Pension Protection Fund

# PPF 7800 Index

**30 November 2023**

The PPF 7800 Index tracks the level of underfunding risk in the PPF-eligible universe using the latest scheme return information provided to The Pensions Regulator and the roll-forward methodology used for PPF levy purposes. There are certain simplifications within the levy calculation, as described in Note 4 on page 7 of this document, that should be borne in mind when interpreting these results. In particular, the assets and liabilities have not been reduced for benefit payments made since the schemes' latest valuations, on the grounds that such an adjustment (and the resulting simplification) will not affect the calculated surplus/deficit.

**This month there has been an update in the way the PPF 7800 Index is calculated.**

We have moved to the new Purple Book 2023 dataset and, consistent with previous years, we have re-stated the funding position from March 2023 to October 2023 to reflect the new data. The impact as at 31 March 2023 is an increase in the funding ratio of 1.1 percentage points from 133.2% to 134.3% (see Note 1 on page 7 for more information). All the charts and tables presented in this publication have been revised to reflect the changes described above.

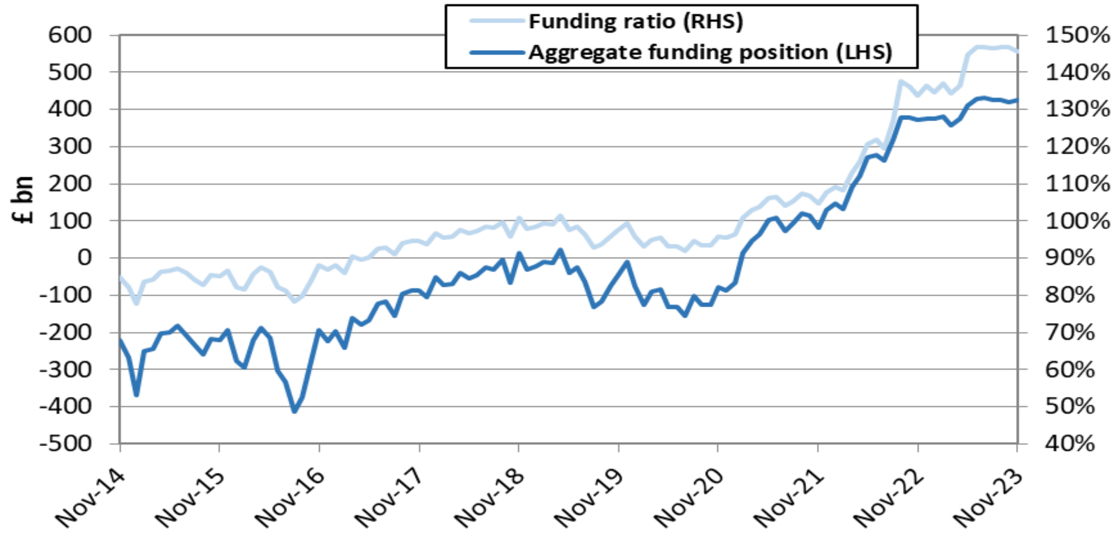
In addition, we have revised the number of schemes from 5,051 to 5,050 following the removal of one large scheme from the dataset.

## Highlights

- The aggregate surplus of the 5,050 schemes in the PPF 7800 Index is estimated to have increased over the month to £425.5 billion at the end of November 2023, from a surplus of £418.8 billion at the end of October 2023.
- The funding ratio decreased from 146.8 per cent at the end of October 2023 to 145.7 per cent.
- Total assets were £1,356.4 billion and total liabilities were £930.9 billion.
- There were 595 schemes in deficit and 4,455 schemes in surplus.
- The deficit of the schemes in deficit at the end of November 2023 was £4.1 billion, down from £4.5 billion at the end of October 2023.

