

7. Asset allocation

Summary

- This chapter contains information on how DB schemes have invested scheme assets since 2006 and how asset allocations in *The Purple Book 2020* dataset vary according to different scheme characteristics, such as scheme size.
- Around 99 per cent of schemes' asset allocations in *The Purple Book 2020* dataset had an effective date in the year 2018 or 2019.
- The aggregate proportion of schemes' assets invested in equities fell from 24.0 per cent to 20.4 per cent, which was partly because of market volatility in March 2020 that led to decreases in the value of equities over the year to 31 March 2020. Meanwhile the proportion in bonds rose from 62.8 per cent to 69.2 per cent.
- Within bonds, the proportions held were broadly unchanged from last year with index-linked bonds making up the biggest proportion at 46.1 per cent. Corporate bonds accounted for 28.0 per cent of the bonds held and government fixed interest bonds contributed 25.9 per cent of the total.
- Smaller schemes tend to have higher proportions in government and corporate fixed interest bonds than in index-linked bonds.
- Within equities, the UK-quoted proportion fell from 16.6 per cent to 13.3 per cent and the proportion of overseas-quoted equities decreased slightly from 69.7 per cent to 69.0 per cent. This would have been partly because of volatility in UK-quoted and overseas-quoted equities in March 2020 that led to decreases in the value of these equities over the year to 31 March 2020. Meanwhile unquoted/private equities increased by 4.0 per cent to 17.7 per cent.
- Smaller schemes tend to hold higher proportions in UK equities with smaller proportions in both overseas and unquoted/private equities.
- The best funded schemes tend to have the greatest proportion of their assets invested in bonds and a smaller proportion invested in equities.
- As scheme maturity increases, the proportion of assets invested in equities falls.

Asset data¹⁰

Figure 7.1 | Distribution of schemes by asset allocation date*

Around 99 per cent of schemes provided an asset allocation with an effective date in 2018 or 2019.

Source: PPF

Note: the percentage column does not sum to 100 per cent due to rounding.

Asset allocation year	Number of schemes	Percentage of <i>The Purple Book 2020</i> dataset
2006–2012	2	0.0%
2013	–	0.0%
2014	1	0.0%
2015	3	0.1%
2016	3	0.1%
2017	32	0.6%
2018	1,823	34.3%
2019	3,433	64.6%
2020	21	0.4%
Total	5,318	100%

* There can be a significant gap between the date of the scheme return and the date at which the asset allocation was taken. This means that the date at which asset allocation data is provided differs from scheme to scheme.

¹⁰ Asset allocations submitted by schemes are not adjusted for market movements. Most of this chapter uses weighted average asset allocations. For example, the weighted average share of equities is the total amount of equities across all schemes divided by the total amount of assets across all schemes. The simple average takes the arithmetic average of each scheme's proportion of its assets held in equities.

7. Asset allocation continued

Figure 7.2 | Weighted average asset allocation in total assets

In *The Purple Book 2020* dataset, the proportion invested in bonds rose while the proportion in equities fell.

