

# Purple Book 2015

Chapter 4: Scheme funding

## 4.1 Summary

- ▶ The aggregate s179 funding position of the schemes in the Purple 2015 data set as at 31 March 2015 was a deficit of £244.2 billion. This is the largest s179 deficit at an end of March date since the establishment of the PPF (although the funding ratio was lower in 2009 and 2012). This is primarily because of the reduction in real and nominal discount rates as a result of market changes in relevant interest rates.
- ▶ The s179 funding ratio for 2015 is 84%. Total liabilities have increased from £1,176.8 billion in 2014 to £1,542.5 billion this year. Total assets have increased from £1,137.5 billion to £1,298.3 billion.
- ▶ 21% of schemes in the over 10,000 members group had s179 funding levels of over 100% compared with 45% last year.
- ▶ Higher funding levels remain associated with schemes with greater maturity.
- ▶ 26% of s179 liabilities in the data set were in respect of active members.

## 4.2 Introduction

This chapter primarily deals with funding on a s179 basis as at March 2015. Funding information supplied in scheme returns is processed so that the funding levels can be estimated at a common date, allowing consistent totals to be used. A scheme 100% funded on a s179 basis is, broadly speaking, at the level which would have to be paid to an insurance company for it to take on the payment of PPF levels of compensation. In addition, full buy-out funding information is included.

The processing of s179 results allows for the different assumptions used for the s179 valuations at different effective dates. S179 figures form the basis for PPF levy calculations, subject to subsequent adjustments in defined circumstances. Estimates of liabilities on the full buy-out basis have used the same valuation assumptions and underlying data but allow for the difference between the PPF level of compensation and full scheme benefits. The buy-out calculations are hypothetical, as only small numbers of buy-outs actually occur and the terms achieved are confidential and not necessarily obtainable for other schemes.

## 4.3 Overall funding

Figure 4.1: Key funding statistics as at 31 March 2015

	s179	Full buy-out
Total number of schemes	5,945	5,945
Total assets (£ billion)	1,298.3	1,298.3
Total liabilities (£ billion)	1,542.5	2,099.2
Aggregate funding position (£ billion)	-244.2	-800.9
Total balance for schemes in deficit (£ billion)	-285.3	-804.9
Total balance for schemes in surplus (£ billion)	41.1	4.0
Funding level	84%	62%

Source: PPF/The Pensions Regulator

The aggregate s179 funding position of the schemes in the Purple 2015 dataset as at 31 March 2015 was a deficit of £244.2 billion. This is the largest s179 deficit at an end March date since the establishment of the PPF (although the funding ratio was lower in 2009 and 2012). This is primarily because of the reduction in real and nominal discount rates as a result of market changes in relevant interest rates.

**Figure 4.2: Historical funding figures on an s179 basis**

Year	No of schemes	Total assets (£ billion)	s179				
			Liabilities (£ billion)	Aggregate funding (s179) (£ billion)	Deficit of schemes in deficit (£ billion)	Surplus of schemes in surplus (£ billion)	Funding ratio
2006	7,751	769.5	792.2	-22.7	-76.3	53.5	97%
2007	7,542	837.7	769.9	67.8	-46.8	96.5	109%
2008	6,897	837.2	842.3	-5.1	-67.7	62.6	99%
2009	6,885	780.4	981.0	-200.6	-216.7	16.0	80%
2010	6,596	926.2	887.9	38.3	-49.1	87.4	104%
2011	6,432	968.5	969.7	-1.2	-78.3	77.1	100%
2012	6,316	1,026.8	1,231.0	-204.2	-231.3	27.1	83%
2013	6,150	1,118.5	1,329.2	-210.8	-245.8	35.0	84%
2014	6,057	1,137.5	1,176.8	-39.3	-119.0	79.7	97%
2015	5,945	1,298.3	1,542.5	-244.2	-285.3	41.1	84%

Source: PPF/The Pensions Regulator

The s179 funding ratio for 2015 is 84%. Total liabilities have increased from £1,176.8 billion in 2014 to £1,542.5 billion this year. Total assets have increased from £1,137.5 billion to £1,298.3 billion

**Figure 4.3: Historical funding figures on a full buy-out basis**

Year	Full buyout				
	Liabilities (£ billion)	Aggregate funding (s179) (£ billion)	Deficit of schemes in deficit (£ billion)	Surplus of schemes in surplus (£ billion)	Funding ratio
2006	1,273.5	-504.0	n/a	n/a	60%
2007	1,289.3	-451.6	n/a	n/a	65%
2008	1,356.0	-518.6	-520.4	1.6	62%
2009	1,351.6	-571.2	-572.3	1.1	58%
2010	1,359.2	-433.0	-436.5	3.5	68%
2011	1,435.5	-467.0	-470.7	3.7	67%
2012	1,702.6	-675.8	-677.3	1.5	60%
2013	1,826.7	-708.2	-709.9	1.7	61%
2014	1,690.3	-552.8	-558.2	5.4	67%
2015	2,099.2	-800.9	-804.9	4.0	62%