For a more in-depth look at the monthly changes to our data please see the link to the supporting data on the 7800 Index home page: https://ppf.co.uk/ppf-7800-index

**Chart 1: Historical aggregate funding position (assets less s179 liabilities) and funding ratio of schemes in the PPF universe**

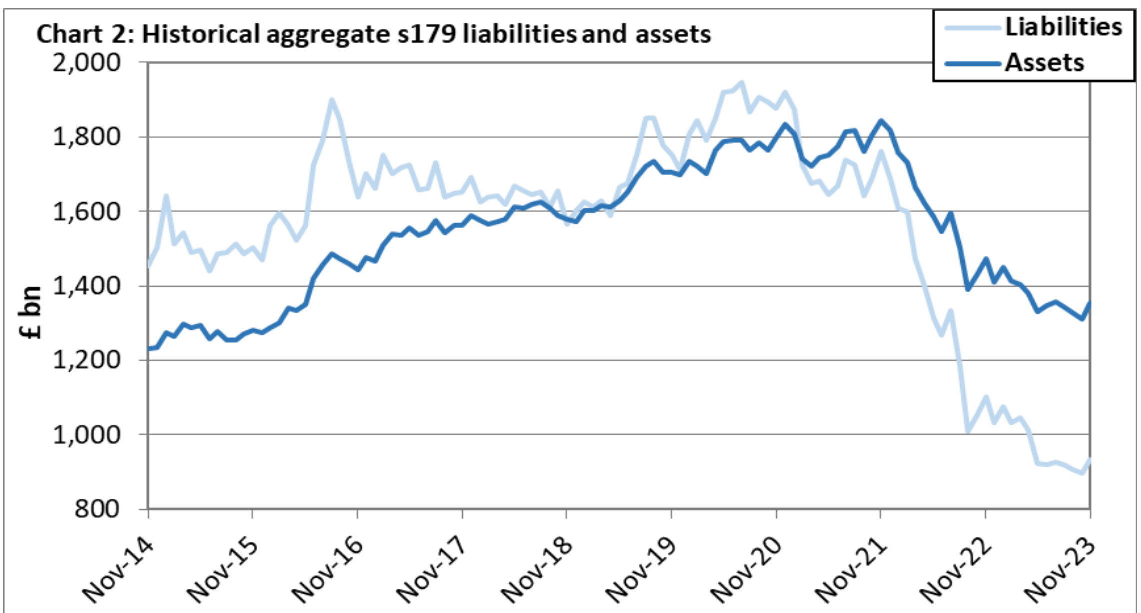



## The schemes in the universe

The aggregate surplus (total assets less s179 liabilities) of the schemes in the PPF 7800 Index is estimated to have increased to £425.5 billion at the end of November 2023, from £418.8 billion at the end of October 2023. The position has improved from a year ago, when a surplus of £371.5 billion was recorded at the end of November 2022.

The funding ratio (assets as a percentage of s179 liabilities) of schemes decreased over the month from 146.8 per cent to 145.7 per cent at the end of November 2023. The funding ratio is higher than the 133.7 per cent recorded in November 2022.

