

## 07

## Asset allocation

This chapter looks at trends in the types of assets DB schemes invest in.

### Summary

- This chapter contains information on how DB schemes have invested scheme assets since 2006 and how asset allocations in *The Purple Book 2021* dataset vary according to different scheme characteristics, such as scheme size.
- Around 98 per cent of schemes' asset allocations in *The Purple Book 2020* dataset were at a date in 2019 or 2020.
- The aggregate proportion of schemes' assets invested in equities fell from 20.4 per cent to 19.0 per cent while the proportion in bonds rose from 69.2 per cent to 72.0 per cent.
- Within bonds, the proportions held were broadly unchanged from last year with index-linked bonds making up the biggest proportion at 47.2 per cent. Corporate bonds accounted for 28.2 per cent of the bonds held and government fixed interest bonds contributed 24.6 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 13.3 per cent to 11.6 per cent. Similarly the proportions of overseas-quoted equities decreased slightly from 69.0 per cent to 68.3 per cent, while unquoted/private equities increased from 17.7 per cent to 20.1 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 data<sup>8</sup>

**Figure 7.1 | Distribution of schemes by asset allocation date\***

Around 98 per cent of schemes provided an asset allocation with an effective date in 2019 or 2020.

Asset allocation year	Number of schemes	Percentage of <i>The Purple Book 2021</i> dataset
2006–2012	1	0.0%
2013	0	0.0%
2014	0	0.0%
2015	3	0.1%
2016	2	0.0%
2017	14	0.3%
2018	46	0.9%
2019	1,765	33.8%
2020	3,370	64.6%
2021	14	0.3%
<b>Total</b>	<b>5,215</b>	<b>100%</b>

\* 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.

Source: PPF

<sup>8</sup> 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.

Asset allocation continued

**Figure 7.2 | Weighted average asset allocation in total assets**

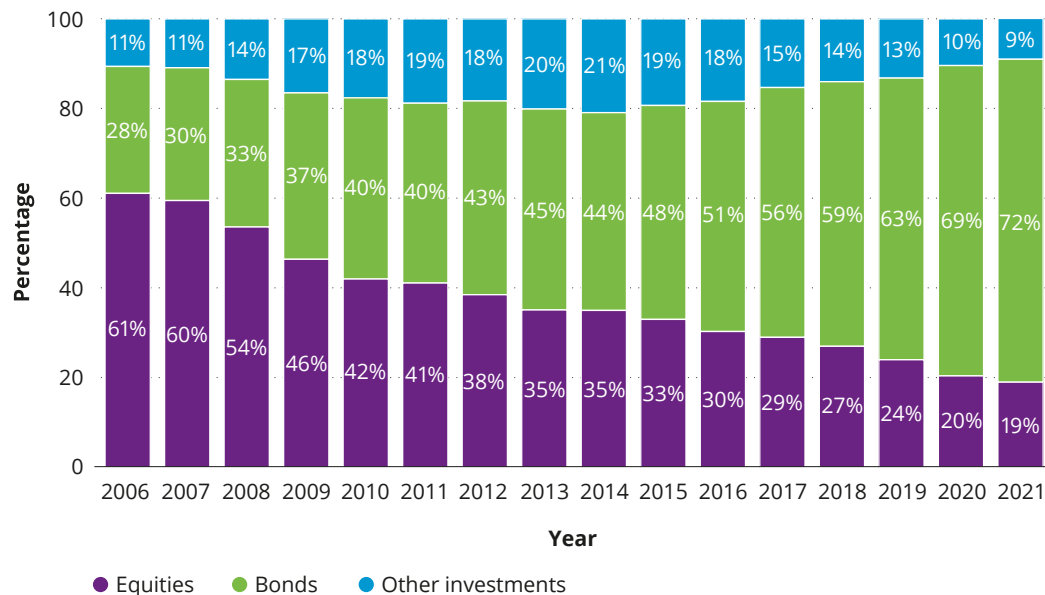
In *The Purple Book 2021* dataset, the proportion invested in bonds rose while the proportion in equities fell.

Year/The Purple Book dataset	Asset class								
	Equities	Bonds	Other investments	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%
2021	19.0%	72.0%	9.1%	4.7%	-9.5%	0.1%	6.1%	6.6%	0.9%

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.

\* 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.

