



Investment performance and strategy

Helping insurers understand the drivers of performance

UK WITH-PROFITS FUNDS
Analysis as at 31 December 2018



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PARTICIPATING FIRMS

We thank the following firms for participating in this survey:

- AEGON
- Cirencester
- Dentists' Provident
- DG Mutual
- Foresters Financial
- Foresters Friendly
- Healthy Investment
- Holloway Friendly
- Kingston Unity
- Legal and General
- Lloyds Banking Group
- LV=
- Metfriendly
- NFU Mutual
- Police Mutual
- Scottish Friendly
- Sheffield Mutual
- Shepherds Friendly
- Standard Life
- The Exeter
- The Oddfellows
- Utmost
- Wesleyan

This is the sixth investigation Barnett Waddingham has conducted into the investment strategies of UK with-profits funds. Its purpose is to understand sources of differences in investment returns over the most recent one and five year periods.

Our aim is to stimulate debate with insurers as to whether the approaches others take may be appropriate for them, and whether their asset manager has performed well compared to peers. This year we have also carried out additional analyses in respect to investment expenses.

The data our report uses is private information that is not in the public domain. We approached the majority of firms who have with-profits funds in the UK, asking for information on asset allocations, investment returns and investment expenses.

We are delighted to have received information for 41 funds from 23 insurers, covering over £50bn of assets, to include in our analysis this year. We list the participating firms at the end of the report.

We have carried out analysis over a five-year horizon for the 22 funds where we have the relevant information available. Additional analysis of investment expenses has also been done for the 31 funds where we have the relevant information available.

We have used the information provided without any independent verification, although we have queried responses where these looked to be outliers.

We hope you find the report informative. Please get in touch with any questions and comments you have.



A handwritten signature in black ink, appearing to read 'Scott Eason'.

Scott Eason
PARTNER, HEAD OF INSURANCE CONSULTING



A handwritten signature in black ink, appearing to read 'Amit Lad'.

Amit Lad
ASSOCIATE, LIFE INSURANCE

Executive summary

2018 was the first poor year for equities for a number of years. Corporate bond and UK government bond benchmark returns were also negative. As would be expected in such conditions, returns were negative for most funds.

Only two funds achieved a positive net return over one year. The majority of funds produced similar returns (between -2% and -4%), which was considerably above equity performance.

⋮ All funds achieved a positive return over five years with most funds outperforming high-street savings rates.

Smaller firms marginally outperformed larger firms over one year, primarily due to a lower exposure to equities. Over five years, stock selection was a bigger differentiator than asset allocation. This is not surprising as most funds have similar balanced asset mixes.

Asset mixes have remained practically unchanged, despite the market falls, as funds were able to maintain a long-term investment view.

With-profits funds continue to achieve strong equity performance, with the average fund return significantly beating the benchmark over both one and five-year horizons.

This is important to the general performance of with-profits funds as equity is the largest asset class for the majority of funds.

However, performance against other asset classes lagged the five-year benchmarks. Given that these other asset classes make up more than 50% of the majority of funds, it is important that firms spend as much time on ensuring performance in these asset classes as they do in equities.

This is the first year that we have collected investment expense information. It was interesting to note the wide range of investment expense levels being paid, in total and at the asset class level. A number of the higher performing funds appeared to have benefited from paying for quality active management but, overall, there was little evidence to suggest a correlation between investment expenses paid and the return achieved. Investment expenses were not a major differentiator in performance.

The data we're reporting on

This investigation covers 41 funds across 23 insurers, who provided their asset allocations at 31 December 2018 and their investment performance over 2018 to us privately. Of these funds, 31 provided additional information about their investment expenses. For 22 funds, we have annual asset allocation and investment performance data spanning the last five years.

We have split the analysis in this investigation by fund, as different funds within an insurer can have materially different risk characteristics.

We recognise that there are many good reasons why different with-profits funds will have different asset allocations. For this report, we have isolated Holloway funds in our analysis, to see if these have different allocations, as we can easily identify these. For non-Holloway funds, we have grouped funds by size when carrying out our analysis.

We have made the fund names in this report anonymous, as the underlying data is not publicly available. We present fund names in the format: '<classification> - <1-year rank> - <5-year rank>'.

- <classification> is a letter indicating whether it is a Holloway fund or, if not, the fund size as set out in the next table.
- <1-year rank> is a number representing overall fund performance in relation to all funds over the last year.
- <5-year rank> is a number representing overall fund performance in relation to all funds over the last five years. This is shown as 'NA' for funds where we do not have annual data spanning the last five years.

TABLE 1: FUND CLASSIFICATIONS USED IN THIS INVESTIGATION

Classification	Holloway fund	Fund size (£m)	Number of funds
H	Yes	All	5
S	No	0 – 50	11
M	No	50 – 200	13
L	No	200 – 1,000	5
XL	No	> 1,000	7

Investment returns

Table 2 shows the annual net investment return achieved by with-profits funds during 2018. For ease of peer comparison, we have shown the results split by fund classification. Table 3 summarises investment returns by classification. Graphs 4 and 5 show the distribution of fund returns by classification.

TABLE 2: 1-YEAR AND 5-YEAR NET INVESTMENT RETURN SPLIT BY FUND AND CLASSIFICATION

Classification	Fund name	1-year net return (%)	Fund name	5-year net return (%)
XL	XL - 13 - 03	-2.10%	XL - 21 - 02	6.18%
	XL - 14 - 15	-2.31%	XL - 13 - 03	6.14%
	XL - 21 - 02	-2.70%	XL - 33 - 14	4.41%
	XL - 27 - NA	-3.29%	XL - 14 - 15	4.20%
	XL - 29 - NA	-3.60%	XL - 37 - 22	0.87%
	XL - 33 - 14	-3.69%		
	XL - 37 - 22	-4.46%		
L	L - 14 - NA	-2.31%	L - 23 - 04	5.96%
	L - 20 - 20	-2.43%	L - 36 - 16	4.14%
	L - 23 - 04	-2.96%	L - 20 - 20	2.73%
	L - 34 - NA	-3.71%		
	L - 36 - 16	-4.12%		
M	M - 04 - 10	-0.47%	M - 24 - 05	5.39%
	M - 06 - NA	-0.72%	M - 18 - 06	5.33%
	M - 08 - NA	-0.91%	M - 25 - 07	5.14%
	M - 09 - NA	-0.98%	M - 41 - 08	4.87%
	M - 12 - NA	-1.78%	M - 04 - 10	4.80%
	M - 16 - NA	-2.33%	M - 40 - 11	4.69%