**Chart 2: Historical aggregate s179 liabilities and assets**

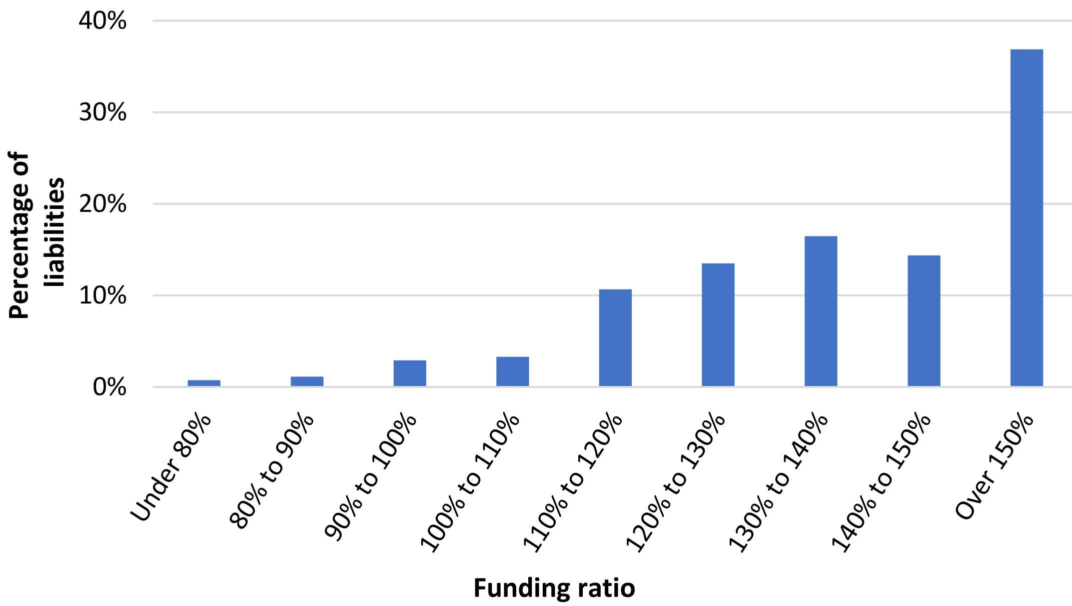


Within the Index, total scheme assets amounted to £1,356.4 billion at the end of November 2023. Total scheme assets experienced an increase of 3.3 per cent over the month and a decrease of 7.9 per cent over the year. Total scheme liabilities were £930.9 billion at the end of November 2023, an increase of 4.1 per cent over the month and a decrease of 15.5 per cent over the year.

**Funding comparison**

| | November 2022 | October 2023 | November 2023 |
|---|---|---|---|
| **Aggregate funding position** | £371.5bn | £418.8bn | £425.5bn |
| **Funding ratio** | 133.7% | 146.8% | 145.7% |
| **Aggregate assets** | £1,472.8bn | £1,312.9bn | £1,356.4bn |
| **Aggregate liabilities** | £1,101.3bn | £894.1bn | £930.9bn |
| **Dataset / Assumptions** | Purple 22 / A10 | Purple 23 / A11 | Purple 23 / A11 |