Source: PPF/The Pensions Regulator

## 4.4 Analysis of funding by scheme size

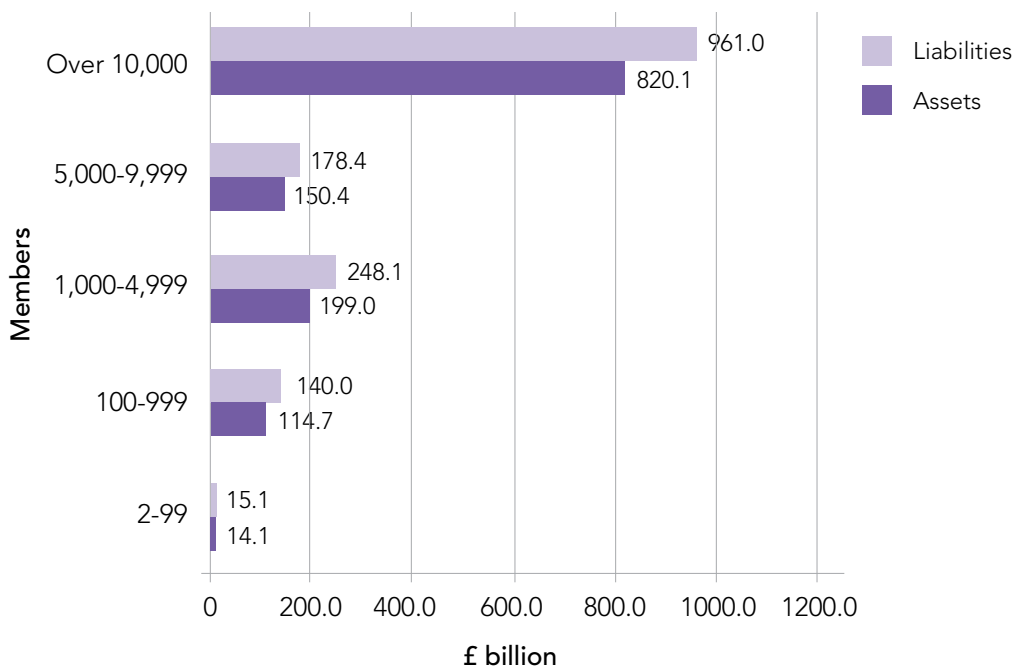
Figure 4.4: s179 funding levels by size of scheme membership as at 31 March 2015

Membership group	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level*
2 to 99 members	2,144	14.1	15.1	-1.0	93%	90%
100 to 999 members	2,625	114.7	140.0	-25.2	82%	80%
1,000 to 4,999 members	785	199.0	248.1	-49.0	80%	78%
5,000 to 9,999 members	179	150.4	178.4	-28.0	84%	82%
Over 10,000 members	212	820.1	961.0	-140.9	85%	85%
Total	5,945	1,298.3	1,542.5	-244.2	84%	84%

\*Note that schemes with unusual funding arrangements were excluded from the simple averages in this table to avoid distortions. 16 schemes were removed on the basis that their buy-out funding level was equal to or greater than 200%.