TABLE 2: 1-YEAR AND 5-YEAR NET INVESTMENT RETURN SPLIT BY FUND AND CLASSIFICATION

Classification	Fund name	1-year net return (%)	Fund name	5-year net return (%)
M	M - 18 - 06	-2.40%		
	M - 24 - 05	-3.18%		
	M - 25 - 07	-3.25%		
	M - 28 - NA	-3.36%		
	M - 38 - NA	-4.70%		
	M - 40 - 11	-6.53%		
	M - 41 - 08	-6.95%		
S	S - 01 - 18	0.24%	S - 19 - 09	4.84%
	S - 03 - NA	-0.08%	S - 35 - 13	4.54%
	S - 05 - 19	-0.61%	S - 01 - 18	3.81%
	S - 07 - NA	-0.89%	S - 05 - 19	3.49%
	S - 10 - 21	-1.20%	S - 10 - 21	1.87%
	S - 11 - NA	-1.49%		
	S - 19 - 09	-2.42%		
	S - 25 - NA	-3.25%		
	S - 31 - NA	-3.61%		
	S - 35 - 13	-3.73%		
	S - 39 - NA	-5.99%		
H	H - 01 - 01	0.24%	H - 01 - 01	6.60%
	H - 17 - 12	-2.34%	H - 17 - 12	4.64%
	H - 22 - 17	-2.71%	H - 22 - 17	3.82%
	H - 29 - NA	-3.60%		
	H - 32 - NA	-3.63%		

Notes

- Where funds only provided gross returns and investment expenses, we have calculated net return as gross return less investment expenses.
- Where funds only provided the return or investment expense information at an asset class level, but not for the fund in aggregate, we have estimated the aggregate results by taking the average from each asset class, weighted by the allocations to each asset class.
- Two funds (S – 01 – 18 and H – 01 – 01) achieved a one-year net return of 0.24% (to 2dp). These have both been given the same one-year ranking of '01'. As a result, no funds have been given the ranking of '02'.
- Two funds (XL – 14 – 15 and L – 14 – NA) achieved a one-year net return of -2.31% (to 2dp). These have both been given the same one-year ranking of '14'. As a result, no funds have been given the ranking of '15'.
- Two funds (M – 25 – 07 and S – 25 – NA) achieved a one-year net return of -3.25% (to 2dp). These have both been given the same one-year ranking of '25'. As a result, no funds have been given the ranking of '26'.
- Two funds (XL – 29 – NA and H – 29 – NA) achieved a one-year net return of -3.60% (to 2dp). These have both been given the same one-year ranking of '29'. As a result, no funds have been given the ranking of '30'.

TABLE 3: ARITHMETIC AVERAGE OF 1-YEAR AND 5-YEAR NET INVESTMENT RETURN FOR EACH CLASSIFICATION

Classification	1-year ar. avg. net return (%)	5-year ar. avg. net return (%)
 XL	-3.16%	4.36%
 L	-3.11%	4.28%
 M	-2.89%	5.04%
 S	-2.09%	3.71%
 H	-2.41%	5.02%
All	-2.69%	4.48%

Notes

- Arithmetic average has been abbreviated as 'ar. avg' throughout this report.

GRAPH 4: HISTOGRAM OF 1-YEAR NET INVESTMENT RETURNS SPLIT BY CLASSIFICATION



GRAPH 5: HISTOGRAM OF 5-YEAR NET INVESTMENT RETURNS SPLIT BY CLASSIFICATION



Our insight

Over 2018, the funds investigated achieved a wide range of investment returns. The largest variance is amongst the smaller and mid-sized funds. The best performing smaller and mid-sized funds outperformed larger funds, and worst performing smaller and mid-sized funds underperformed comparatively to larger funds.

There is not much difference between the 'average' performing fund within each classification over the last year, although we note that the smaller funds marginally outperformed larger funds over one year. This is contrary to the trend that we had seen over previous years when returns were positive. This suggests that the smaller firms have less exposure to market movements than larger funds.

In contrast, the variance in five-year returns is much smaller, with over 40% of funds achieving a five-year annualised return between 4%-5%. All funds in our analysis achieved a positive five-year net investment return.

In the rest of this report, we will look at how differences in asset mix and stock selection have contributed to the different levels of returns achieved. We will also consider whether higher levels of investment expenses are correlated to higher net investment returns.



Asset allocation

Table 6 shows the minimum, maximum and arithmetic average holding of each asset class within each classification. Graph 7 shows the distribution of holdings for each asset class and Graph 8 shows how asset allocations have changed over the past five years for each classification of fund.

Relative investment performance depends on two factors, both of which have an impact on the overall returns achieved. The first is the high-level asset allocation between the different asset classes and the second is the stock selection within each asset class.

The second factor actually contains two sources of difference – the breadth of assets invested in within a class and the actual names held (including timing).

This section of the survey looks at asset allocation differences. We have shown asset allocations only for funds grouped by size and type – this is to avoid presenting information that identifies the funds in this investigation.

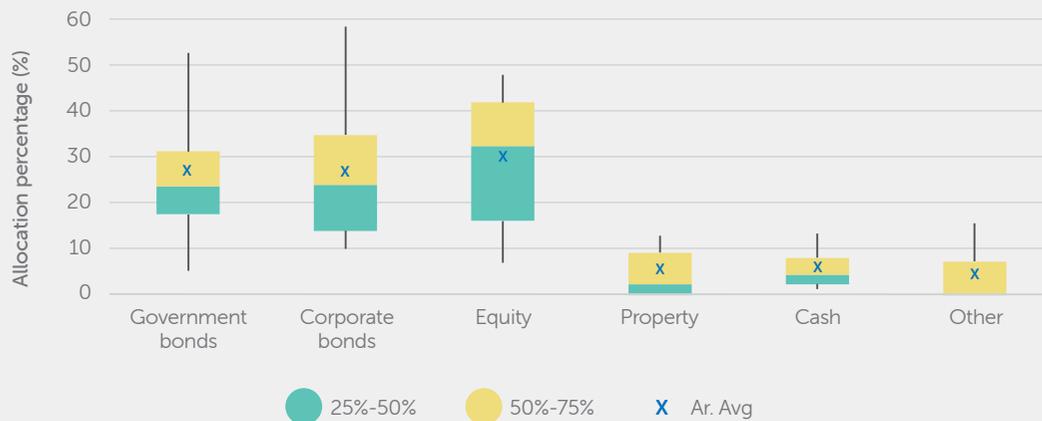
TABLE 6: ASSET ALLOCATION BY FUND CLASSIFICATION, AS AT 31 DECEMBER 2018

Classification	Summary statistic	Government Bonds	Corporate Bonds	Equity	Property	Cash	Other
XL	Minimum	3.33%	9.09%	28.04%	7.13%	2.73%	0.00%
	Ar. avg	19.44%	13.98%	40.30%	9.37%	6.62%	10.29%
	Maximum	35.38%	28.85%	54.67%	12.32%	14.90%	20.00%
L	Minimum	9.64%	4.81%	25.53%	0.00%	4.70%	0.00%
	Ar. avg	23.53%	24.69%	36.25%	4.79%	7.81%	2.94%
	Maximum	35.47%	42.63%	55.68%	12.78%	13.28%	10.24%
M	Minimum	3.88%	13.69%	0.39%	0.00%	0.00%	0.00%
	Ar. avg	24.55%	33.22%	26.63%	7.35%	3.51%	4.73%
	Maximum	46.45%	59.67%	49.11%	36.43%	9.62%	18.68%