Year/ The Purple Book dataset	Asset class								
	Equities	Bonds	Other invest- ments	Breakdown of other investments					
				Property	Cash and deposits	Insurance policies	Hedge funds*	Annuities*	Misc
2006	61.1%	28.3%	10.6%	4.3%	2.3%	0.9%	n/a	n/a	3.1%
2007	59.5%	29.6%	10.9%	5.2%	2.3%	0.8%	n/a	n/a	2.5%
2008	53.6%	32.9%	13.5%	5.6%	3.0%	1.1%	n/a	n/a	3.8%
2009	46.4%	37.1%	16.5%	5.2%	3.9%	1.4%	1.5%	n/a	4.5%
2010	42.0%	40.4%	17.6%	4.6%	3.9%	1.4%	2.2%	n/a	5.4%
2011	41.1%	40.1%	18.8%	4.4%	4.1%	1.6%	2.4%	n/a	6.3%
2012	38.5%	43.2%	18.3%	4.9%	5.1%	0.2%	4.5%	n/a	3.6%
2013	35.1%	44.8%	20.1%	4.7%	6.7%	0.1%	5.2%	n/a	3.5%
2014	35.0%	44.1%	20.9%	4.6%	6.1%	0.1%	5.8%	n/a	4.3%
2015	33.0%	47.7%	19.3%	4.9%	3.5%	0.1%	6.1%	n/a	4.7%
2016	30.3%	51.3%	18.4%	4.8%	3.0%	0.1%	6.6%	2.1%	1.7%
2017	29.0%	55.7%	15.3%	5.3%	-0.9%	0.1%	6.7%	3.3%	0.8%
2018	27.0%	59.0%	14.0%	4.8%	-2.5%	0.1%	7.0%	3.4%	1.2%
2019	24.0%	62.8%	13.2%	5.0%	-4.4%	0.3%	7.4%	4.0%	1.0%
2020	20.4%	69.2%	10.4%	4.9%	-7.2%	0.1%	6.8%	5.0%	0.8%

* n/a denotes not available, where schemes may have been invested in these asset classes but the percentages cannot be determined from the data held.

The decrease in the value of equities between 31 March 2019 and 31 March 2020 contributed towards the decrease in the proportion of assets invested in equities over this period.

The weighted average proportion of assets held in cash and deposits being negative represents a number of large schemes with significant negative cash holdings which are likely to be related to investments such as swaps and repurchase agreements.

Source: PPF

Note: figures may not sum to 100 per cent or the 'other investments' total due to rounding.

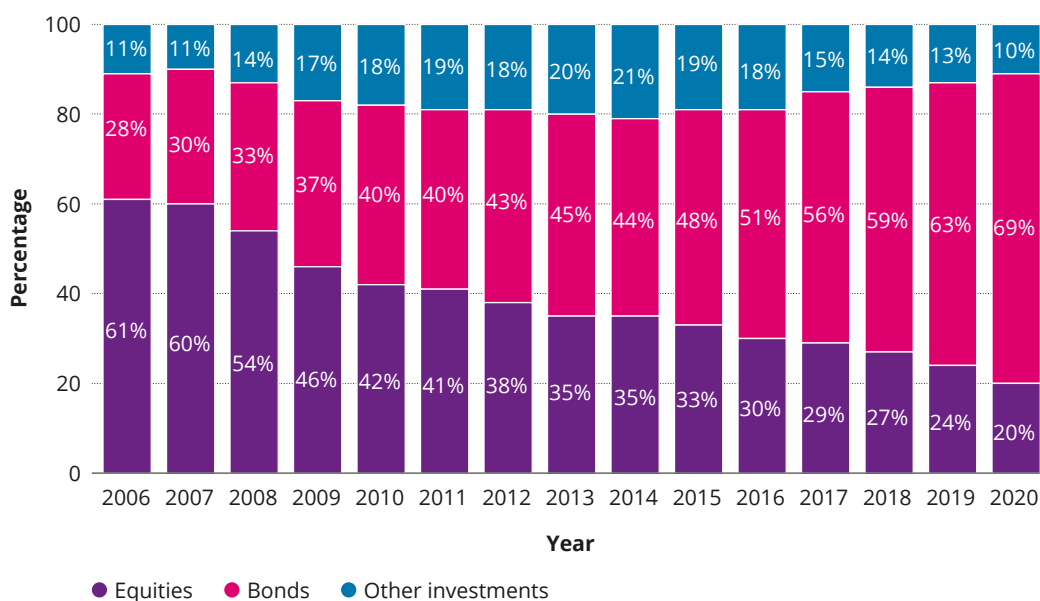


Figure 7.3 | Asset allocation: simple averages

A comparison of simple and weighted averages in 2020 shows there is a greater weighted allocation to bonds and smaller allocations to equities and other investments. This reflects the fact that the larger schemes hold a greater proportion of bonds than smaller schemes.

