

## PPF 7800 Index

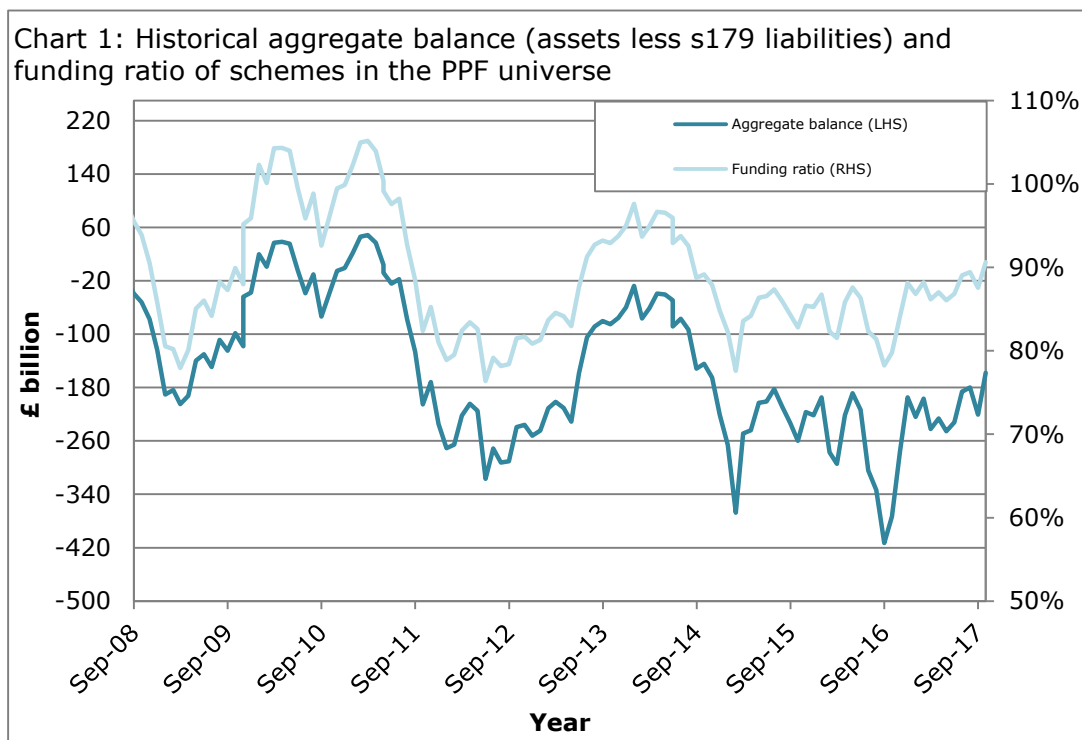
### 30 September 2017

This update provides the latest estimated funding position, on a section 179 (s179) basis, for the defined benefit schemes potentially eligible for entry to the Pension Protection Fund (PPF). A scheme's s179 liabilities represent, broadly speaking, the premium that would have to be paid to an insurance company to take on the payment of PPF levels of compensation. This compensation may be lower than full scheme benefits.

### Highlights

- The aggregate deficit of the 5,794 schemes in the PPF 7800 Index is estimated to have decreased over the month to £158.0 billion at the end of September 2017, from a deficit of £220.4 billion at the end of August 2017.
- The funding ratio increased from 87.6 per cent at end of August 2017 to 90.6 per cent.
- Total assets were £1,524.3 billion and total liabilities were £1,682.3 billion.
- There were 4,079 schemes in deficit and 1,715 schemes in surplus.