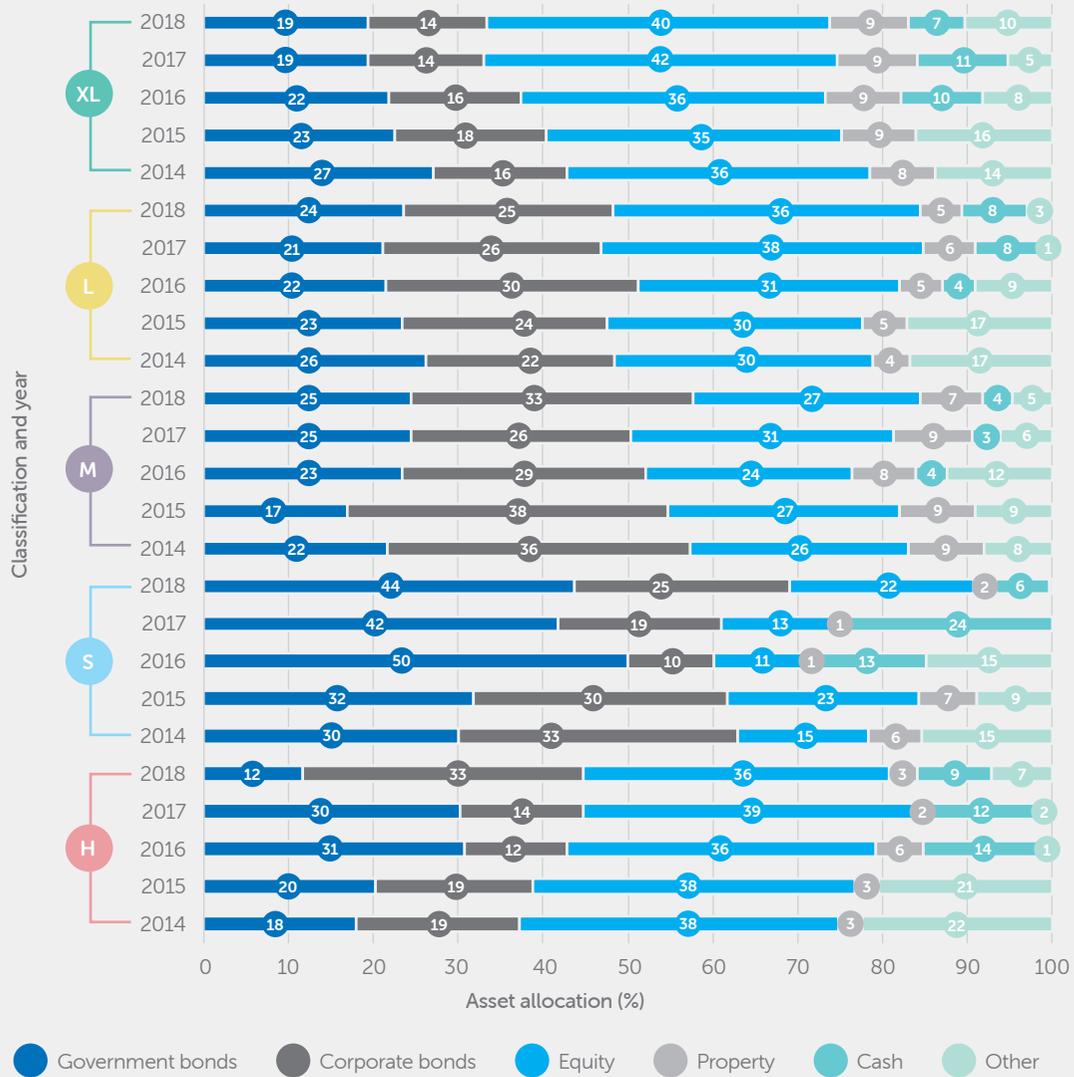
TABLE 6: ASSET ALLOCATION BY FUND CLASSIFICATION, AS AT 31 DECEMBER 2018

Classification	Summary statistic	Government Bonds	Corporate Bonds	Equity	Property	Cash	Other
S	Minimum	2.09%	0.00%	0.00%	0.00%	0.00%	0.00%
	Ar. avg	43.64%	25.39%	21.77%	2.48%	6.30%	0.41%
	Maximum	84.08%	63.06%	73.87%	22.45%	23.71%	2.73%
H	Minimum	0.00%	12.04%	22.70%	0.00%	2.33%	0.00%
	Ar. avg	11.71%	33.02%	36.12%	3.15%	8.82%	7.17%
	Maximum	19.75%	66.84%	42.96%	13.40%	17.26%	27.84%
Total minimum		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Ar. avg		27.11%	26.77%	29.99%	5.57%	5.96%	4.60%
Total Maximum		84.08%	66.84%	73.87%	36.43%	23.71%	27.84%

GRAPH 7: BOX PLOT SHOWING 10TH-90TH PERCENTILE OF ASSET ALLOCATIONS IN 2018 FOR ALL FUNDS IN AGGREGATE AGAINST EACH ASSET CLASS, AS AT 31 DECEMBER 2018



GRAPH 8: ARITHMETIC AVERAGE ASSET MIX BY FUND CLASSIFICATION BETWEEN 2014 AND 2018



Notes

- Some funds provided average asset values throughout 2018 and others have provided values at 31 December 2018. This has introduced an element of approximation in the results shown.
- We do not have data for every fund in every year between 2014 and 2018. Graph 8 shows the arithmetic average asset mix for the 22 funds that we have five years of data for.
- We asked funds to provide data that included the estate. We are aware of one fund in our analysis, where the asset allocation and investment returns do not include estate assets.
- The data we hold for 2014 and 2015 does not differentiate between the “Cash” and “Other” asset classes. For 2014 and 2015, the combined amount is shown in the “Other” category.



Our insight

There are a range of asset allocations, although most could be described as balanced funds with a mix of all of the major asset classes.

The asset classes with the largest inter-quartile ranges are equities and fixed interest. This is due to larger funds having a higher allocation, on average, to equities compared to fixed interest.

On average, smaller funds are holding more fixed interest assets than larger funds. This observation is persistent over the last five years.

It was interesting to note that the Holloway funds had, on average, a greater equity proportion than the similar-sized standard with-profits funds, and that this has consistently been the case since 2014.

Overall, asset allocation is either stable or shows gentle trends over time. In particular, we cannot see at a classification level any material decreases in equity allocations, despite the significant fall in markets that took place towards the end of 2018. This suggests that asset allocations, across all sizes of funds, are being determined with a long-term outlook rather than attempting to take advantage of short-term market movements.

Stock selection

Tables 9 and 11 show the returns achieved on each asset class by each fund over one year and five years respectively. Table 13 shows benchmark returns for comparative purposes, and Graph 14 shows box plots for the distribution of one-year and five-year returns in each asset class. Tables 10 and 12 show the average returns for each classification of fund.