Year/ The Purple Book dataset	Asset class								
	Equities	Bonds	Other invest- ments	Property	Cash and deposits	Insurance policies	Hedge funds*	Annuities*	Misc
2006	52.6%	22.6%	24.8%	2.1%	3.9%	14.9%	n/a	n/a	3.6%
2007	53.5%	24.0%	22.5%	2.5%	3.7%	13.7%	n/a	n/a	2.6%
2008	50.2%	26.5%	23.3%	2.9%	4.4%	13.0%	n/a	n/a	2.9%
2009	46.6%	29.2%	24.2%	2.8%	5.6%	12.4%	0.7%	n/a	2.6%
2010	43.1%	32.6%	24.3%	2.6%	5.7%	12.3%	0.9%	n/a	2.8%
2011	43.7%	32.6%	23.7%	2.7%	4.9%	11.8%	1.0%	n/a	3.3%
2012	43.7%	36.1%	20.2%	3.5%	5.5%	4.4%	3.7%	n/a	3.2%
2013	40.6%	39.1%	20.3%	3.6%	6.2%	2.0%	5.0%	n/a	3.5%
2014	39.4%	39.0%	21.6%	3.5%	6.4%	1.8%	6.2%	n/a	3.9%
2015	38.8%	39.4%	21.8%	3.6%	5.7%	1.7%	7.3%	n/a	3.7%
2016	36.8%	41.1%	22.1%	3.7%	5.4%	1.2%	7.9%	2.4%	1.5%
2017	34.5%	41.4%	24.1%	3.7%	3.6%	0.7%	7.9%	6.8%	1.3%
2018	32.4%	43.1%	24.5%	3.3%	1.8%	0.6%	8.5%	8.9%	1.4%
2019	30.4%	47.0%	22.7%	3.4%	-0.8%	0.5%	8.9%	9.4%	1.3%
2020	27.8%	52.3%	19.9%	3.4%	-3.2%	0.6%	7.9%	9.7%	1.7%

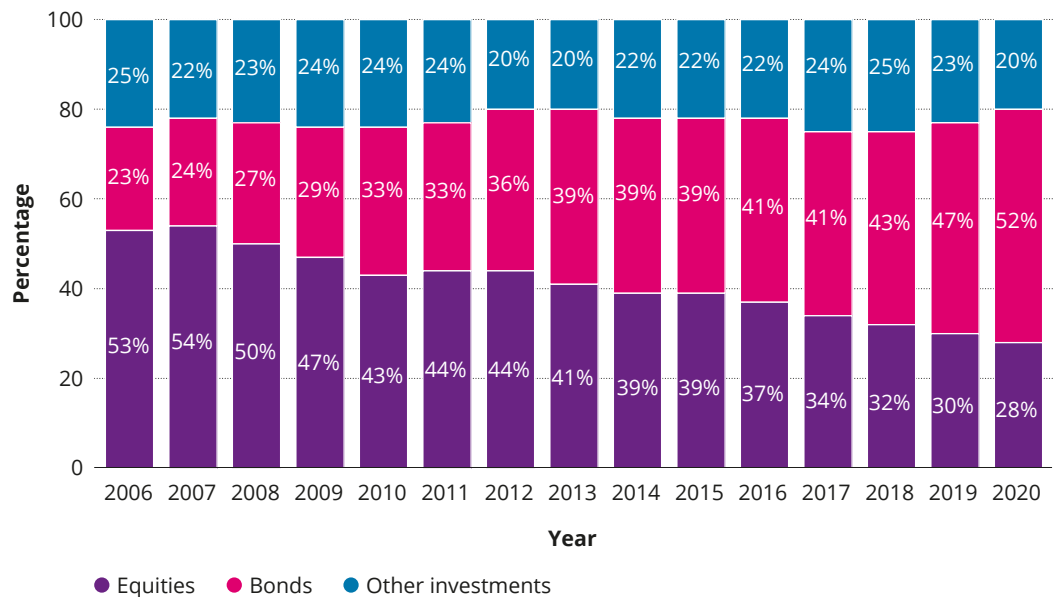
* n/a denotes not available, where schemes may have been invested in these asset classes but the percentages cannot be determined from the data held.