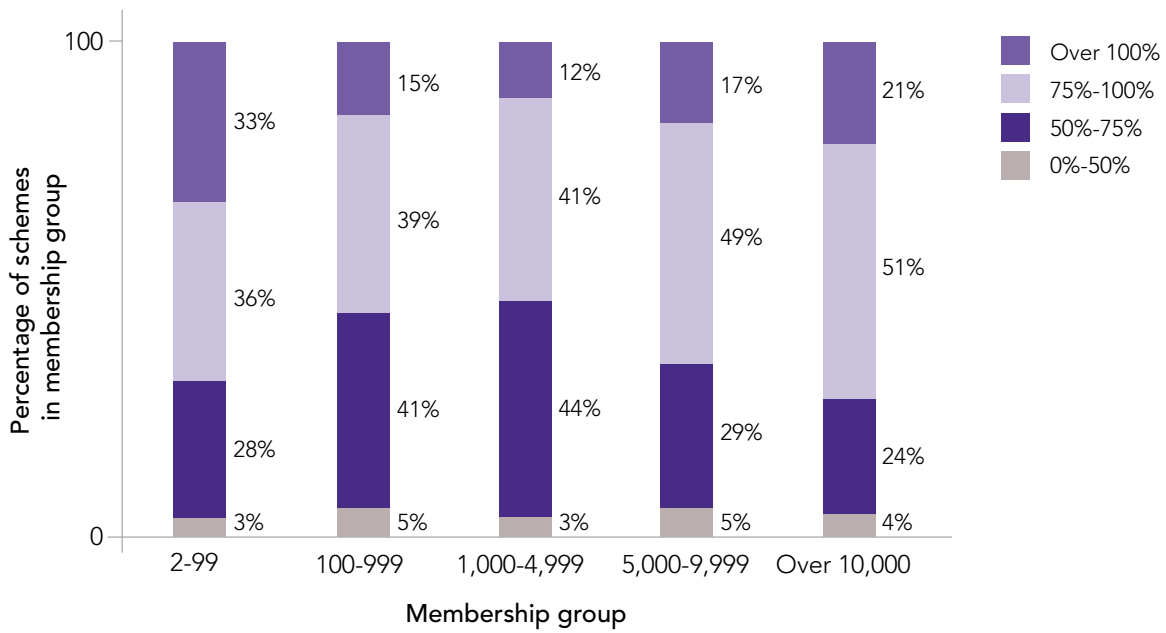
Source: PPF/The Pensions Regulator

Figure 4.5: Total assets and liabilities on a s179 basis as at 31 March 2015



Source: PPF/The Pensions Regulator

**Figure 4.6: Distribution of s179 funding levels by size of scheme membership as at 31 March 2015**



Source: PPF/The Pensions Regulator

21% of schemes in the 'over 10,000 members' group had s179 funding levels of over 100% compared with 45% last year.

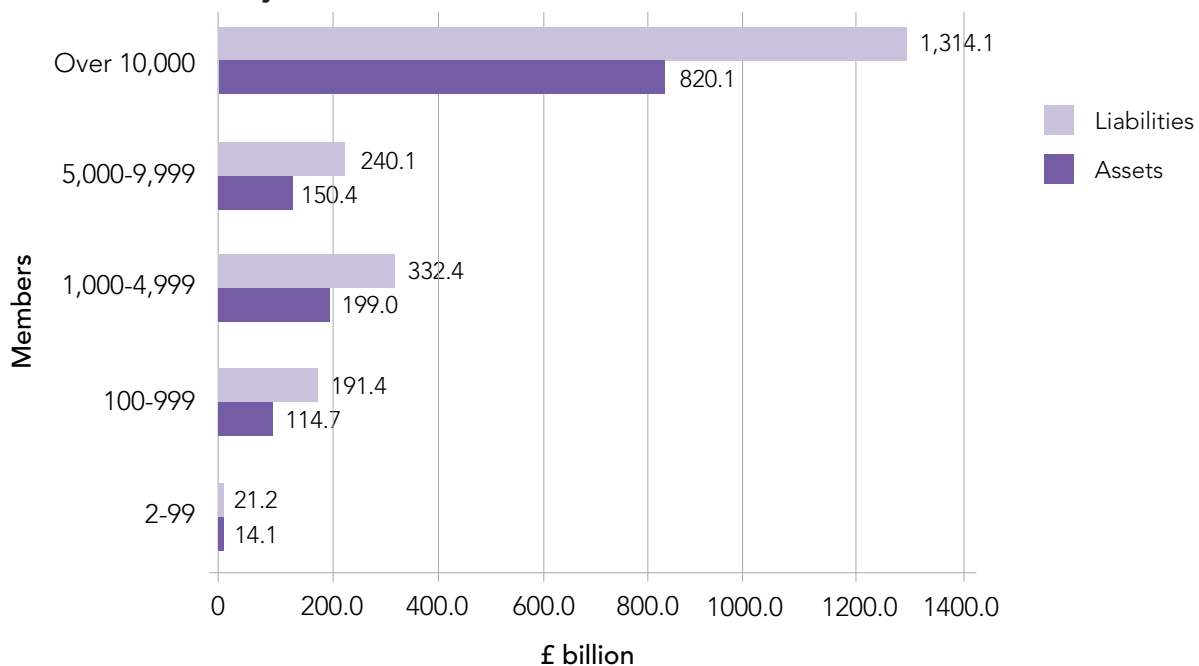
**Figure 4.7: Estimated full buy-out levels by size of scheme membership as at 31 March 2015**

Membership group	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level*
2 to 99 members	2,144	14.1	21.2	-7.1	67%	66%
100 to 999 members	2,625	114.7	191.4	-76.7	60%	59%
1,000 to 4,999 members	785	199.0	332.4	-133.4	60%	59%
5,000 to 9,999 members	179	150.4	240.1	-89.7	63%	60%
Over 10,000 members	212	820.1	1,314.1	-494.0	62%	62%
Total	5,945	1,298.3	2,099.2	-800.9	62%	62%

\*Note that schemes with unusual funding arrangements were excluded from the simple averages in this table to avoid distortions. 16 schemes were removed on the basis that their buy-out funding level was equal to or greater than 200%.