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



Source: PPF

**Figure 7.3 | Asset allocation: simple averages**

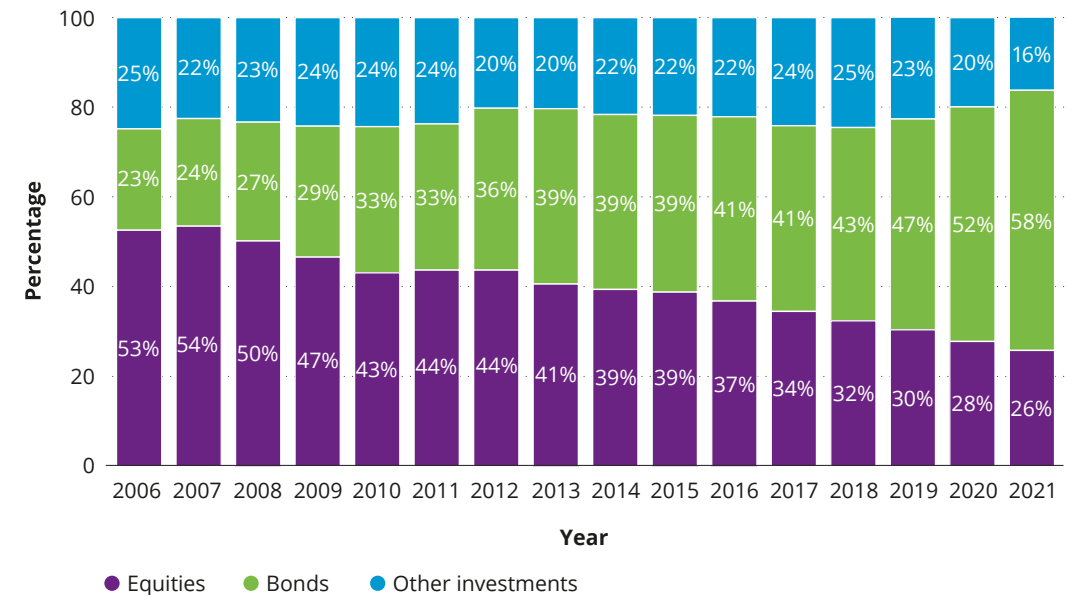
A comparison of simple and weighted averages in 2021 shows there is a greater weighted allocation to bonds and smaller allocations to equities and other investments. This reflects the fact that the larger schemes hold a greater proportion of bonds than smaller schemes.

Year/The Purple Book dataset	Asset class								
	Equities	Bonds	Other investments	Breakdown of other investments					
				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%
2021	25.8%	58.0%	16.3%	3.2%	-6.6%	0.6%	6.9%	10.6%	1.7%

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.

\* 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.