TABLE 9: 1-YEAR NET INVESTMENT RETURN FOR EACH ASSET CLASS BY FUND

Classification	Fund name	Government Bonds	Corporate Bonds	Equity	Property	Total
XL	XL - 13 - 03	1.20%	-0.50%	-7.00%	-0.30%	-2.10%
	XL - 14 - 15	0.44%	-1.47%	-7.45%	8.00%	-2.31%
	XL - 21 - 02	1.20%	0.10%	-5.50%	11.40%	-2.70%
	XL - 27 - NA	0.76%	-2.70%	-6.57%	8.10%	-3.29%
	XL - 29 - NA	0.02%	-0.82%	-8.65%	1.87%	-3.60%
	XL - 33 - 14	0.33%	-1.50%	-9.48%	3.71%	-3.69%
	XL - 37 - 22	0.52%	-2.16%	-7.58%	-5.50%	-4.46%
L	L - 14 - NA	0.00%	-1.07%	-5.07%	4.88%	-2.31%
	L - 20 - 20	0.40%	0.10%	-9.66%	-0.65%	-2.43%
	L - 23 - 04	0.97%	-2.19%	-7.71%	-8.37%	-2.96%
	L - 34 - NA	-0.21%	-4.28%	-8.41%	2.48%	-3.71%
	L - 36 - 16	0.05%	-1.81%	-11.25%	5.77%	-4.12%
M	M - 04 - 10	0.35%	-1.33%	-10.75%	5.77%	-0.47%
	M - 06 - NA	0.34%	0.34%	-10.48%	11.63%	-0.72%
	M - 08 - NA	0.48%	-1.17%	-3.86%	0.48%	-0.91%
	M - 09 - NA	0.26%	-0.22%	-3.90%	4.68%	-0.98%
	M - 12 - NA	1.33%	0.23%	-7.11%	-0.33%	-1.78%

TABLE 9: 1-YEAR NET INVESTMENT RETURN FOR EACH ASSET CLASS BY FUND

Classification	Fund name	Government Bonds	Corporate Bonds	Equity	Property	Total
M	M - 16 - NA	-7.06%	-1.65%	-7.06%	3.19%	-2.33%
	M - 18 - 06	0.24%	0.36%	-7.05%	-0.32%	-2.40%
	M - 24 - 05	-1.18%	-1.30%	-9.72%	15.54%	-3.18%
	M - 25 - 07	1.02%	-0.15%	-7.16%	-0.61%	-3.25%
	M - 28 - NA	0.33%	0.08%	-8.07%	8.06%	-3.36%
	M - 38 - NA	-1.00%	-5.49%	-8.81%	1.11%	-4.70%
	M - 40 - 11	-6.28%	-7.20%	-0.71%		-6.53%
	M - 41 - 08	0.30%	-11.02%	-7.09%		-6.95%
S	S - 01 - 18	0.28%	1.10%			0.24%
	S - 03 - NA	-3.25%	0.77%	-2.27%	3.65%	-0.08%
	S - 05 - 19	-0.97%	-2.30%			-0.61%
	S - 07 - NA	0.53%	-0.57%	-5.72%	-3.32%	-0.89%
	S - 10 - 21	-0.50%	-0.47%	-9.82%		-1.20%
	S - 11 - NA	-0.16%		-11.12%		-1.49%
	S - 19 - 09	-0.92%	-1.37%	-13.49%	15.54%	-2.42%
	S - 25 - NA	-0.60%	-3.58%	-6.87%		-3.25%
	S - 31 - NA	-0.41%	-6.78%	-9.83%		-3.61%
	S - 35 - 13	0.52%	-5.52%	-5.52%		-3.73%
S - 39 - NA	1.80%	-1.71%	-7.20%		-5.99%	
H	H - 01 - 01	-0.40%	-0.40%	-2.03%	3.19%	0.24%
	H - 17 - 12		0.19%	-8.06%		-2.34%
	H - 22 - 17	2.59%	-1.79%	-6.11%		-2.71%
	H - 29 - NA	0.99%	-1.45%	-7.02%	-1.63%	-3.60%
	H - 32 - NA	-6.37%	-0.29%	-11.50%	-0.37%	-3.63%

TABLE 10: 1-YEAR AVERAGE NET INVESTMENT RETURN FOR EACH ASSET CLASS FOR EACH CLASSIFICATION OF FUND

Classification	Government Bonds	Corporate Bonds	Equity	Property	Total
XL	0.64%	-1.29%	-7.46%	3.90%	-3.16%
L	0.24%	-1.85%	-8.42%	0.82%	-3.11%
M	-0.84%	-2.19%	-7.06%	4.47%	-2.89%
S	-0.33%	-2.04%	-7.98%	5.29%	-2.09%
H	-0.80%	-0.75%	-6.94%	0.40%	-2.41%
All funds	-0.30%	-1.77%	-7.50%	3.37%	-2.69%

TABLE 11: 5-YEAR ANNUALISED NET INVESTMENT RETURN FOR EACH ASSET CLASS BY FUND

Classification	Fund name	Government Bonds	Corporate Bonds	Equity	Property	Total
XL	XL - 21 - 02	7.48%	6.65%	5.53%	15.22%	6.18%
	XL - 13 - 03	7.76%	3.70%	6.94%	8.32%	6.14%
	XL - 33 - 14	3.79%	5.08%	4.66%	6.79%	4.41%
	XL - 14 - 15	5.03%	3.34%	6.47%	11.15%	4.20%
	XL - 37 - 22	7.25%	4.70%	4.01%	7.14%	0.87%
L	L - 23 - 04	6.61%	5.23%	4.26%	-0.21%	5.96%
	L - 36 - 16	3.77%	4.57%	4.33%	8.43%	4.14%
	L - 20 - 20	3.58%	1.82%	4.78%	-0.13%	2.73%

TABLE 11: 5-YEAR ANNUALISED NET INVESTMENT RETURN FOR EACH ASSET CLASS BY FUND

Classification	Fund name	Government Bonds	Corporate Bonds	Equity	Property	Total
M	M - 24 - 05	6.12%	5.13%	4.65%	13.92%	5.39%
	M - 18 - 06	5.75%	3.57%	5.31%	-0.06%	5.33%
	M - 25 - 07	5.79%	4.65%	5.13%	-1.37%	5.14%
	M - 41 - 08	8.92%	3.80%	3.26%	8.09%	4.87%
	M - 04 - 10	3.52%	4.83%	4.90%	6.16%	4.80%
	M - 40 - 11	4.28%	4.38%	3.42%		4.69%
S	S - 19 - 09	5.08%	4.98%	1.60%	17.88%	4.84%
	S - 35 - 13	0.91%	4.27%	5.78%		4.54%
	S - 01 - 18	2.07%	1.07%		7.92%	3.81%
	S - 05 - 19	4.20%	0.86%			3.49%
	S - 10 - 21	1.48%	1.52%	5.83%		1.87%
H	H - 01 - 01	3.34%	3.35%	9.40%	6.51%	6.60%
	H - 17 - 12	6.12%	6.50%	6.12%		4.64%
	H - 22 - 17	2.38%	3.18%	6.42%	-0.79%	3.82%