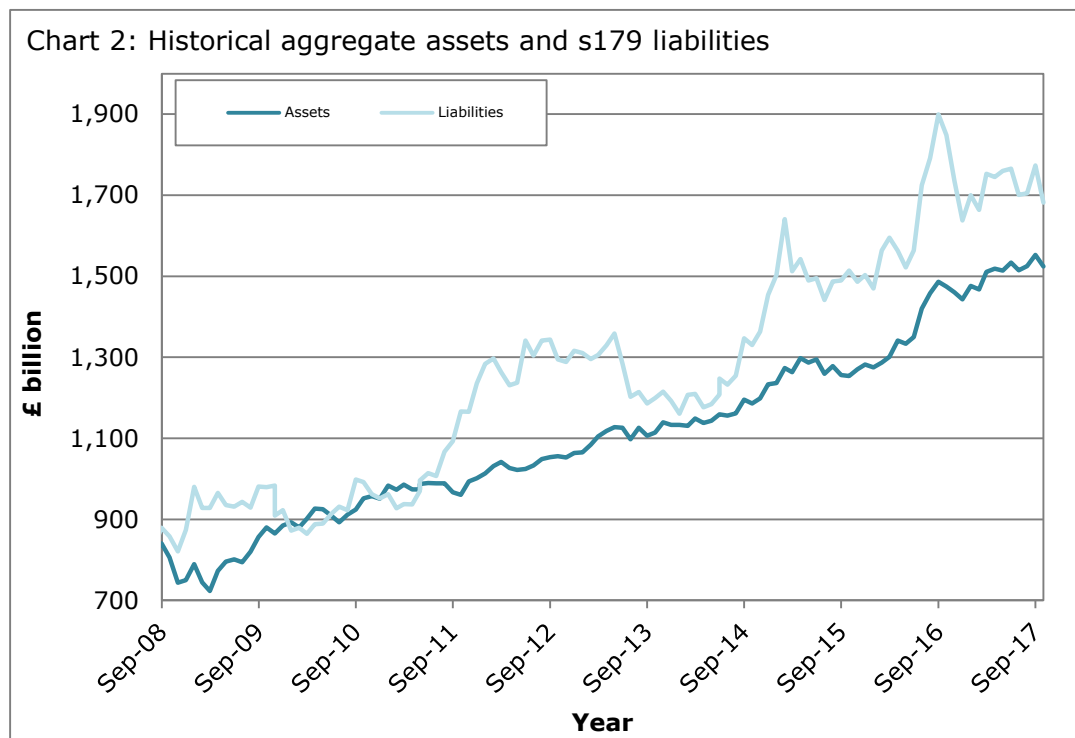
[http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF\\_7800\\_underlying\\_data.pdf](http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF_7800_underlying_data.pdf)



## The schemes in the universe

The aggregate deficit (total s179 liabilities minus total assets) of the schemes in the PPF 7800 Index is estimated to have decreased to £158.0 billion at the end of September 2017, from £220.4 billion at the end of August 2017. The position has improved from the previous year, when a deficit of £373.5 billion was recorded at the end of September 2016.

The funding ratio (assets as a percentage of s179 liabilities) of schemes increased over this month from 87.6 per cent to 90.6 per cent at the end of September 2017. The funding ratio is higher than the 79.8 per cent recorded in September 2016.



Within the index, total scheme assets amounted to £1,524.3 billion at the end of September 2017. Total scheme assets decreased by 1.8 per cent over the month and increased by 3.4 per cent over the year. Total scheme liabilities were £1,682.3 billion at the end of September 2017, a decrease of 5.1 per cent over the month and a decrease of 9.0 per cent over the year.