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



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Source: PPF

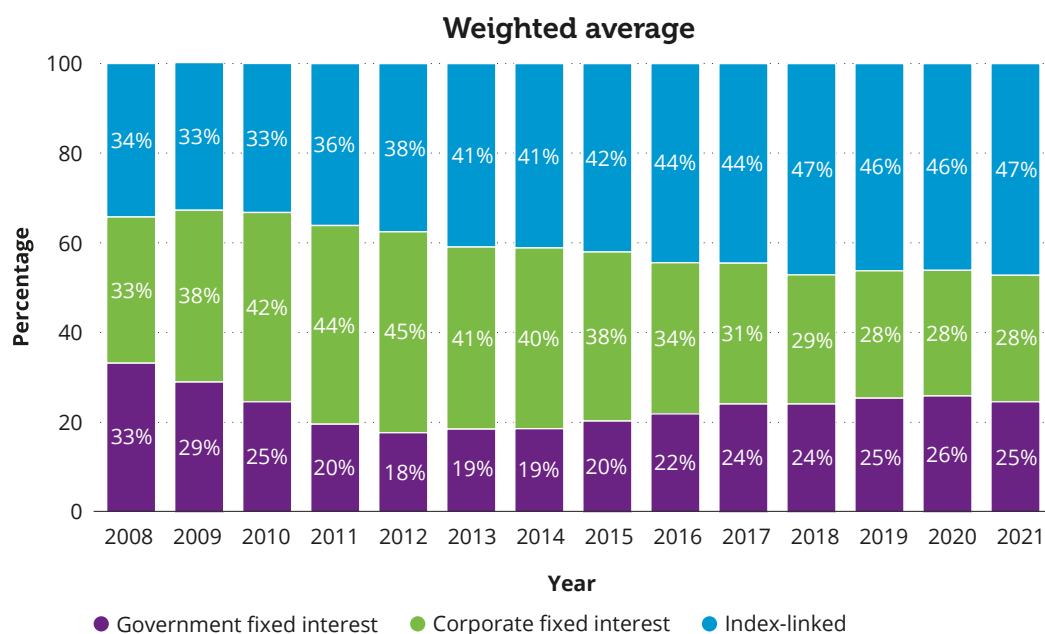
Asset allocation continued

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%
2021	24.6%	28.2%	47.2%	30.4%	34.8%	34.8%

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



● Government fixed interest ● Corporate fixed interest ● Index-linked

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

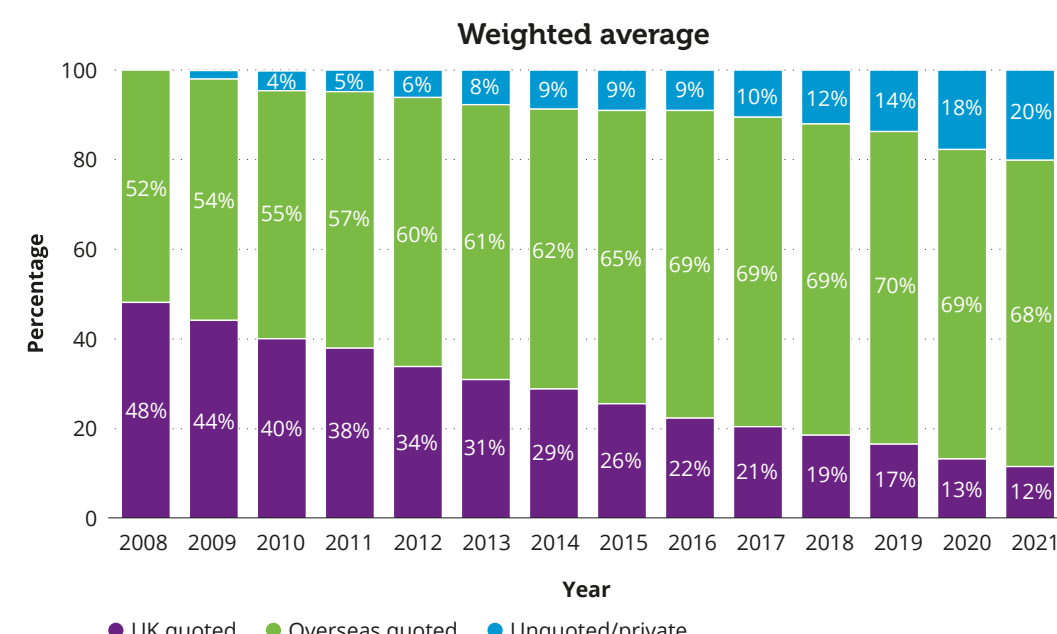
Source: PPF

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	48.2%	51.8%	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%
2021	11.6%	68.3%	20.1%	24.9%	69.4%	5.8%

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



● UK quoted ● Overseas quoted ● Unquoted/private

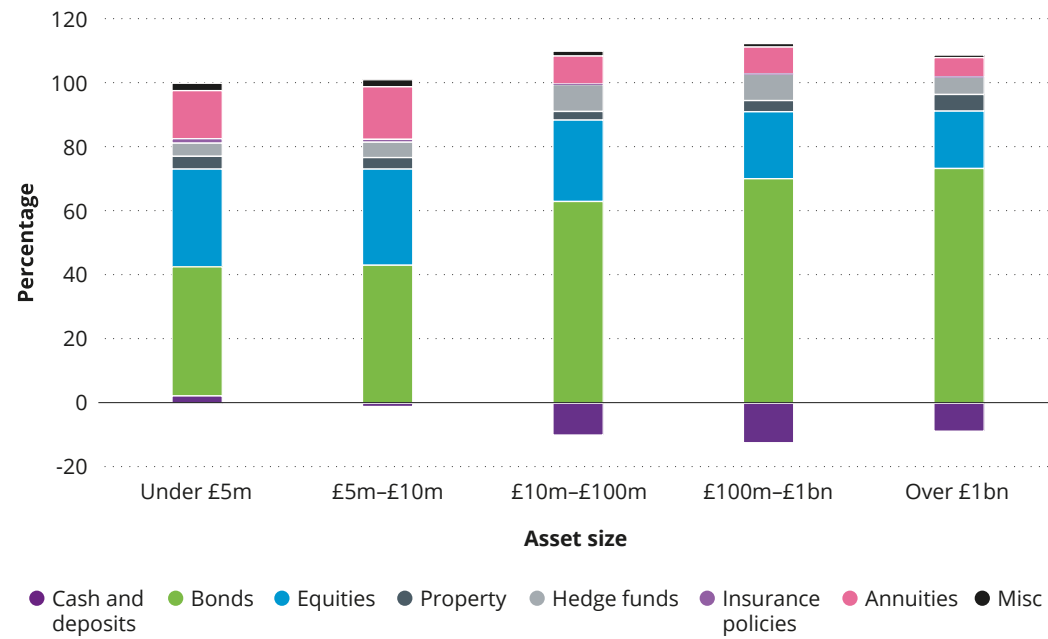
Note: figures may not sum to 100 per cent or the 'Other investments' total due to rounding.