Source: PPF/The Pensions Regulator

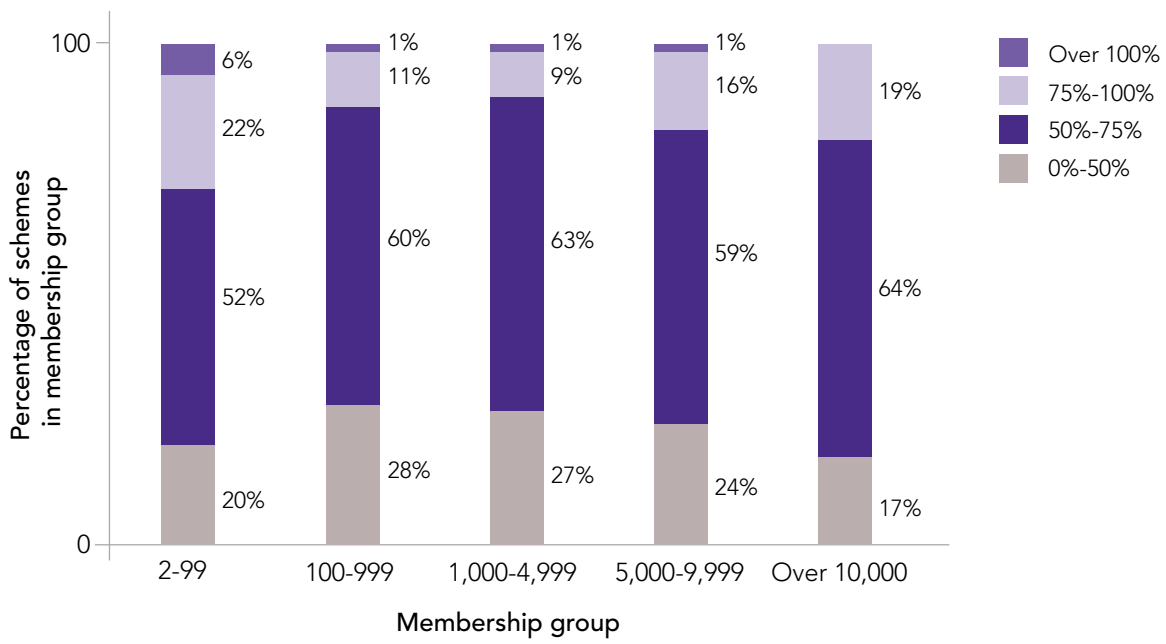
**Figure 4.8: Total assets and liabilities by size of scheme membership on an estimated full buy-out basis as at 31 March 2015**



Source: PPF/The Pensions Regulator



**Figure 4.9: Distribution of buy-out funding levels by size of scheme membership as at 31 March 2015**



Source: PPF/The Pensions Regulator

## 4.5 Analysis of funding by scheme maturity

Scheme maturity is represented by dividing schemes into groups according to the proportion of s179 liabilities which relate to pensioners.

**Figure 4.10: Analysis of s179 funding levels by scheme maturity as at 31 March 2015**

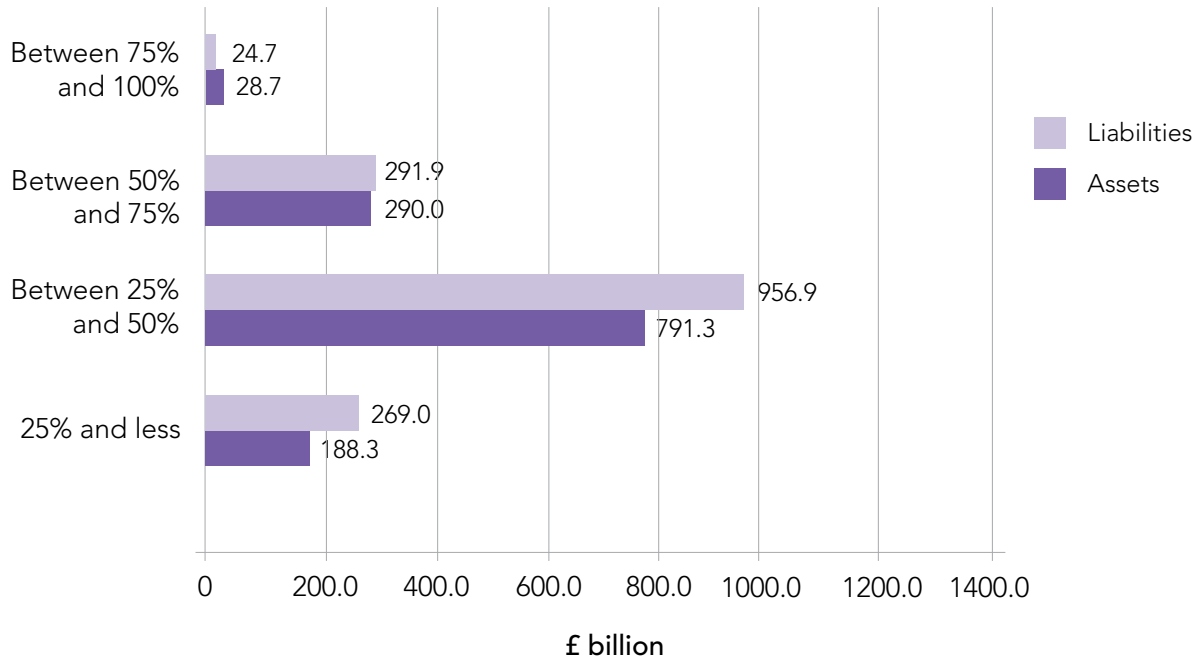
Proportion of s179 liabilities relating to pensioners	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level*
25% and less	1,970	188.3	269.0	-80.7	70%	76%
Between 25% and 50%	2,787	791.3	956.9	-165.6	83%	82%
Between 50% and 75%	984	290.0	291.9	-1.9	99%	97%
Between 75% and 100%	204	28.7	24.7	3.9	116%	118%
Total	5,945	1,298.3	1,542.5	-244.2	84%	84%