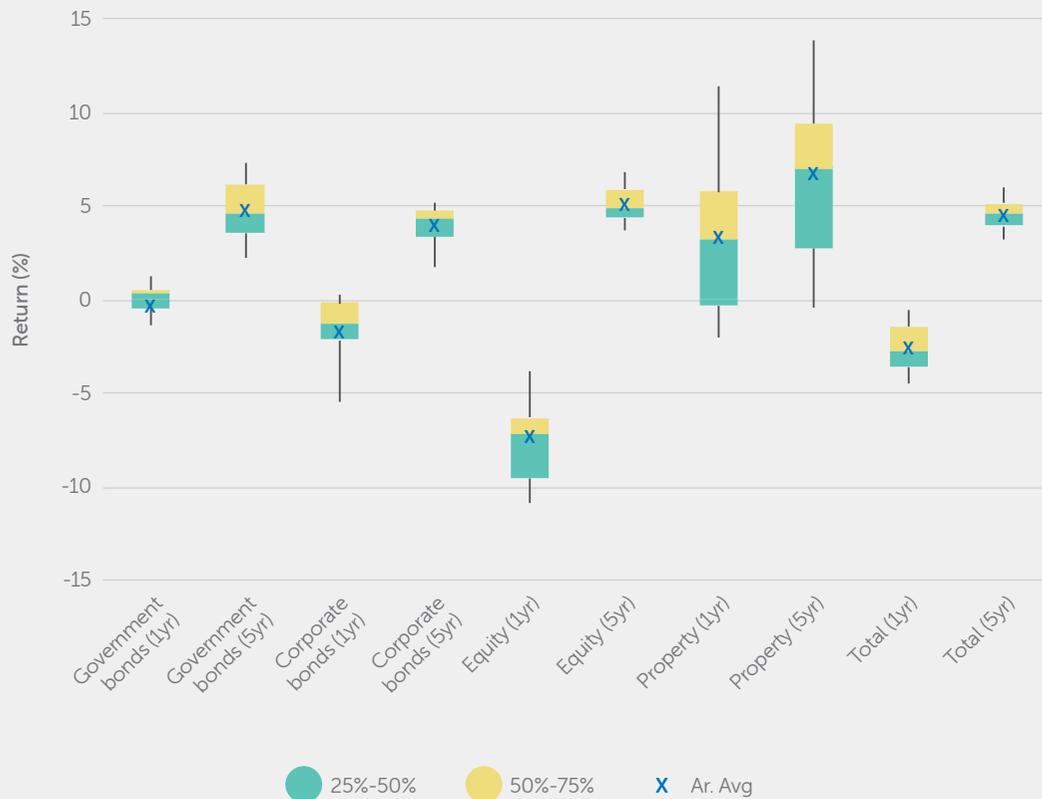
TABLE 12: 5-YEAR AVERAGE NET INVESTMENT RETURN FOR EACH ASSET CLASS FOR EACH CLASSIFICATION OF FUND

Classification	Government bonds	Corporate bonds	Equity	Property	Total
XL	6.26%	4.69%	5.52%	9.72%	4.36%
L	4.65%	3.87%	4.46%	2.70%	4.28%
M	5.73%	4.39%	4.44%	5.35%	5.04%
S	2.75%	2.54%	4.40%	12.90%	3.71%
H	3.94%	4.34%	7.31%	2.86%	5.02%
All funds	4.78%	3.96%	5.14%	6.76%	4.48%

TABLE 13: BENCHMARK RETURNS FOR EACH ASSET CLASS

	Government bonds	Corporate bonds	Equity	Property
1 year benchmarks	-0.28%	-2.20%	-9.47%	7.33%
5 year benchmarks	8.48%	5.30%	4.16%	10.76%

GRAPH 14: BOX PLOTS SHOWING 10TH-90TH PERCENTILE OF 1-YEAR AND 5-YEAR NET INVESTMENT RETURNS FOR ALL FUNDS IN AGGREGATE AGAINST EACH ASSET CLASS



Notes

- Returns for the 'Cash and other' category are not shown in the above tables. This is because many funds have assets such as derivatives within this class. These have volatile returns and so the results cannot be compared.
- We calculated the benchmark return for government bonds using the overall increase in the total return index for the FTSE Gilts All stocks Fixed Interest index.
- We calculated the benchmark return for corporate bonds using the overall increase in the total return index for the iBoxx Non-Gilts All Stocks Index.
- We calculated the benchmark return for equities using the overall increase in the total return index for the FTSE All Share Index.
- We calculated the benchmark return for property using the overall increase in the total return index for the IPD UK All Property Index.

Our insight

All but two funds achieved a negative return over 2018. This is predominantly driven by poor performance in the equity and corporate bond asset classes. It is pleasing to note that, whilst not directly comparable to the benchmarks shown, at least 75% of funds outperformed the benchmark in these two asset classes.

Every single fund achieved a positive return over a five-year horizon. Despite negative markets over 2018, the vast majority of funds delivered stronger returns over a five-year horizon and have outperformed standard high-street savings rates.

With-profits funds continue to achieve strong equity performance, with the average fund return significantly beating the benchmark over both one and five year horizons. This is important to the general performance of with-profits funds as equity is the largest asset class for the majority of funds.

However, performance against other asset classes lagged the five year benchmarks. Given that these other asset classes make up more than 50% of the majority of funds, it is important that firms spend as much time on ensuring performance in these asset classes as they do in equities.

Most asset classes had a smaller variance over a five-year horizon compared to a one-year horizon. The exception were with the government bond and property asset classes.

We will now assess the impact of asset allocation and stock selection on the relative investment returns achieved by each of the funds compared to the average fund.

Performance attribution

Below, we show how asset allocation and stock selection have affected the total net return on a one-year and a five-year horizon. We compared the total return reported for each fund to the arithmetic average (ar. avg.).