**Chart 3: Distribution of s179 liabilities, by funding ratio**

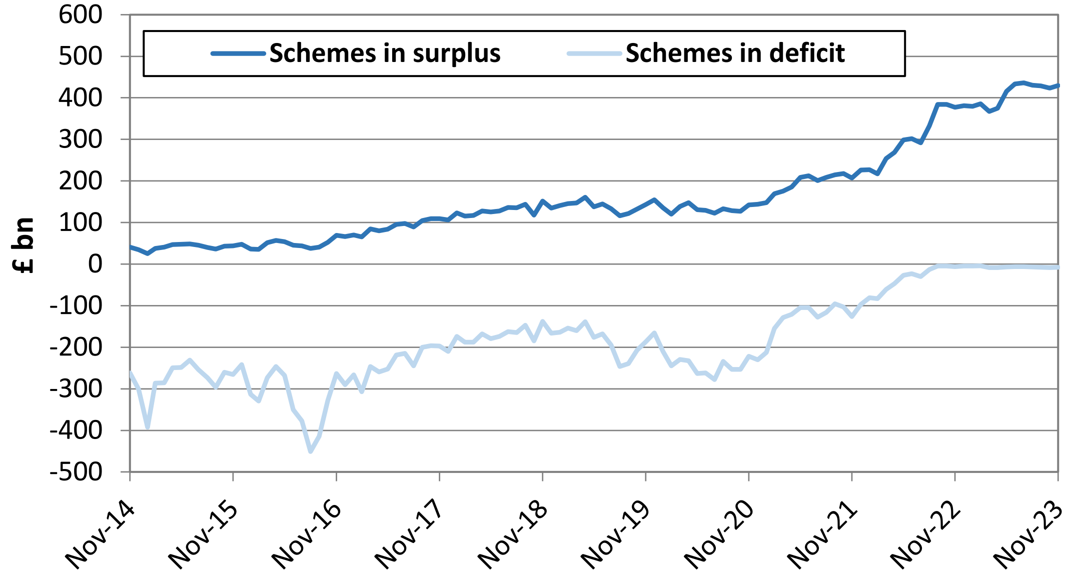



**Schemes in deficit and surplus**

The aggregate deficit of all schemes in deficit at the end of November 2023 is estimated to have decreased to £4.1 billion from £4.5 billion at the end of October 2023. At the end of November 2022, the equivalent figure was £5.8 billion.

At the end of November 2023, the total surplus of schemes in surplus increased to £429.6 billion from £423.3 billion at the end of October 2023. At the end of November 2022, the total surplus of all schemes in surplus stood at £377.3 billion.

Chart 4: Historical s179 deficit (surplus) for schemes in deficit (surplus)

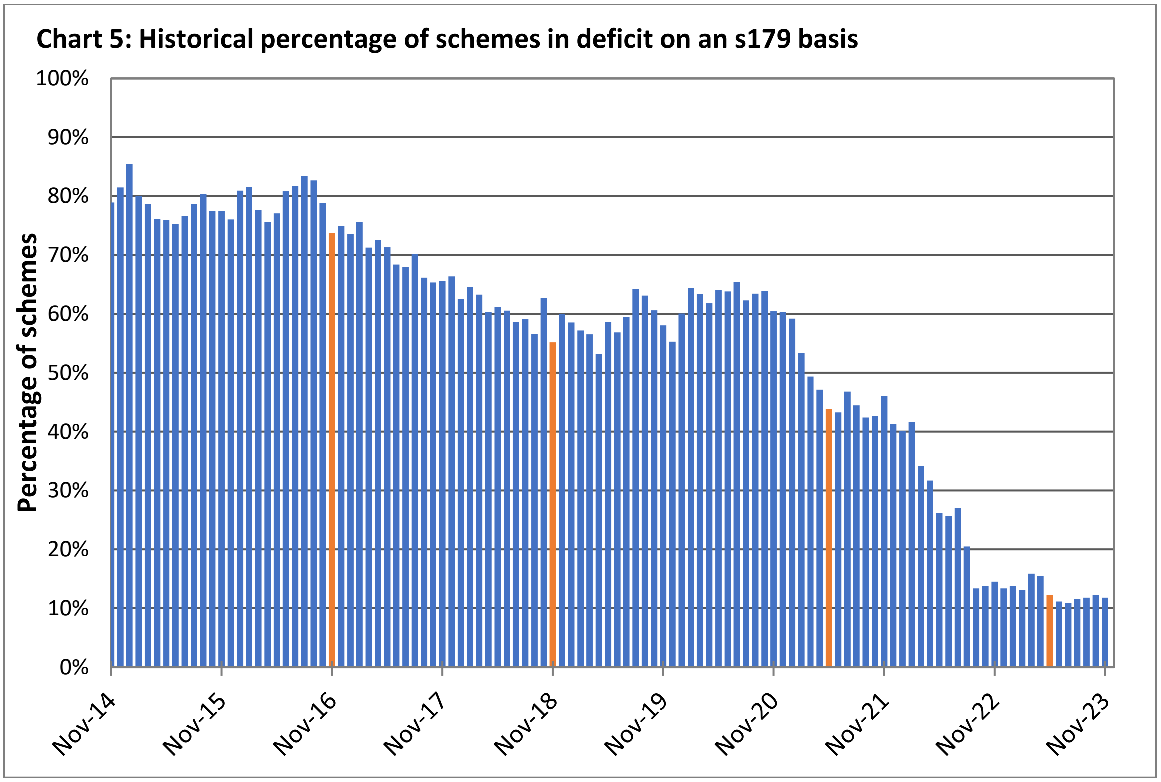



The number of schemes in deficit at the end of November 2023 decreased to 595, representing 11.8 per cent of the total 5,050 defined benefit schemes. There were 619 schemes in deficit at the end of October 2023 (12.3 per cent) and 746 schemes in deficit at the end of November 2022 (14.5 per cent).