Source: PPF

Asset allocation continued

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

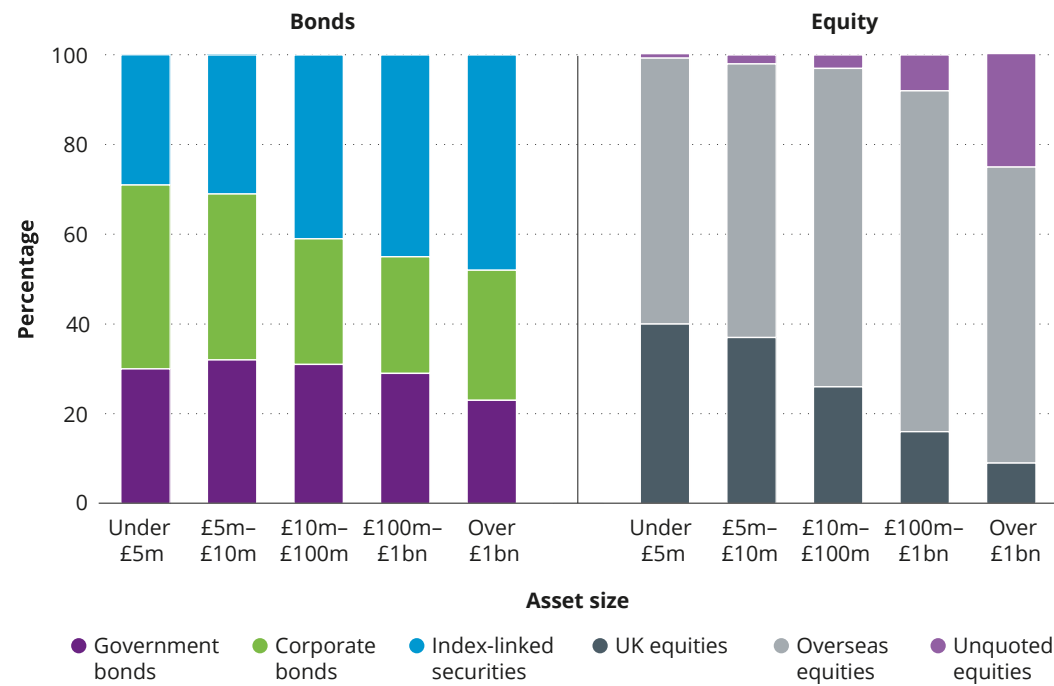
The proportion of assets held in bonds tends to increase with scheme asset size, while equities display the opposite relationship.