GRAPH 15: IMPACT OF STOCK SELECTION AND ASSET ALLOCATION ON TOTAL RETURN BY FUND OVER A 1-YEAR HORIZON

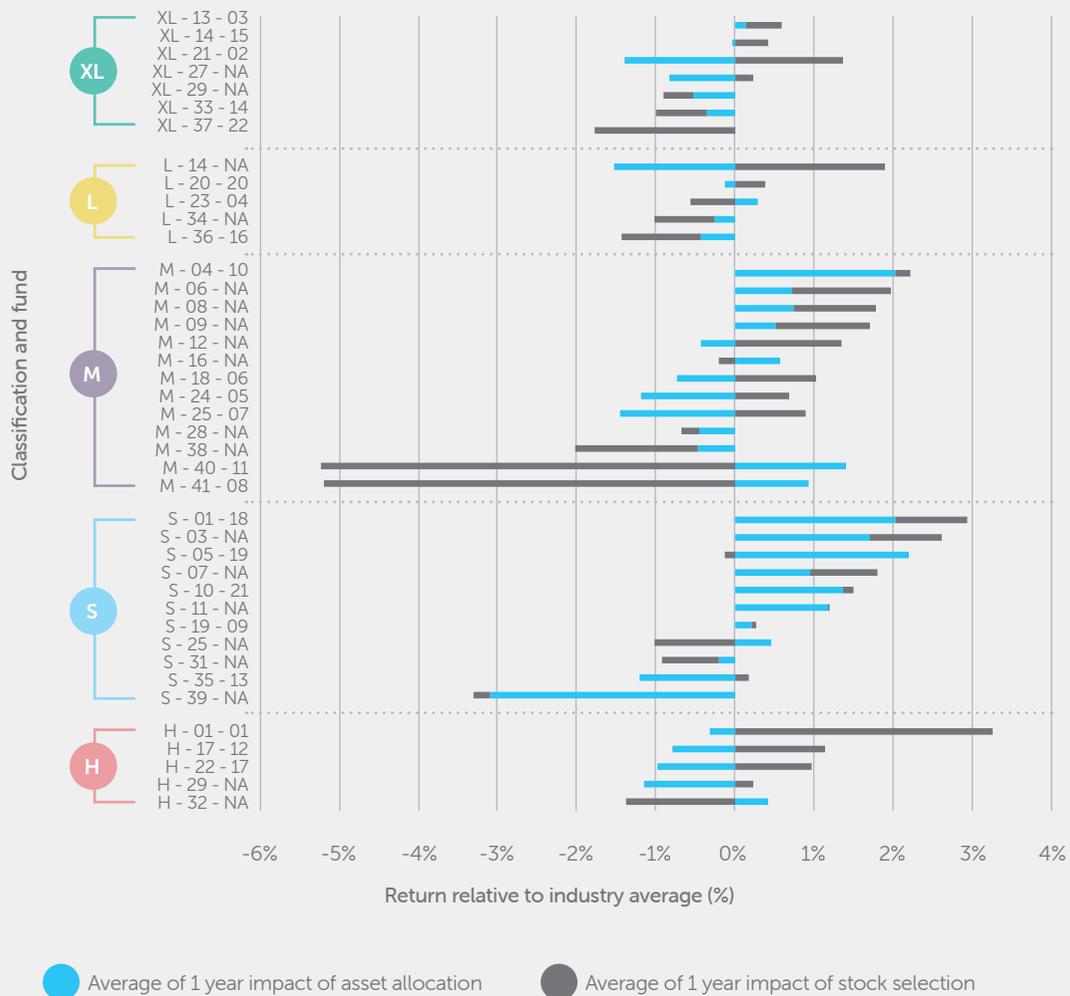


TABLE 16: SUMMARY IMPACT OF ASSET ALLOCATION AND STOCK SELECTION BY FUND CLASSIFICATION OVER A 1-YEAR HORIZON

Classification	Average of 1-year net return	Return (relative to industry ar. avg.)	Average of 1-year impact of asset allocation	Average of 1-year impact of stock selection
XL	-3.16%	-0.47%	-0.43%	-0.05%
L	-3.11%	-0.42%	-0.40%	-0.01%
M	-2.89%	-0.20%	0.17%	-0.37%
S	-2.09%	0.60%	0.51%	0.09%
H	-2.41%	0.28%	-0.56%	0.84%
All funds	-2.69%	0.00%	0.00%	0.00%

Notes

- We have calculated the impact of asset allocation for each fund on a one-year horizon as the return each asset class has achieved on average, over the overall total average return, multiplied by the funds' asset allocation to the asset class above the industry average allocation.
- We have calculated the impact of stock selection by finding the difference between return relative to average and the impact of asset allocation.

GRAPH 17: IMPACT OF STOCK SELECTION AND ASSET ALLOCATION ON TOTAL RETURN BY FUND OVER A 5-YEAR HORIZON

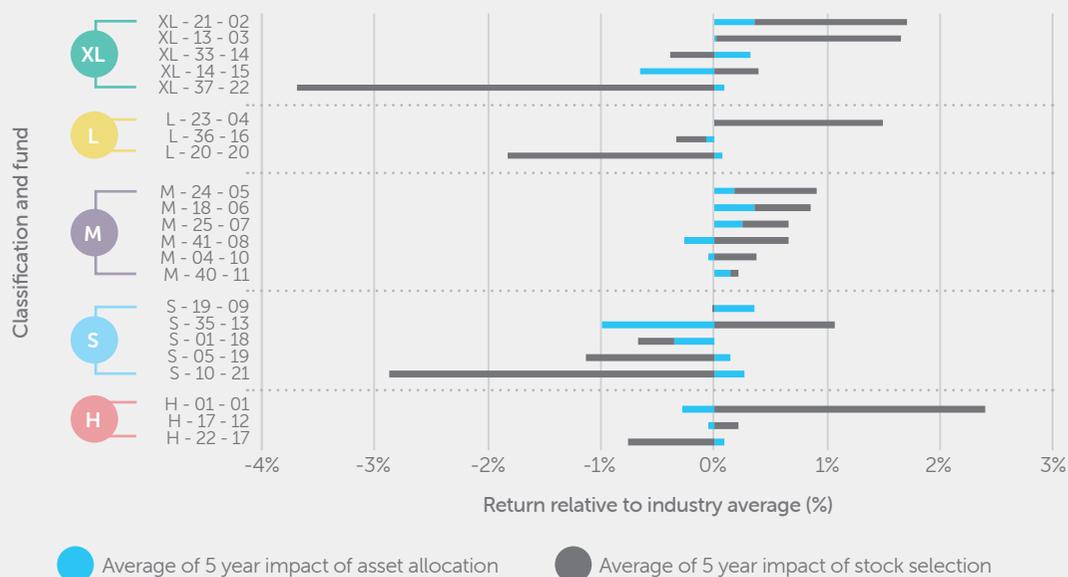
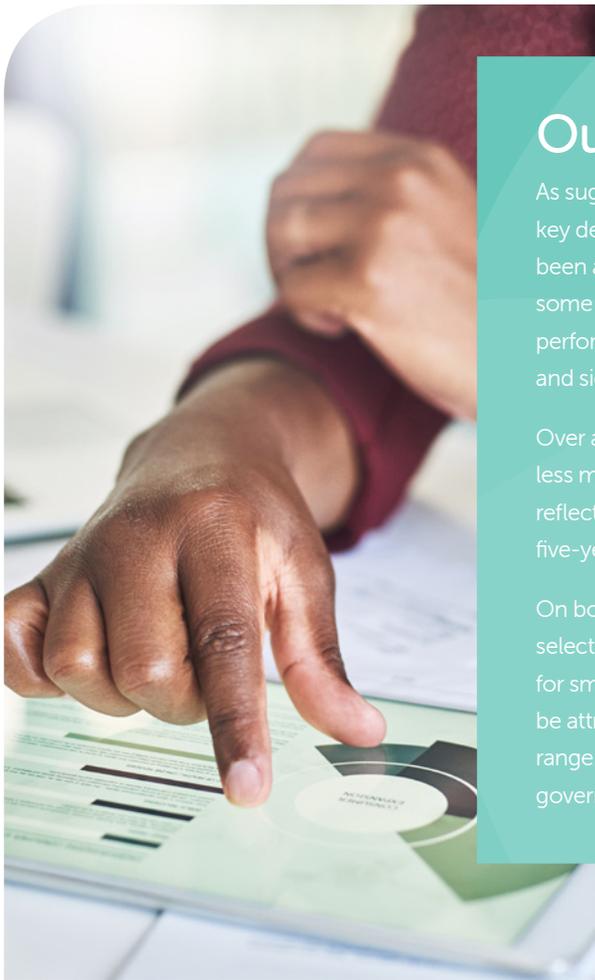


TABLE 18: SUMMARY IMPACT OF ASSET ALLOCATION AND STOCK SELECTION BY FUND CLASSIFICATION OVER A 5-YEAR HORIZON

Classification	Average of 5-year net return	Return (relative to industry ar. avg.)	Average of 5-year impact of asset allocation	Average of 5-year impact of stock selection
XL	4.36%	-0.12%	0.02%	-0.14%
L	4.28%	-0.20%	0.00%	-0.20%
M	5.04%	0.56%	0.11%	0.45%
S	3.71%	-0.77%	-0.11%	-0.65%
H	5.02%	0.55%	-0.08%	0.62%
All funds	4.48%	0.00%	0.00%	0.00%

Notes

- We have calculated the impact of asset allocation for each fund on a five year time horizon as the five-year return each asset class achieved on average, over the overall total average return multiplied by the funds' five-year average allocation to the asset class above the industry average allocation.
- We have calculated the impact of stock selection by finding the difference between return relative to average and the impact of asset allocation.