## Funding Comparisons

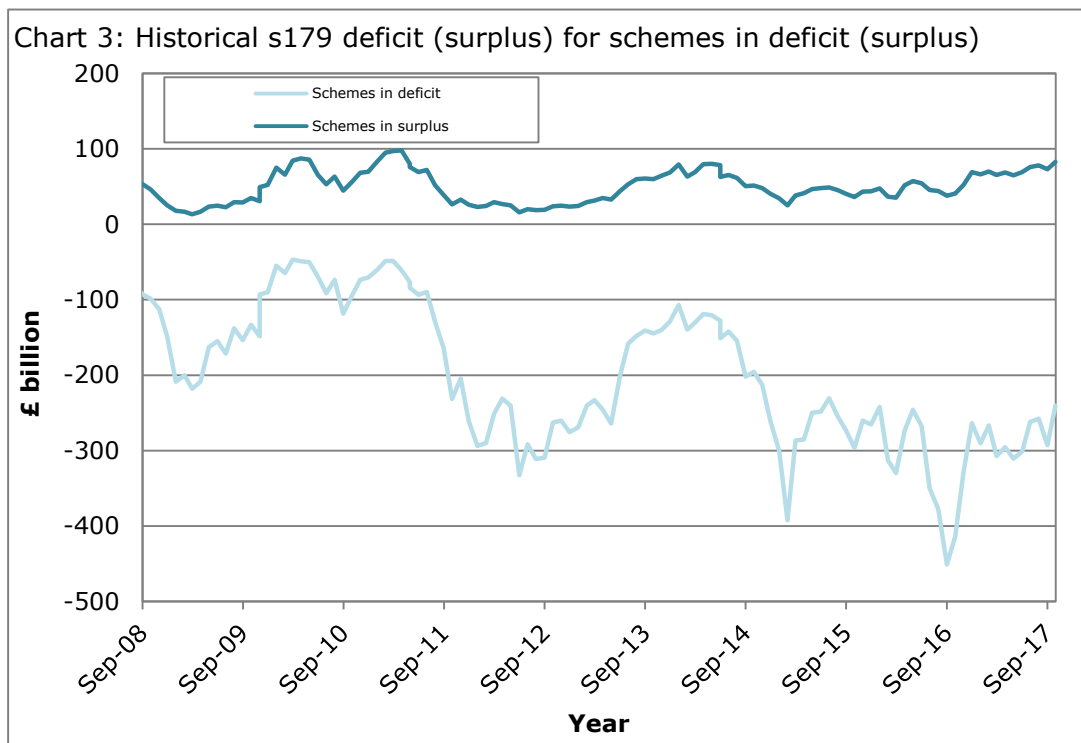
|                               | September 2016 | August 2017    | September 2017 |
|-------------------------------|----------------|----------------|----------------|
| <b>Aggregate Balance</b>      | -£373.5bn      | -£220.4bn      | -£158.0bn      |
| <b>Funding ratio</b>          | 79.8%          | 87.6%          | 90.6%          |
| <b>Aggregate Assets</b>       | £1,474.6bn     | £1,553.0bn     | £1,524.3bn     |
| <b>Aggregate Liabilities</b>  | £1,848.1bn     | £1,773.4bn     | £1,682.3bn     |
| <b>Data Set / Assumptions</b> | Purple 16 - A7 | Purple 16 - A8 | Purple 16 - A8 |

### Schemes in deficit and surplus

The aggregate deficit of all schemes in deficit at the end of September 2017 is estimated to have decreased to £240.5 billion from £293.1 billion at the end of August 2017. At the end of September 2016, the equivalent figure was £414.2 billion.

At the end of September 2017, the total surplus of schemes in surplus increased to £82.5 billion from £72.7 billion at the end of August 2017. At the end of September 2016, the total surplus of all schemes in surplus stood at £40.7 billion.