\*Note that schemes with unusual funding arrangements were excluded from the simple averages in this table to avoid distortions. 16 schemes were removed on the basis that their buy-out funding level was equal to or greater than 200%.

Source: PPF/The Pensions Regulator

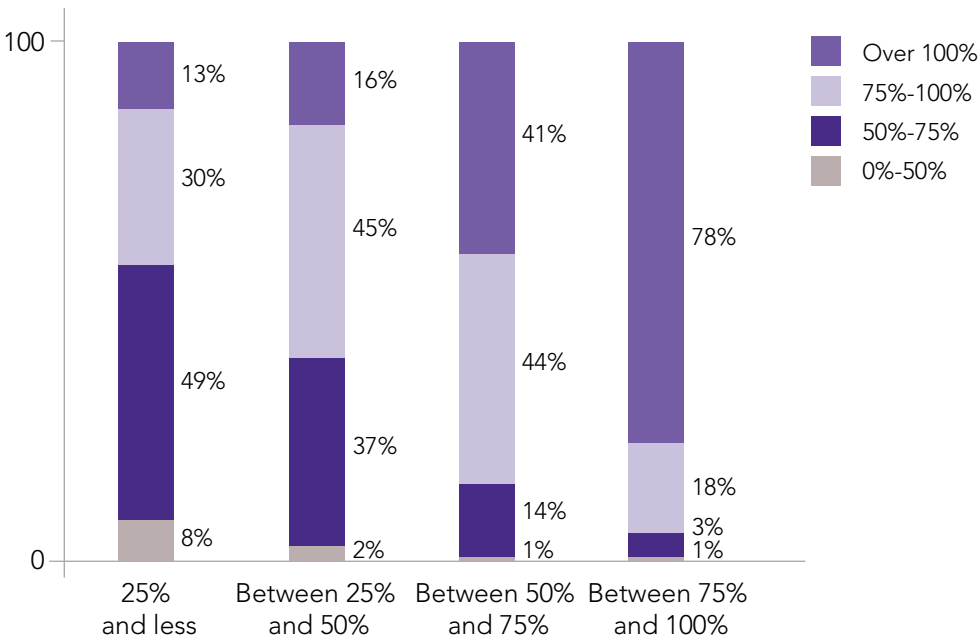
Higher funding levels remain associated with schemes with greater maturity.

**Figure 4.11: Distribution of s179 assets and liabilities by scheme maturity as at 31 March 2015**



Source: PPF/The Pensions Regulator

**Figure 4.12: Distribution of funding levels on a s179 basis by scheme maturity as at 31 March 2015**



Source: PPF/The Pensions Regulator

## 4.6 Analysis of funding by scheme status

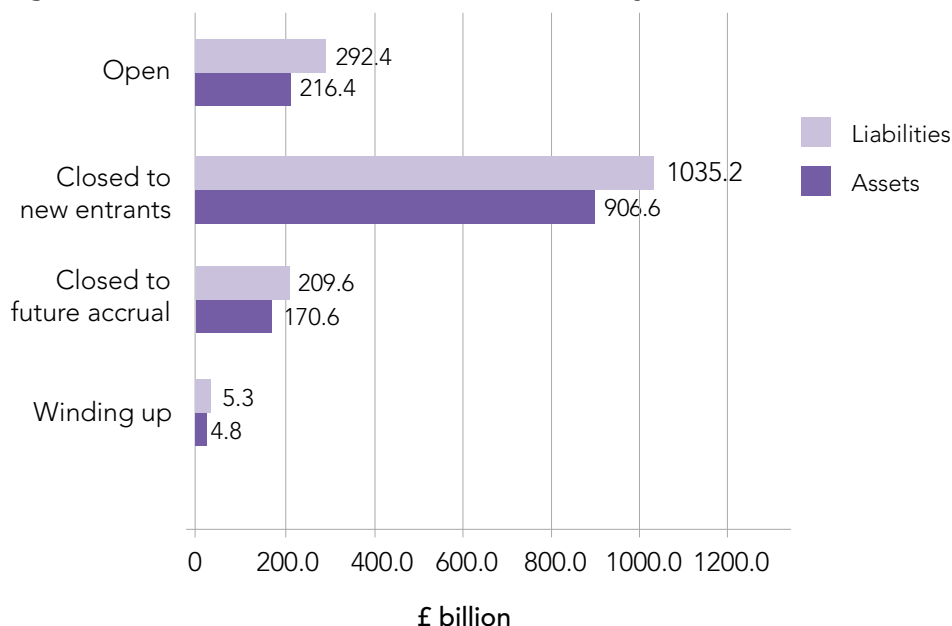
Figure 4.13: Analysis of s179 funding levels by scheme status as at 31 March 2015