The decrease in the value of equities between 31 March 2019 and 31 March 2020 contributed towards the decrease in the proportion of assets invested in equities over this period.

The simple average proportion of assets held in cash and deposits being negative represents schemes with negative cash holdings which are likely to be related to investments such as swaps and repurchase agreements.

Source: PPF

Note: figures may not sum to 100 per cent or the 'other investments' total due to rounding.



7. Asset allocation continued

Figure 7.4 | Bond splits

The proportion of bonds in each class has remained broadly unchanged in recent years.

Year/ The Purple Book dataset	Bonds					
	Weighted average			Simple average		
	Government fixed interest	Corporate fixed interest	Index-linked	Government fixed interest	Corporate fixed interest	Index-linked
2008	33.2%	32.6%	33.9%	47.2%	33.0%	19.8%
2009	29.0%	38.3%	32.6%	45.6%	37.3%	17.1%
2010	24.6%	42.2%	33.1%	37.3%	43.0%	19.8%
2011	19.6%	44.3%	36.1%	31.2%	47.1%	21.7%
2012	17.7%	44.8%	37.5%	28.2%	49.4%	22.4%
2013	18.5%	40.6%	40.9%	27.0%	49.6%	23.4%
2014	18.6%	40.3%	41.1%	23.8%	51.9%	24.4%
2015	20.3%	37.7%	42.0%	23.8%	51.2%	25.0%
2016	21.9%	33.7%	44.4%	24.4%	49.0%	26.6%
2017	24.1%	31.4%	44.5%	25.9%	46.8%	27.3%
2018	24.1%	28.8%	47.1%	27.2%	42.1%	30.8%
2019	25.4%	28.4%	46.2%	29.0%	38.9%	32.1%
2020	25.9%	28.0%	46.1%	29.4%	36.1%	34.6%

Source: PPF

Note: the rows may not sum to 100 per cent due to rounding.