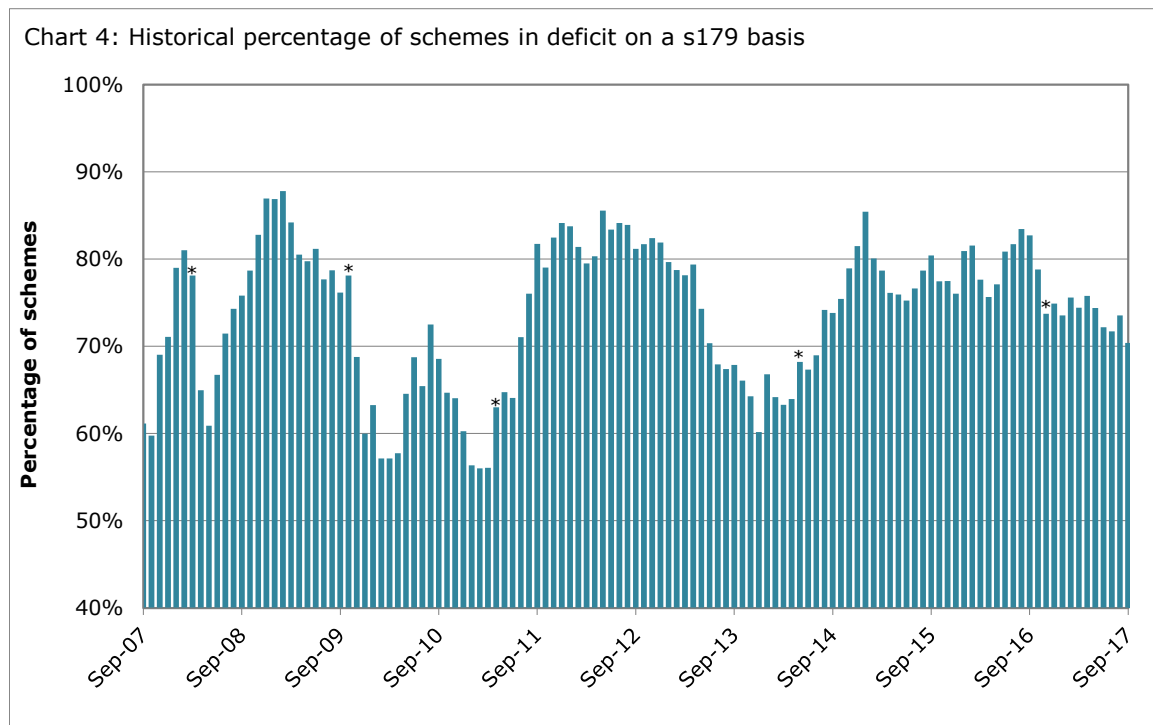
The number of schemes in deficit at the end of September 2017 decreased to 4,079, representing 70.4 per cent of the total 5,794 defined benefit schemes. There were 4,261 schemes in deficit at the end of August 2017 (73.5 per cent) and 4,792 schemes in deficit at the end of September 2016 (82.7 per cent).



The number of schemes in surplus increased to 1,715 at the end of September 2017 (29.6 per cent of schemes) from 1,533 at the end of August 2017 (26.5 per cent). There were 1,002 schemes in surplus at the end of September 2016 (17.3 per cent).

## Schemes in deficit (surplus)

|                                       | September 2016 | August 2017    | September 2017 |
|---------------------------------------|----------------|----------------|----------------|
| <b>Number of Schemes in Deficit</b>   | 4,792          | 4,261          | 4,079          |
| <b>Deficit for Schemes in Deficit</b> | £414.2bn       | £293.1bn       | £240.5bn       |
| <b>Number of Schemes in Surplus</b>   | 1,002          | 1,533          | 1,715          |
| <b>Surplus for Schemes in Surplus</b> | £40.7bn        | £72.7bn        | £82.5bn        |
| <b>Number of Schemes in Universe</b>  | 5,794          | 5,794          | 5,794          |
| <b>Data Set / Assumptions</b>         | Purple 16 - A7 | Purple 16 - A8 | Purple 16 - A8 |



*\*Note: The changes to assumptions in March 2008 and October 2009 reduced the number of schemes in deficit by 412 (5.6 per cent) and 566 (8.5 per cent) respectively, while the changes to assumptions in April 2011 and May 2014 raised the number of schemes in deficit by 107 (1.7 per cent) and 259 (4.3 per cent) respectively. The changes to assumptions on December 2016 and implemented in the end November PPF 7800 Index reduced the number of schemes in deficit by 157 (2.7 per cent).*

