset classes, made no allowance for hedging instruments to mitigate risk and have made assumptions about scheme liabilities in aggregate that may not accurately reflect the underlying liabilities of individual schemes. This is not an exhaustive list of assumptions. Any of the assumptions we have made may be a significant source of error at the individual scheme level.

## Limitations of employer analysis

Where an employer participates in more than one scheme or the scheme is sponsored by more than one employer, we have made assumptions about the division of an employer's financial support among the pension schemes it sponsors.

We have used the latest corporate financial data available to us at 1 May 2013, though we acknowledge that trustees and employers are likely to have more recent information when they come to negotiate their valuation outcomes.

Accounting based metrics may be poor indicators of formally assessed covenant strength. This analysis should not be seen to replace the outcomes from formal assessments for other purposes. Employers for which corporate information is unavailable may be concentrated in a particular market (eg SMEs) and therefore the analysis may not be entirely representative of the whole landscape.

# Glossary

## 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 between 22 September 2005 and 21 September 2006 were in Tranche 1, between 22 September 2006 and 21 September 2007 were Tranche 2, 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.

## Technical provisions (TPs)

The 'technical provisions' are an estimate, made on actuarial principles, of the assets needed at any particular time to make provision for benefits already accrued under the scheme. These include pensions in payment (including those payable to survivors of former members) and benefits accrued by other members which will become payable in the future.

## Recovery plans (RPs)

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 technical provisions. The plan to address this shortfall is known as a recovery plan.

## Recovery plan length

The recovery plan length is the time that it will take for a scheme to recover any shortfall at the effective date of the actuarial valuation, so that by the end of the recovery plan it will be fully funded in relation to the technical provisions.

## Deficit repair contributions (DRCs)

Payments made by employers to the scheme in order to clear any technical provisions deficit in line with the schedule of contributions under the agreed recovery plan.

## DRCs in initial years of RPs

We have used this term to mean the average annual DRCs paid by a scheme in the second, third and fourth years following the valuation date.

## Currently planned DRCs

We have used this term to mean the assumed annual DRC in the current RP for the fifth year after the valuation date. In practice, given the 15 month timescales for valuations, this is typically the earliest planned DRC that may be revised to reflect a new valuation.

### Earnings before tax, depreciation and amortisation (EBTDA)

A measure of earnings which treats interest items as an essential business expense. To derive EBTDA we have deducted net interest from EBITDA. Financial entities (eg banks and insurance companies) disclose their financial results in a different format to non-financial entities and generally have significant net interest income. Unlike non-financial entities where net interest is disclosed below operating profit (EBIT), net interest is disclosed above operating profit for financial entities. So for deriving EBTDA for financial entities, the net interest is not deducted from EBITDA.

### Pension Protection Fund (PPF)

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

### 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 technical provisions, the assumptions to be used in a 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.

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### **Supporting analysis and evidence: Annual funding statement 2013**

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