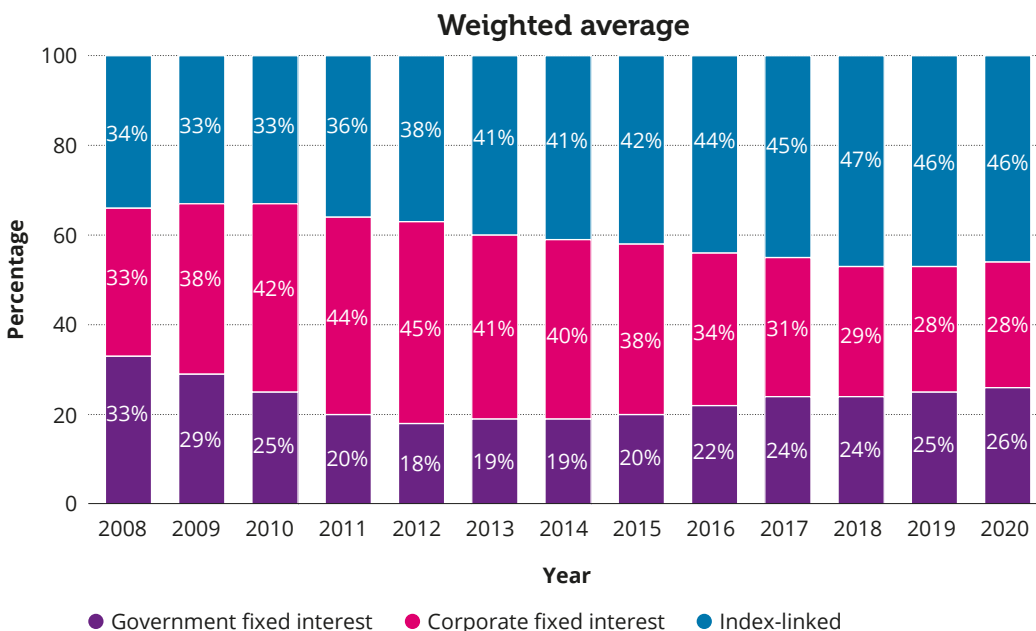


Figure 7.5 | Equity splits

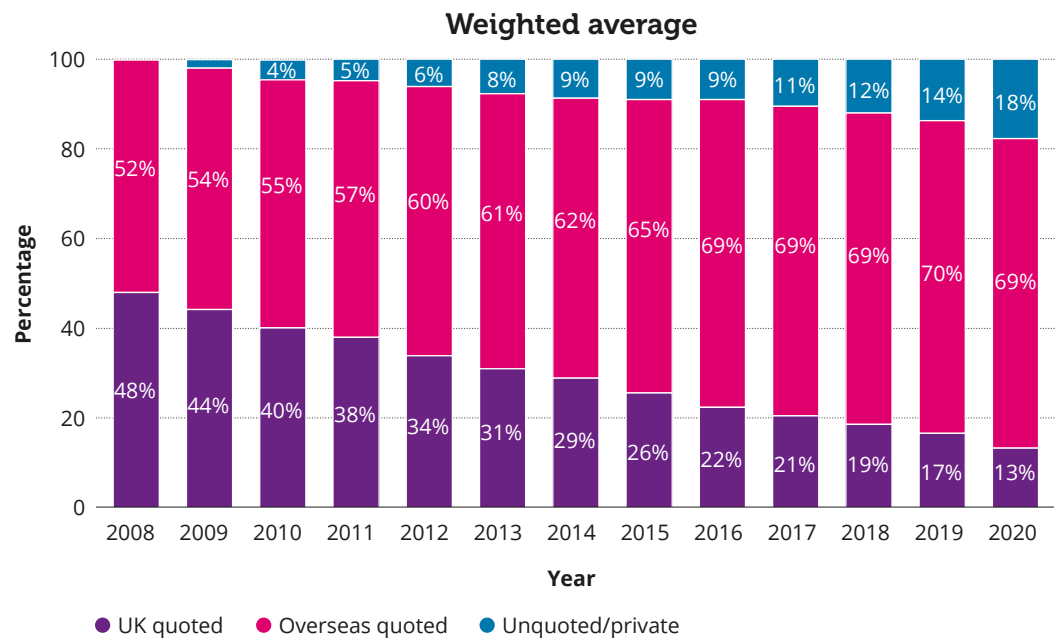
Within equities, the proportion invested in private equities continued to rise, while the proportion invested in UK equities continued to fall.

Year/ The Purple Book dataset	Equities					
	Weighted average			Simple average		
	UK quoted	Overseas quoted	Unquoted/ private	UK quoted	Overseas quoted	Unquoted/ private
2008	48.0%	51.6%	n/a	60.4%	39.6%	n/a
2009	44.2%	53.8%	1.9%	57.6%	41.7%	0.7%
2010	40.1%	55.3%	4.4%	55.3%	43.7%	1.0%
2011	38.0%	57.2%	4.8%	52.7%	46.1%	1.2%
2012	33.9%	60.0%	6.1%	49.9%	48.5%	1.7%
2013	31.0%	61.3%	7.7%	47.5%	50.3%	2.2%
2014	28.9%	62.4%	8.7%	44.9%	52.7%	2.4%
2015	25.6%	65.4%	9.0%	42.2%	55.3%	2.5%
2016	22.4%	68.6%	9.0%	38.8%	58.6%	2.6%
2017	20.5%	69.0%	10.5%	36.3%	61.0%	2.7%
2018	18.6%	69.4%	12.0%	32.1%	65.0%	3.0%
2019	16.6%	69.7%	13.7%	29.6%	66.7%	3.7%
2020	13.3%	69.0%	17.7%	26.9%	68.4%	4.8%

The decrease in the value of UK and overseas equities between 31 March 2019 and 31 March 2020 contributed towards the decreases in the proportions of equities that are invested in UK and overseas equities over this period.