## Understanding the impact of market movements

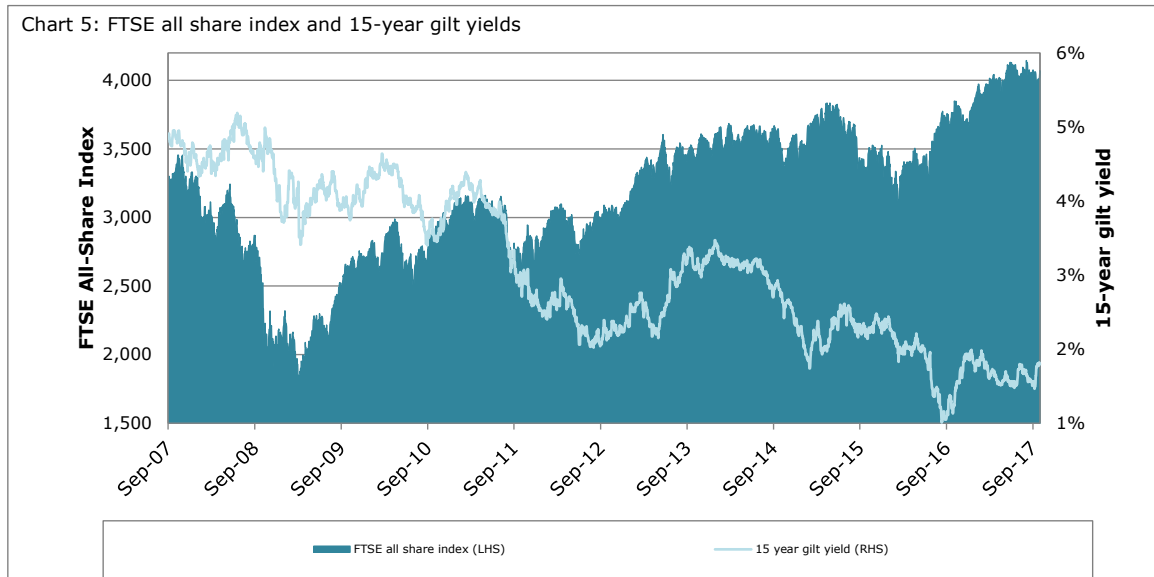
Equity markets and gilt yields are the main drivers of funding levels. Scheme liabilities are sensitive to the yields available on a range of conventional and index-linked gilts. Liabilities are also time-sensitive in that, even if gilt yields were unchanged, scheme liabilities would increase as the point of payment approaches.<sup>1</sup> The value of scheme assets is affected by the change in prices of all the major asset classes, not just equity markets.

<sup>1</sup> This effect amounts to around 0.1-0.2 per cent a month in the current environment of low yields.

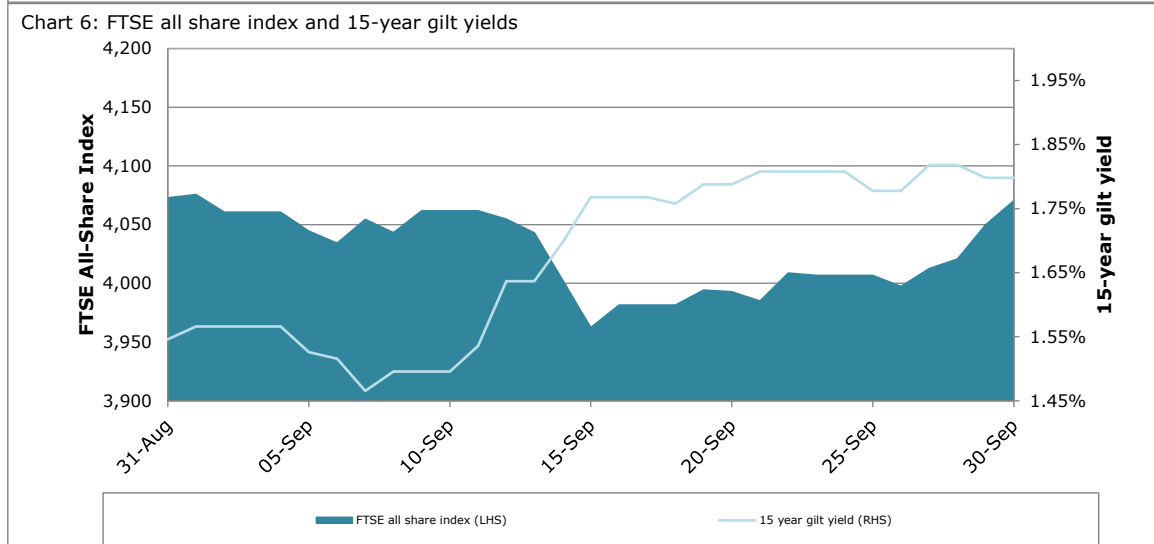
However, due to their weight in asset allocation and volatility, equities and bonds are the biggest drivers behind changes in scheme assets; bonds have a higher weight in asset allocation, but equities tend to be more volatile.