Status	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level*
Open	765	216.4	292.4	-76.0	74%	82%
Closed to new members	3,053	906.6	1,035.2	-128.6	88%	85%
Closed to future accrual	1,998	170.6	209.6	-39.1	81%	82%
Winding up	129	4.8	5.3	-0.6	89%	103%
Total	5,945	1,298.3	1,542.5	-244.2	84%	84%

\*Note that schemes with unusual funding arrangements were excluded from the simple averages in this table to avoid distortions. 16 schemes were removed on the basis that their buy-out funding level was equal to or greater than 200%.

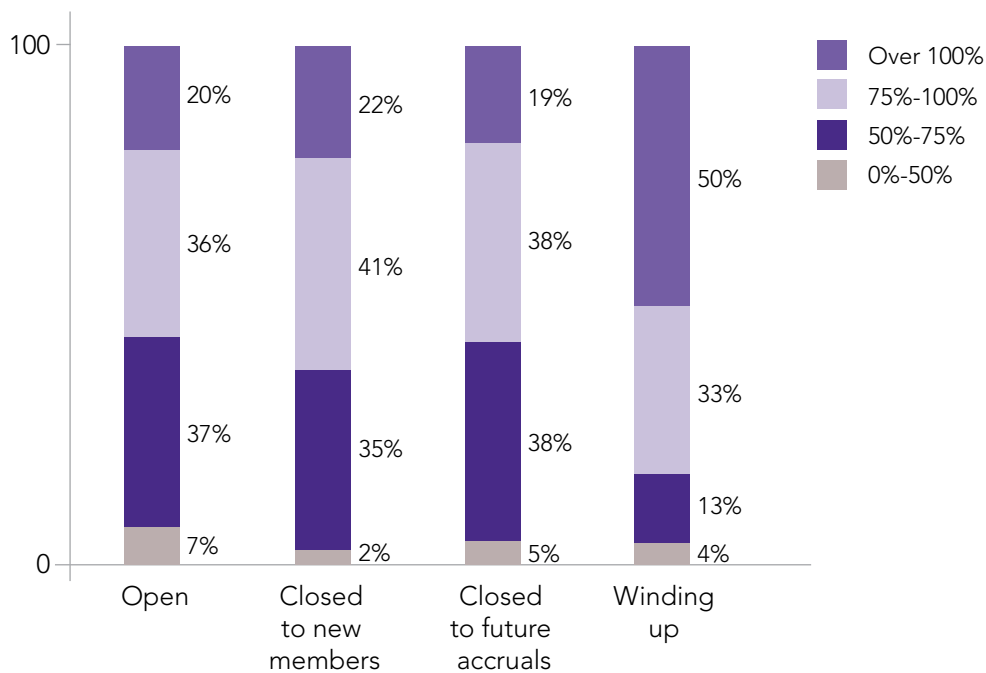
Source: PPF/The Pensions Regulator

Figure 4.14: Distribution of s179 assets and liabilities by scheme status as at 31 March 2015



Source: PPF/The Pensions Regulator

**Figure 4.15: Distribution of schemes by s179 funding levels within scheme status groups as at 31 March 2015**



Source: PPF/The Pensions Regulator

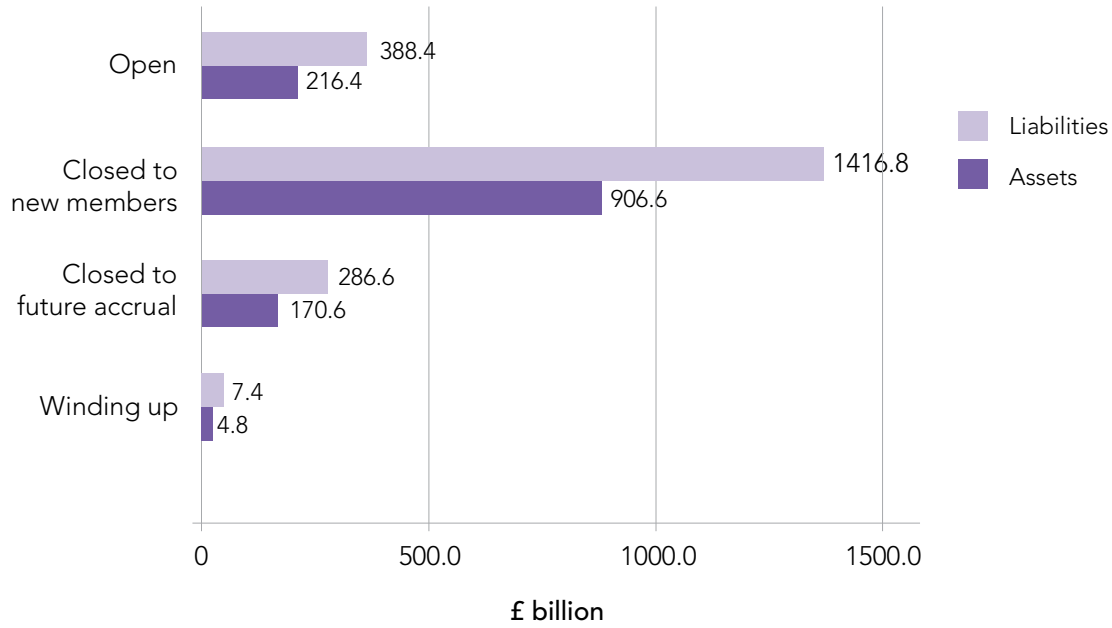
**Figure 4.16: Analysis of estimated full buy-out funding levels by scheme status as at 31 March 2015**