Source: PPF

Note: the figures may not sum to 100 per cent due to rounding.



7. Asset allocation continued

Figure 7.6 | Weighted average asset allocation of schemes by asset size

The proportion of assets held in bonds tends to increase with scheme asset size, while equities display the opposite relationship.

Source: PPF

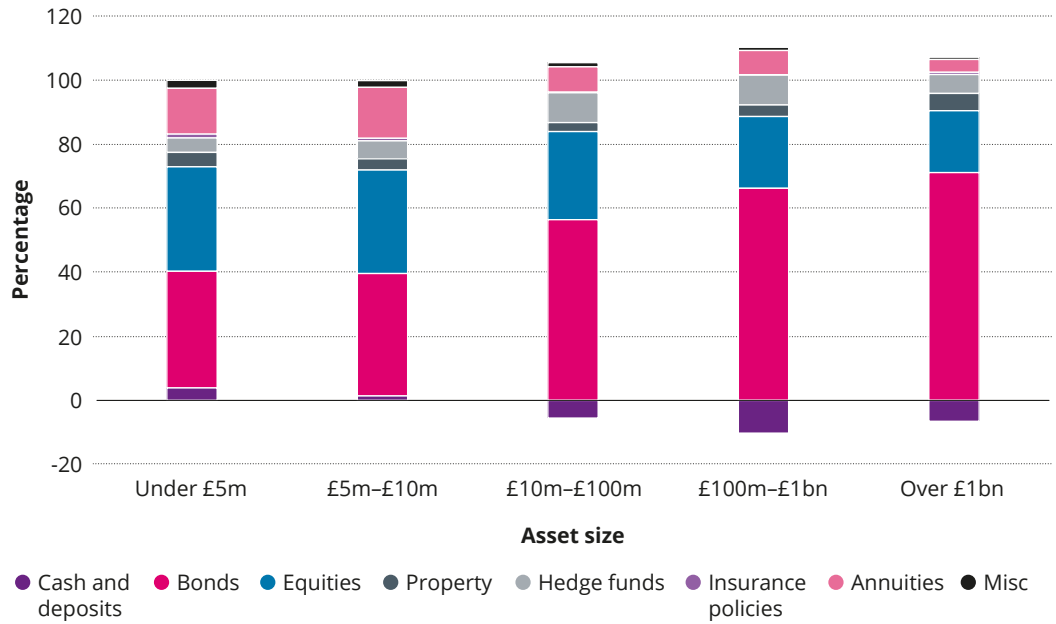


Figure 7.7 | Weighted averages of equity and bond holdings split by asset size

Larger schemes tend to hold a higher proportion of overseas equities within their equity portfolio, and a higher proportion of index-linked bonds in their bond portfolio.