Our insight

As suggested earlier, over a one-year horizon, a key determining factor of relative performance has been a fund's equity allocation. However, there are some notable exceptions. In particular, the best performing fund had a high allocation to equities and significantly outperformed within this asset class.

Over a five-year horizon, asset allocation has had a less material impact on overall performance. This reflects the analysis shown earlier that, even on a five-year horizon, many funds look similar.

On both a one-year and a five-year basis, stock selection did not have as much as a positive impact for smaller funds compared to larger funds. This may be attributable to a lesser ability to access a wide range of assets or the best managers, or weaker governance in monitoring positions.

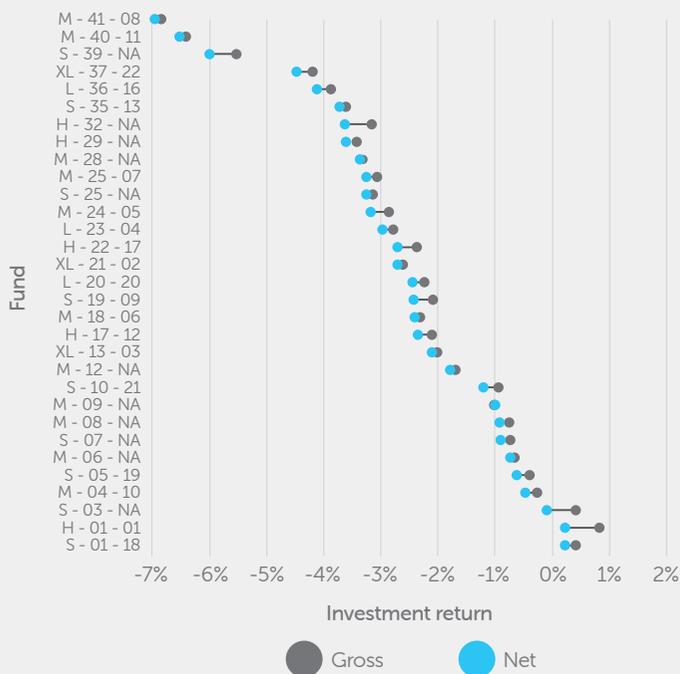
Investment expenses

This is the first year where we have collected information about fund investment expenses. We have analysed this data to provide benchmark information for firms and to investigate whether funds that spend the most on investment achieve the greatest outperformance.

- Graph 19 shows how gross and net 1 year returns vary by fund, ranked by net return performance.
- Graph 20 shows how investment expenses compare to the stock selection element of fund performance attribution.

- Graph 21 shows the impact of investment expenses on gross and net rankings.
- Graphs 22 shows the distribution of investment expenses within asset classes and in total at fund level.

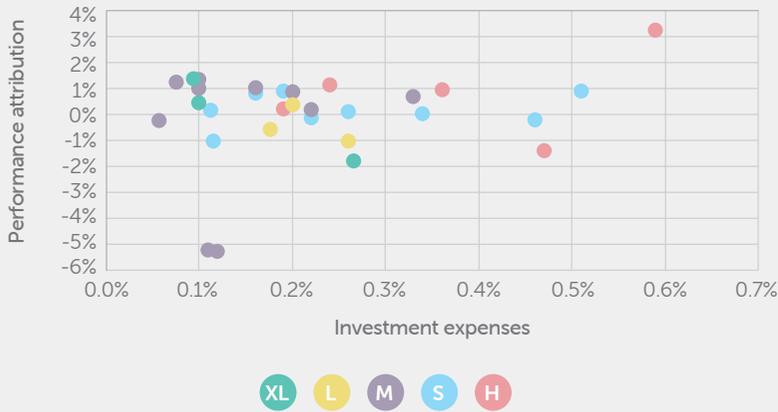
GRAPH 19: GROSS AND NET INVESTMENT RETURNS BY FUND OVER A 1-YEAR HORIZON



Notes

- Only the 31 funds that provided investment expense information are shown.
- If a fund only provided net or gross returns in addition to investment expense return information, then we have estimated the missing item by assuming net returns are equal to gross returns, less investment expenses.
- If a fund provided investment expenses in monetary amounts, we have converted to a percentage by taking it as a proportion of asset values.

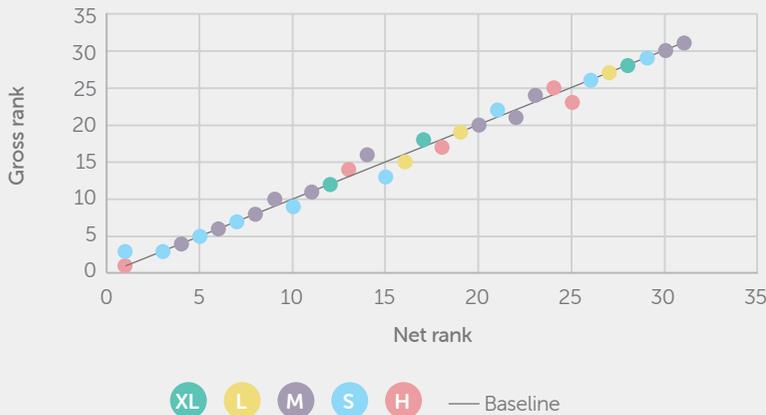
GRAPH 20: SCATTER PLOT COMPARING 1-YEAR INVESTMENT EXPENSES VS 1-YEAR STOCK SELECTION



Notes

- The stock selection performance attribution is as per the analysis in the previous section.