Status	Number of schemes in sample	Market value of assets (£ billion)	Liabilities (£ billion)	Balance (£ billion)	Weighted average funding level	Simple average funding level*
Open	765	216.4	388.4	-172.0	56%	64%
Closed to new members	3,053	906.6	1,416.8	-510.2	64%	62%
Closed to future accrual	1,998	170.6	286.6	-116.0	60%	60%
Winding up	129	4.8	7.4	-2.6	64%	76%
Total	5,945	1,298.3	2,099.2	-800.9	62%	62%

\*Note that schemes with unusual funding arrangements were excluded from the simple averages in this table to avoid distortions. 16 schemes were removed on the basis that their buy-out funding level was equal to or greater than 200%.

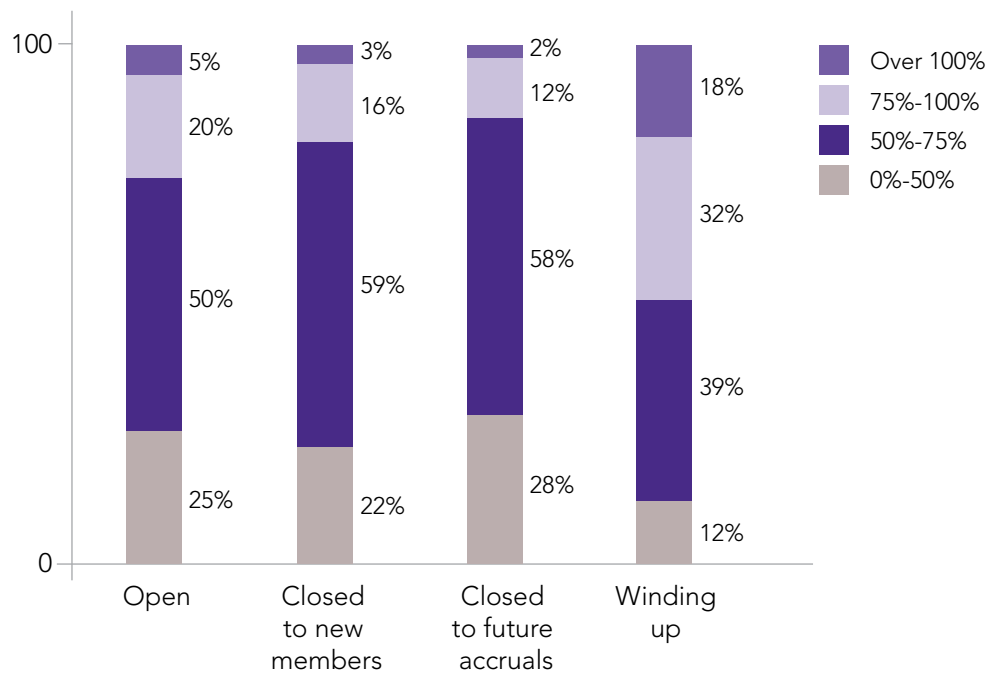
Source: PPF/The Pensions Regulator

**Figure 4.17: Distribution of estimated full buy-out assets and liabilities by status as at 31 March 2015**



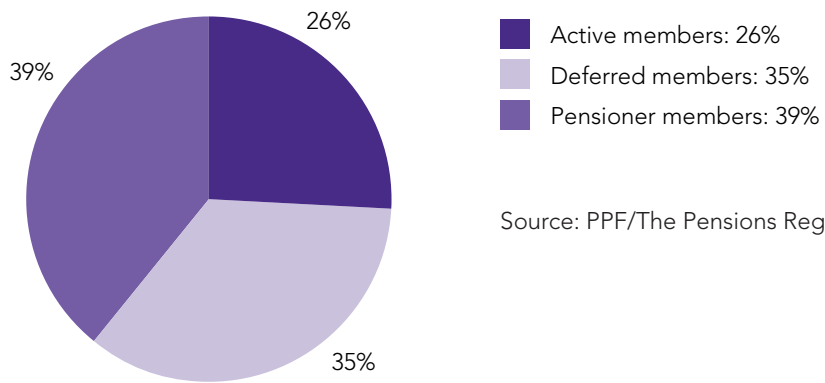
Source: PPF/The Pensions Regulator