Source: PPF

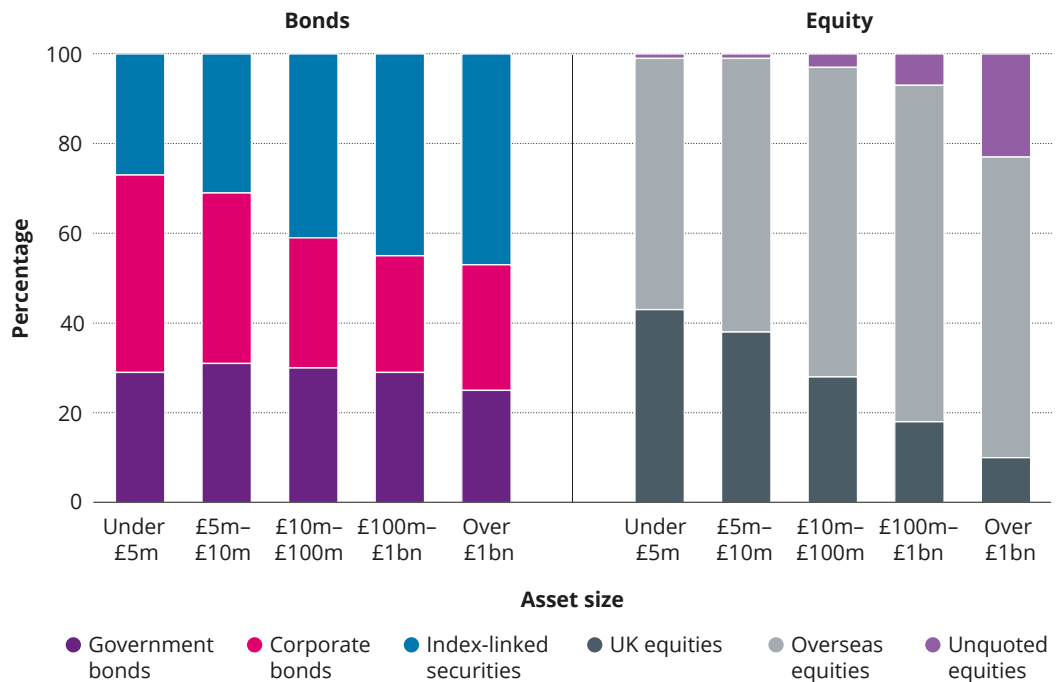
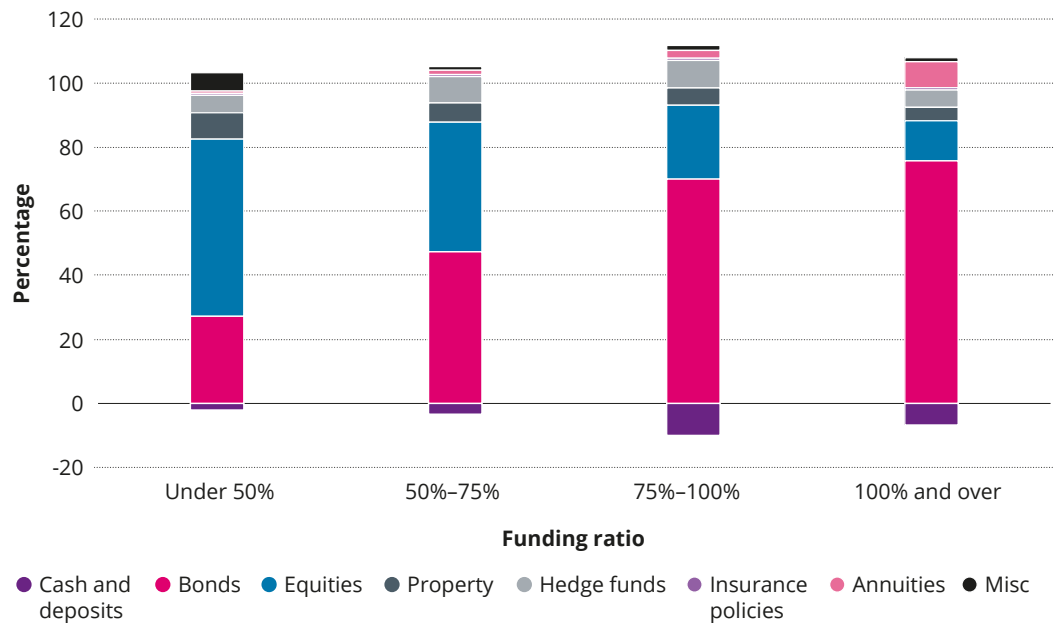


Figure 7.8 | Weighted average asset allocation by s179 funding ratio

The best funded schemes tend to have the greatest proportion of assets invested in bonds, with a smaller proportion invested in equities.

Source: PPF



Schemes that are in surplus on an s179 basis have the greatest proportion of assets invested in bonds, which is consistent with the stability of the s179 funding position of these schemes over time as shown in figure 5.3.

Figure 7.9 | Weighted average asset allocation of schemes by scheme maturity

As scheme maturity increases, the proportion of equities falls.

Source: PPF

Note: the heavy concentration in 'Annuities' for mature schemes is explained by one large scheme with a heavy concentration in annuity policies.