The number of schemes in surplus increased to 4,455 at the end of November 2023 (88.2 per cent of schemes) from 4,431 at the end of October 2023 (87.7 per cent). There were 4,385 schemes in surplus at the end of November 2022 (85.5 per cent).

**Schemes in deficit (surplus)**

| | November 2022 | October 2023 | November 2023 |
|---|---|---|---|
| **Number of schemes in deficit** | 746 | 619 | 595 |
| **Deficit for schemes in deficit** | £5.8bn | £4.5bn | £4.1bn |
| **Number of schemes in surplus** | 4,385 | 4,431 | 4,455 |
| **Surplus for schemes in surplus** | £377.3bn | £423.3bn | £429.6bn |
| **Number of schemes in Universe** | 5,131 | 5,050 | 5,050 |
| **Dataset / Assumptions** | Purple 22 / A10 | Purple 23 / A11 | Purple 23 / A11 |




*Note: The red bars indicate months in which we made changes to the actuarial assumptions used to value schemes on an s179 measure. The most recent change was made in May 2023 and implemented in the end of May 2023 PPF 7800 Index. This served to reduce the number of schemes in deficit by 129 (2.6 per cent of the number of schemes in the universe*

**Understanding the impact of market movements**

Equity markets and gilt yields are the main drivers of funding ratios. S179 liabilities are sensitive to the yields available on a range of conventional and index-linked gilts. Liabilities are also time-sensitive in that, even if gilt yields were unchanged, scheme liabilities would increase as the point of payment approaches.[1]

The value of scheme assets is affected by the change in prices of all asset classes, but owing to the volume invested and the volatility, equities and bonds are the biggest drivers behind changes – bonds have a higher weight in asset allocation, but equities tend to be more volatile.

The following table sets out the changes in s179 liabilities and assets, and some key market indicators, in the month and year to 30 November 2023. Changes in the month of November are the result of market movements. Changes in the year to 30 November 2023 are the result of market movements, the change in the s179 actuarial assumptions guidance from 1 May 2023 and the impact of the updated dataset.



[1] This effect amounts to around 0.3 to 0.4 per cent a month in the current environment.

| | Change over the… | |
|---|---|---|
| | Month | Year |
| **s179 liabilities** | 4.1% | -15.5% |
| **Assets** | 3.3% | -7.9% |
| ***Market indicator*** | | |
| **10-year fixed interest gilt yield** | -34bps | 93bps |
| **15-year fixed interest gilt yield** | -33bps | 102bps |
| **20-year fixed interest gilt yield** | -31bps | 110bps |
| **5-15 year index-linked gilt yield** | -26bps | 85bps |
| **FTSE All-Share Total Return Index** | 3.0% | 1.8% |
| **FTSE All-World Ex-UK Total Return Index** | 4.8% | 6.1% |