**Figure 4.18: Distribution of estimated full buy-out funding levels by scheme status as at 31 March 2015**



Source: PPF/The Pensions Regulator

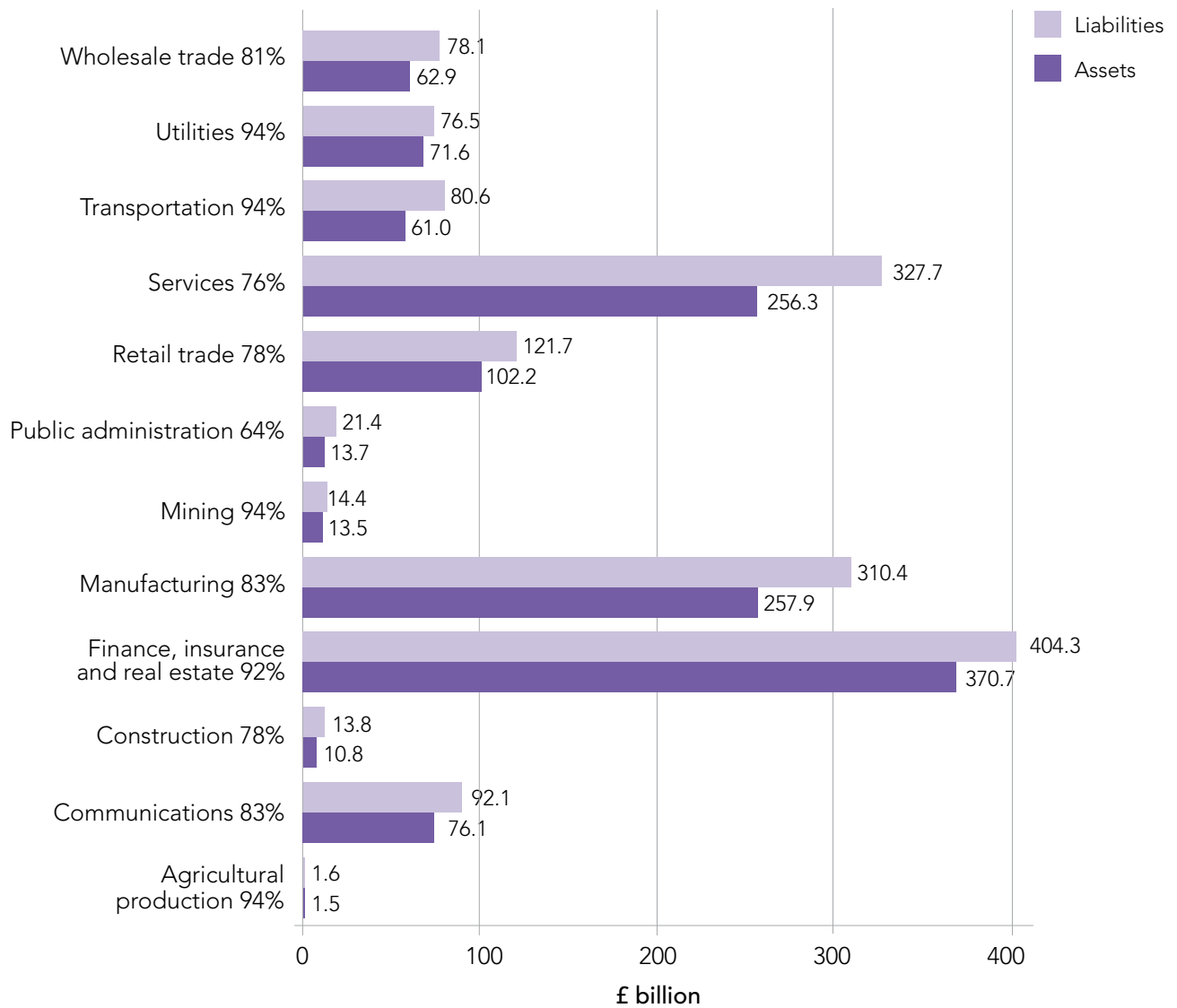
**Figure 4.19: s179 liabilities by active, deferred and pensioner members**



Source: PPF/The Pensions Regulator

26% of s179 liabilities in the dataset were in respect of active members.

**Figure 4.20: s179 assets and liabilities by industry with overall funding level as at 31 March 2015**



Source: PPF/The Pensions Regulator



The Purple Book 2015 – Chapter 3: Scheme demographics can be found at [www.tpr.gov.uk/purple-2015-demo](http://www.tpr.gov.uk/purple-2015-demo)

The Purple Book 2015 – Appendix can be found at [www.tpr.gov.uk/purple-2015-demo-appendix](http://www.tpr.gov.uk/purple-2015-demo-appendix)

## **The Purple Book 2015**

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