Over the month of September 2017, liabilities decreased by 5.1 per cent. Conventional 15-year gilt yields rose by 25 basis points, while index-linked 5-to-15 gilt yields rose by 31 basis points over the month. Assets decreased by 1.8 per cent in September 2017 reflecting the impact of lower bond prices and global equity prices.

Over the year to September 2017, 15-year gilt yields were up by 55 basis points, index-linked 5-15 gilt yields were up by 28 basis points and the FTSE All-Share Index was up by 8.4 per cent.



Source: Bloomberg



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## Notes

### 1. The PPF universe

The PPF covers certain defined benefit occupational schemes and DB elements of hybrid schemes. For more information about eligible schemes see 'eligible schemes' on the PPF's website at

<http://www.pensionprotectionfund.org.uk/About-Us/eligibility/Pages/Eligibility.aspx>

### 2. 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 Pension Protection Fund 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 goes insolvent. For the majority of people below their scheme's normal pension age the Pension Protection Fund will generally pay compensation at the 90 per cent level. This is subject to a cap which is currently equal to £34,655.05 at age 65, after the 90 per cent has been applied. 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:

<http://www.pensionprotectionfund.org.uk/Pages/Compensation.aspx>

### 3. s179 assumptions

On 1 December 2016, the Pension Protection Fund updated its valuation assumption guidance for both s179 and s143 valuations. In summary, the changes concern:

- the use of separate discount rates for pensioners and non-pensioners post retirement;
- the use of yield indices that have durations that better match average liability durations, including the introduction of a new index-linked gilt yield; and
- the mortality assumptions.

The impact of the change in the actuarial assumptions was an improvement of the funding ratio by 1.5 percentage points due to an improvement of £29.5 billion in the aggregate balance. The assumptions had previously been revised in March 2008, October 2009, April 2011 and May 2014. The impact was to improve the aggregate balance by £35.6 billion, £74.1 billion and reduce it by £12.0 billion and £39.2 billion respectively.

For more information about the new actuarial assumptions you can visit PPF's website at

<http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/S179%20Assumptions%20Guidance.pdf>

### 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 a s179 basis is an illustration of the impact of changes in financial markets on the Pension Protection Fund's total exposure. Schemes in surplus on a s179 basis at the time of insolvency usually do not enter the Pension Protection Fund.

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 FRS17 (the measures used in UK company accounts), and technical provisions (that are used in the regulator'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. For more details see the Purple Book 2016.

[http://www.pensionprotectionfund.org.uk/Documents/Purple\\_Book\\_2016.pdf](http://www.pensionprotectionfund.org.uk/Documents/Purple_Book_2016.pdf)

## **5. Methodology**

The figures shown in the charts are based on adjusting the scheme valuation data supplied to the PPF as part of their annual scheme return. This data is transformed on a s179 valuation basis at various dates using changes in market indices for principal asset classes. Conventional and index-linked gilt yields are used to value liabilities. The approximation does not allow for benefit accrual or outgo, contributions paid or actual scheme experience. No account is taken of schemes hedging using derivatives.

## **6. Estimating the impact of changes in market conditions on the Funding 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 s179 assets by 2.2 per cent while a 0.3 per cent rise in gilt yields reduces scheme assets by 1.8 per cent. Meanwhile, a 0.3 per cent rise in gilt yields reduces scheme liabilities by 5.9 per cent. The rules of thumb strictly speaking only apply to small changes from the 31 March 2016 level. For more information see Chapter 5 of the Purple Book 2016.

## **7. Moving to the Purple 2016 dataset**

In November 2016 we moved to a dataset consistent with the Purple Book 2016 covering 5,794 schemes. The Purple 2016 dataset is estimated to include over 98 per cent of liabilities of PPF eligible schemes. 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. The impact of the change was to improve the funding ratio at 31 October 2016 by 2.7 percentage points and the aggregate balance by £53.0 billion. The aggregate balance as at 31 October 2016 was -£275.9 billion (84.1 per cent funded) compared with -£328.9 billion (81.4 per cent funded) using the old dataset. Moving to the new Purple dataset reduced the aggregate deficit by £51.8 billion as at 31 March 2016.

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

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