Source: PPF

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

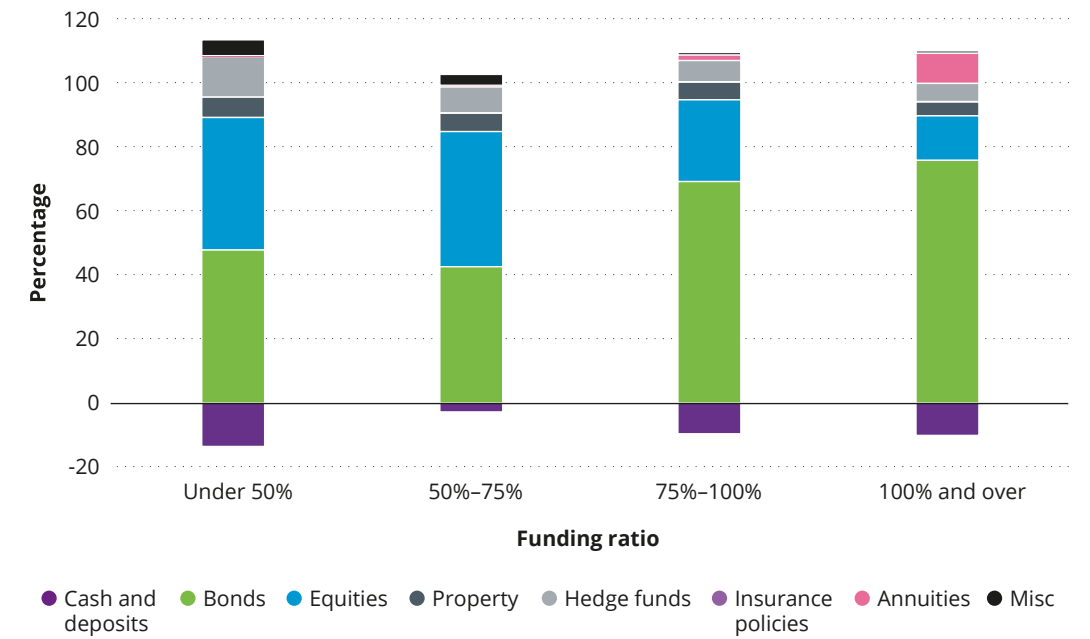
Larger schemes tend to hold a higher proportion of overseas and private equities within their equity portfolio, and a higher proportion of index-linked bonds in their bond portfolio.



Source: PPF

**Figure 7.8 | Weighted average asset allocation by s179 funding ratio**

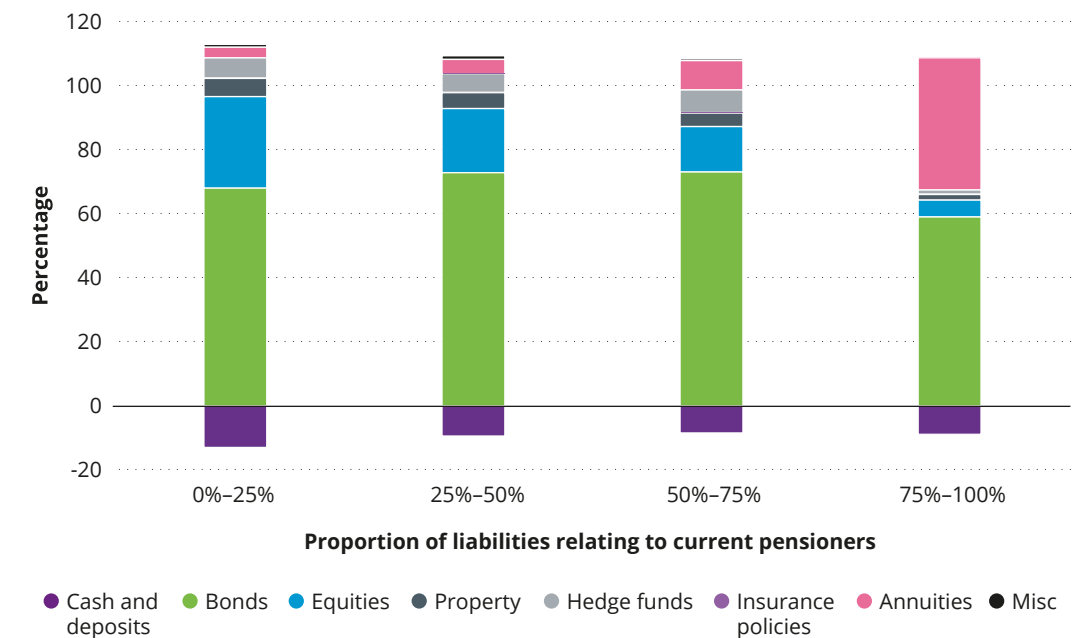
The best funded schemes tend to have the greatest proportion of assets invested in bonds, with a smaller proportion invested in equities.



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.  
Source: PPF

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

As scheme maturity increases, the proportion of equities falls.



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

Source: PPF