**Chart 6: Movements in gilt yields**

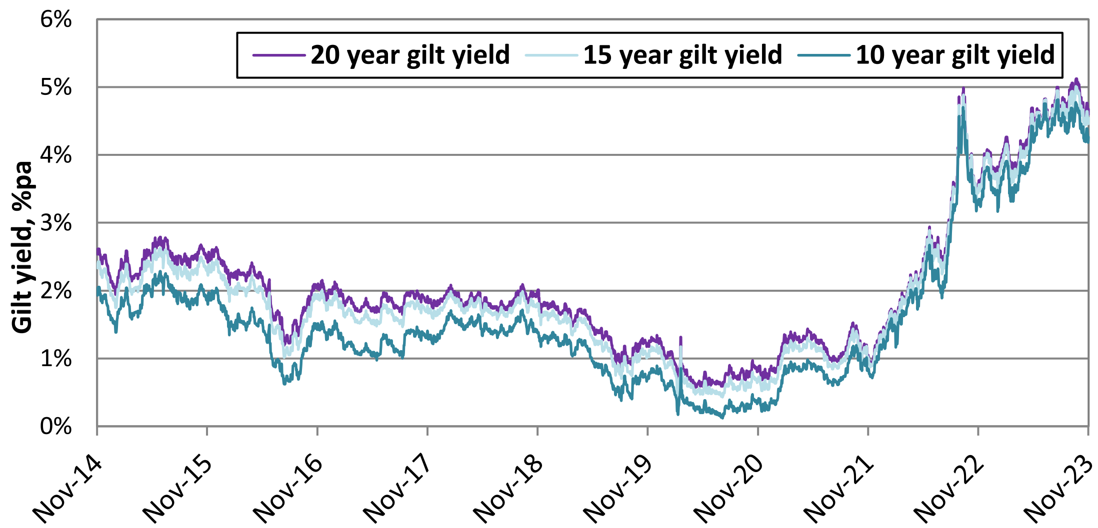
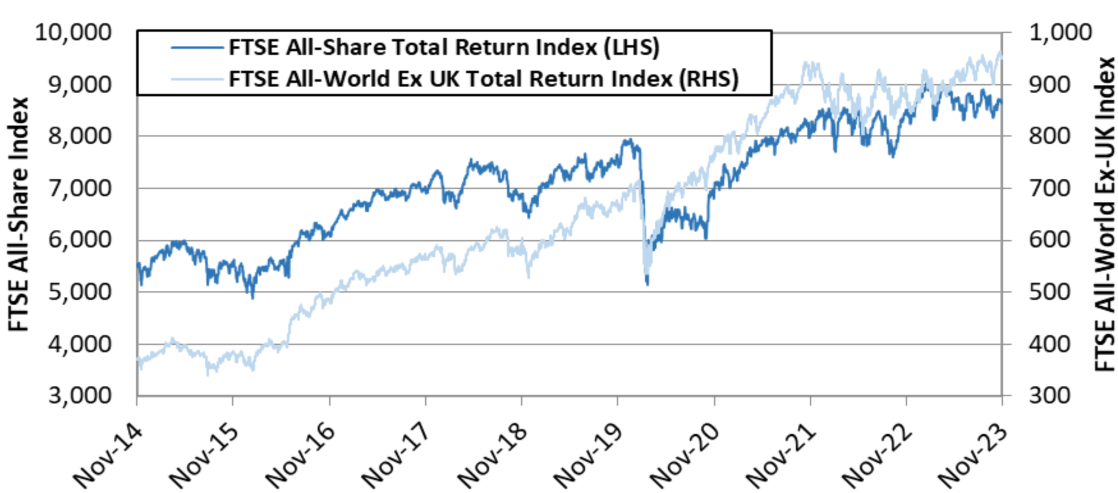



**Chart 7: Movements in equity indices**



## Notes

### 1. Impact of the Purple Book 2023 dataset

This month we moved to a dataset consistent with the Purple Book 2023. The new dataset is based on a more up-to-date universe of schemes, excluding, for example, schemes that have entered PPF assessment, and it also uses more up-to-date funding information from the schemes in our universe. This is a standard procedure performed annually after the publication of the Purple Book.

We have restated the PPF 7800 results from 31 March to 31 October to reflect the new dataset. The following table shows the impact this had on the March position.

| | March 2023 | March 2023 (new data) |
|---|---|---|
| **Aggregate funding position** | £359.3bn | £358.9bn |
| **Funding ratio** | 133.2% | 134.3% |
| **Aggregate assets** | £1,439.8bn | £1,404.4bn |
| **Aggregate liabilities** | £1,080.5bn | £1,045.5bn |
| **Dataset / Assumptions** | Purple 22 / A10 | Purple 23 / A10 |

The new data caused the funding ratio to increase by 1.1 percentage points at March 2023 (this figure can differ depending on the date at which it is calculated). We also removed one large scheme from the dataset with effect from April 2023.