GRAPH 21: IMPACT OF INVESTMENT EXPENSES ON INVESTMENT RETURN RANKINGS

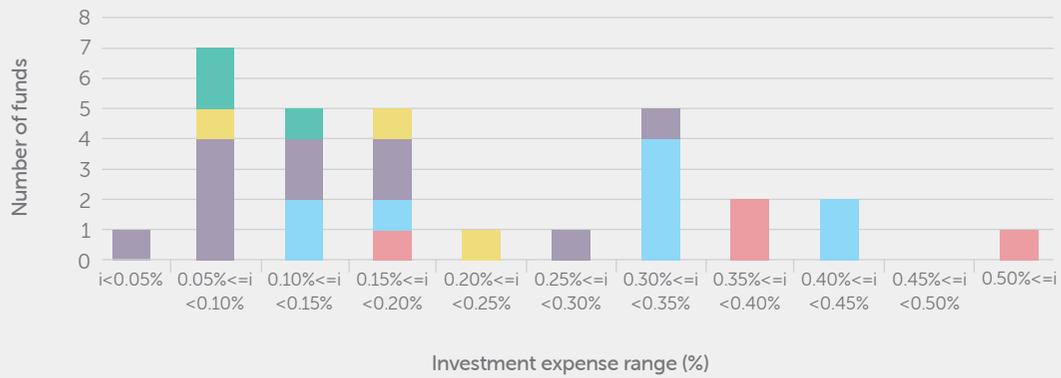


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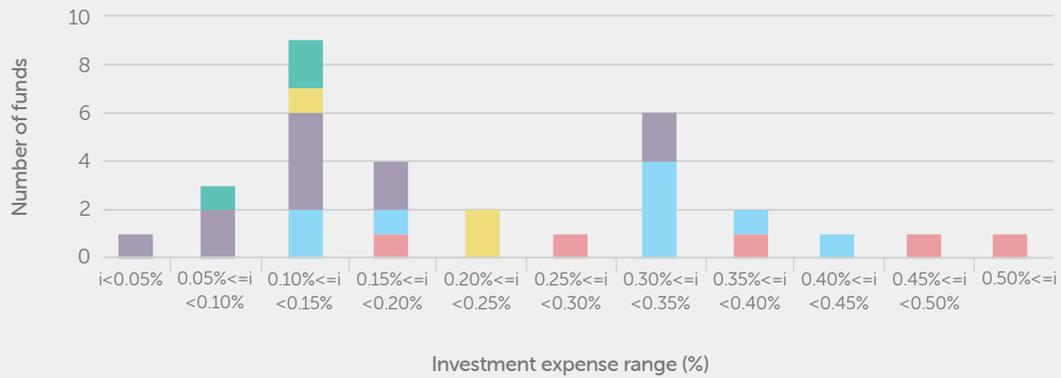
- There are 41 funds in this survey, however we only have investment expense information for 31 of these. The gross and net ranks shown in this chart are the rankings restricted to this group of 31 funds.
- The baseline shows where gross rank is equal to net rank. Dots above the baseline indicate where net rank is better than gross rank. Dots below the baseline indicate where net rank is worse than gross rank.

GRAPHS 22: HISTOGRAM OF INVESTMENT EXPENSES SPLIT BY FUND CLASSIFICATION, FOR EACH ASSET CLASS AND IN TOTAL

Government bonds



Corporate bonds

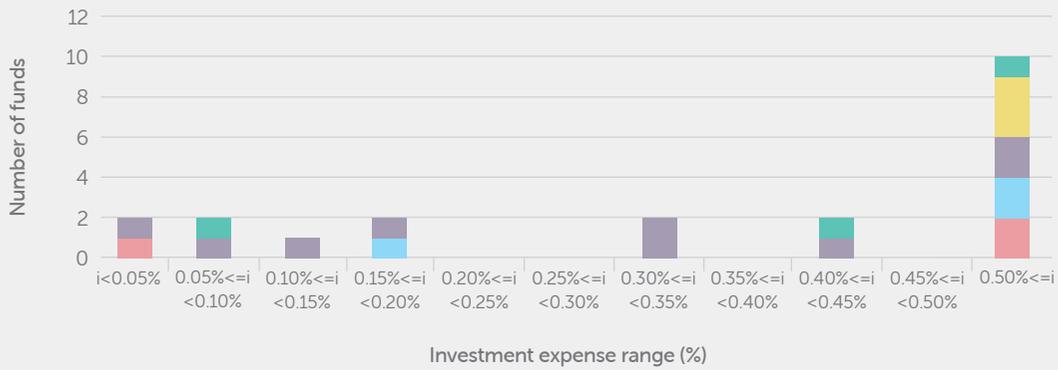


XL L M S H

Equity

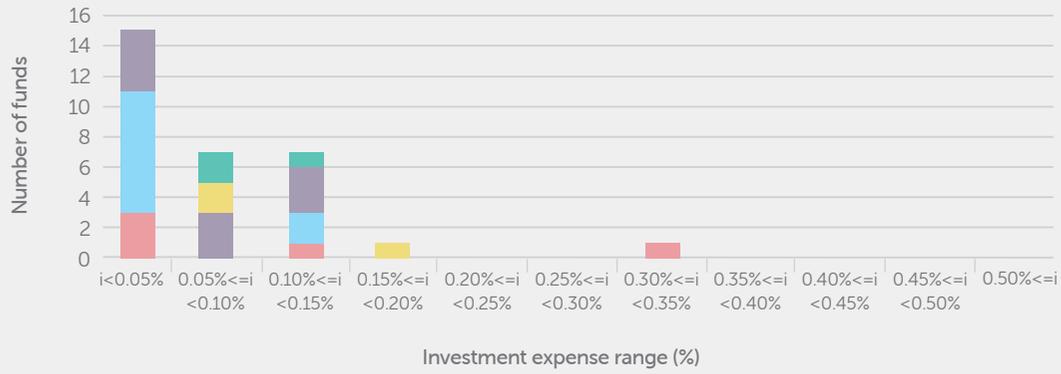


Property

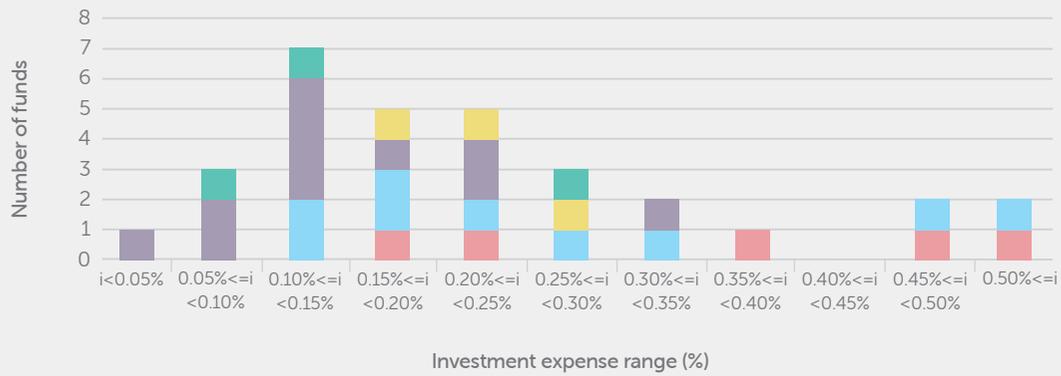


XL L M S H

Cash



Total



Notes

- Some funds have only provided investment expenses at a fund level. For these funds, we have estimated what their investment expenses would have been within each asset class. This has been done by assessing the average investment expenses within each asset class, and then scaling until the weighted average expense is equal to the total investment expense information provided.
- Some funds have only provided investment expenses at asset class level. For these funds, we have estimated expenses at a fund level by taking the average expenses, weighting by asset allocation.
- Some of the analysis here may be skewed by firms that have an in-house investment management team, but do not allocate the team's time or expenses to each asset class.
- Some funds have some assets invested within multi-asset funds. In these cases we have assumed that the investment expenses for the multi-asset fund apply uniformly to all asset classes within the fund.

Our insight

There was a wide range of investment expenses overall; 0.59% was the most being paid.

Two of the three highest performing funds had relatively high investment expenses and two of the three lowest performing funds had relatively low investment expenses. Outside of these extremes, there does not appear to be a statistically significant trend between investment expenses and net returns.

Overall, investment expenses does not materially change any firm's ranking between gross and net investment performance.

Our expectation was for larger funds to be able to use their scale to pay less for the same level of performance as smaller funds.

This does not appear to materialise in the data provided. However, we recognise that there may be some basis differences in the way different funds have prepared and provided their investment expense data.

The variance in expenses for cash and property asset classes is small. The high transactional and frictional costs associated with investing in property contribute to higher fees for the portfolio, but may not necessarily translate to outperformance.

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