### 2. The PPF universe

The PPF covers certain occupational defined benefit pension schemes and defined benefit elements of hybrid schemes. For more information about eligible schemes see the PPF's website at:
https://www.ppf.co.uk/levy-payers/what-levy-and-who-has-pay-it/your-scheme-eligible

### 3. PPF compensation

For individuals who have reached their scheme's normal pension age or are already in receipt of a survivor's pension or pension on the grounds of ill health, the PPF will generally pay compensation at the 100 per cent level, i.e., these members will not see any reduction in retirement income when their scheme sponsor becomes insolvent. For most people below their scheme's normal pension age the PPF will generally pay compensation at the 90 per cent level. Increases in future payments for members may not be as much as they would have been under their pension schemes. For more information about PPF compensation see the PPF's website at:
https://www.ppf.co.uk/what-it-means-ppf

### 4. s179: one of many different funding measures

s179 is one particular measure of funding. The change in the deficit of schemes in deficit on an s179 basis is an illustration of the impact of changes in financial markets on the PPF's total exposure. Schemes in surplus on an s179 basis at the time of insolvency usually do not enter the PPF.

In addition to s179, there are many different measures of a scheme's funding position. Among the other common measures are full buy-out (what would have to be paid to an insurance company for it to take on the payment of full scheme benefits), IAS19 or FRS102 (the measures used in UK company accounts), and Technical Provisions (that are used in the UK's scheme funding regime). The different measures can give very different levels of scheme funding at any point in time and move very differently over time.

**5. Methodology**

The figures shown throughout this document are based on adjusting the scheme valuation data supplied to The Pensions Regulator as part of the schemes' annual scheme returns, including Deficit Reduction Contribution certificates. We transform this data on an s179 valuation basis at various dates using changes in market indices for principal asset classes. In Purple 2023 we adopted more granular asset information than before, which included new asset classes and some revised indices for our roll forward calculation. In particular, index-linked assets are better captured under the new methodology. Conventional and index-linked gilt yields are used to value liabilities. We do not hold sufficient data to capture the impact of any structural changes to asset allocations nor to accurately capture changes in any leveraged LDI portfolios.

In addition, the following simplifications are made:

- No allowance is made for benefit payments made since the date of the latest s179 valuations, which for some schemes can be several years in the past. This simplification will overstate assets and liabilities to a similar extent, and so a scheme's surplus or deficit is unlikely to be materially mis-stated as a result.
- We make no adjustment for actuarial gains or losses that have arisen since the scheme's last valuation, such as early retirement or commutation strains. We also assume that a scheme's mortality experience has been in line with expectations.
- We make no adjustment for "PPF drift", which is the increase in PPF liabilities over time arising from periodic increases in PPF compensation. For example, in schemes that grant higher pension increases than those given by the PPF, PPF compensation will increase whenever such a pension increase is made.

**6. Estimating the impact of changes in market conditions on the PPF 7800 Index**

We have developed a number of 'rules of thumb' to estimate the impact of changes in asset prices on scheme assets and s179 liabilities. A 7.5 per cent rise in equity markets boosts aggregate scheme assets by 1.7 per cent while a 0.3 percentage point rise in gilt yields reduces scheme assets by 2.8 per cent. Meanwhile, a 0.3 percentage point rise in gilt yields reduces aggregate scheme liabilities by 4.1 per cent. Strictly speaking, the rules of thumb only apply to small changes from the 31 March 2023 level. For more information see Chapter 5 of the Purple Book 2023, available on the PPF's website at: https://www.ppf.co.uk/purple-book

The PPF 7800 is produced in accordance with the UK Statistics Authority Code for official statistics which came into force in February 2009.

**Press enquiries**
**PPF Press Office** +44 (0)20 8406 2107