FundCalibre.

Fund Management Index: Bonds

FundCalibre launched its Fund Manager Index earlier this year. The goal was to identify the fund groups whose actively managed equity funds consistently outperform the market. We awarded the top 25% of companies an Elite Provider Rating for Equities.

We have now produced a similar report for bonds which identifies the fund management businesses which have achieved the most success with their actively managed bond funds over the past five years.

After extensive analysis, eight groups, the top quartile of our index, have been awarded an Elite Provider Rating for Bonds, for delivering consistent outperformance for their clients. Royal London topped our list with 9.57%. This means that the average Royal London bond fund outperformed its peers by 9.57% over the past five years.

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Fund Management Index Elite Providers

Position	Fund Provider	5 Yr Average Outperformance (%)	AUM (£M)	No. of Funds	% of Funds Which Outperform SubSector Over 5 Yrs	Elite Rated
1	Royal London	9.57	£3,430	7	85.71%	1
2	Insight	6.27	£3,391	6	83.33%	0
3	Invesco	5.04	£10,220	7	85.71%	3
4	Franklin Templeton	3.87	£21,595	4	50.00%	0
5	Aviva	3.47	£5,295	8	75.00%	0
6	Pimco	3.24	£29,833	11	54.55%	0
7	Baillie Gifford	3.12	£2,595	9	55.56%	2
8	Kames	2.21	£4,166	5	80.00%	1

IMPORTANT NOTICE

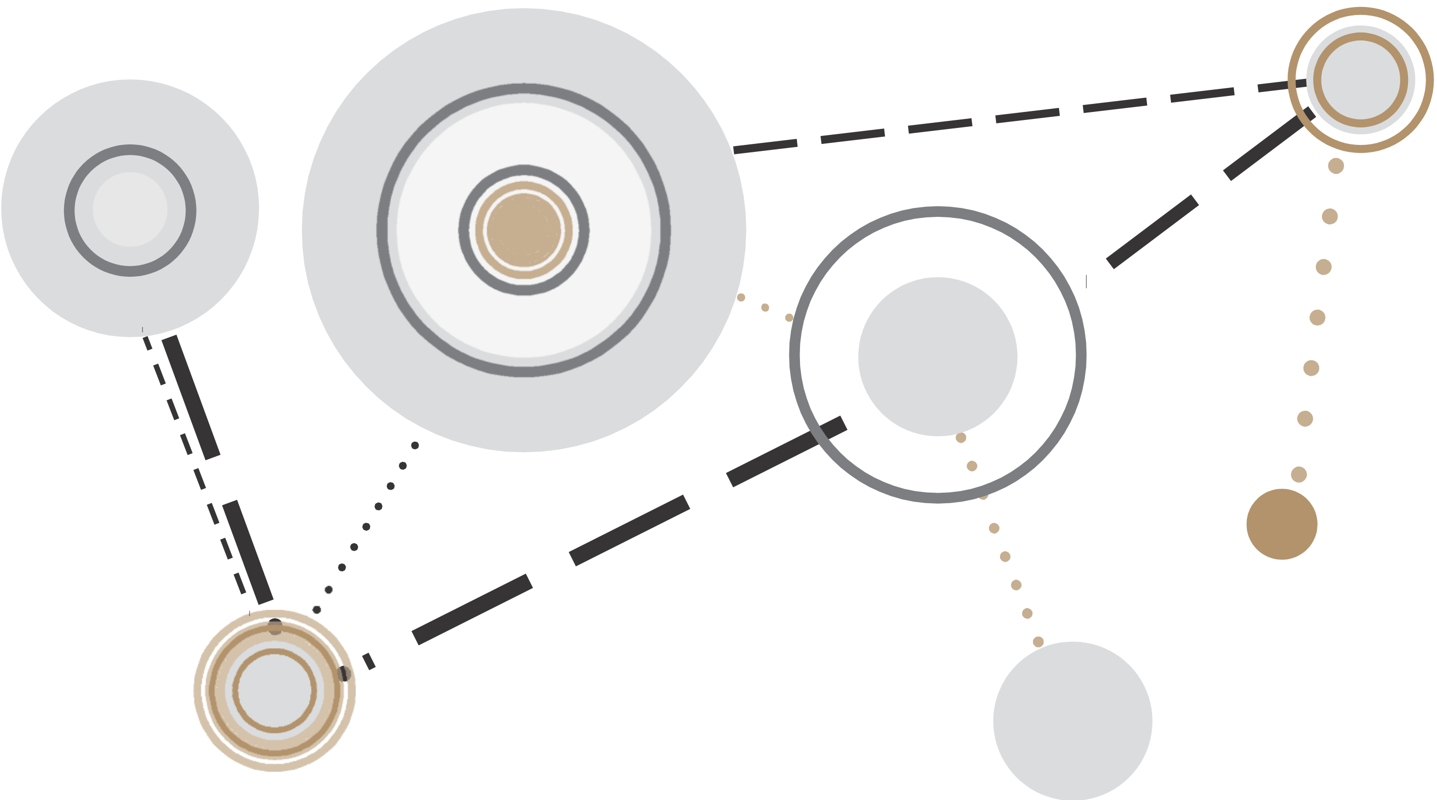
Elite Fund Ratings are based on FundCalibre's research methodology and are the opinion of FundCalibre's research team only. The award of an Elite Fund rating does not mean the fund is a suitable investment for you, and does not constitute a recommendation to buy. If a fund that you already hold does not, in the opinion of FundCalibre, merit an Elite Fund Rating, this does not constitute a recommendation to sell. All cumulative statistics % change bid to bid, net income reinvested, main share classes 30/06/2010-30/06/2015. Source FE Analytics. Whilst every effort has been made to ensure the accuracy of this information, FundCalibre takes no responsibility for any errors, omissions or inaccuracies therein.' FundCalibre is an authorised representative of Chelsea Financial Services.

Methodology

It is very difficult to compare bond funds. The existing IA sectors do not allow for a fair comparison. For example, US and European bond funds both reside in the IA Global Bonds sector. To solve this problem we created our own sub-sectors to better compare funds. FundCalibre decided which funds should be included in each sub-sector. The results are entirely FundCalibre's opinion, although every effort has been made to ensure fairness and accuracy.

- We created our own sub-sectors from the IA bond sectors.
- We compared individual fund performance to their sub-sector average performance and recorded any out or underperformance.
- We then calculated the out/underperformance for each group's average bond fund.
- Groups required a minimum of four qualifying funds with a five-year track record to be eligible for inclusion in the index.

SOURCE:
All cumulative statistics % change bid to bid, net income reinvested, main share classes 30/06/2010 – 30/06/2015, FE Analytics.



General Findings

Specialist bond houses typically did better than groups which have most of their assets in equity funds. Pimco and Insight, known for their fixed income offerings, did not feature in our equity index, but came close to the top of our bond index. This suggests that it might be better to invest in different groups for your bond and equity funds.

Comparing bond funds against one another is extremely difficult. The existing IA sectors do not allow for a fair comparison. For example, US and European bond funds both reside in the IA Global Bonds sector.

The many hundreds of different bond benchmarks and composites confuses the situation further.

Because of the lack of available information there is no easy way for a retail investor to determine the best-performing bond funds and we suggest the existing IA bond sectors may need to be re-thought.

Our findings show that choosing the right fund group matters - some fund groups consistently produced much better performance than others.

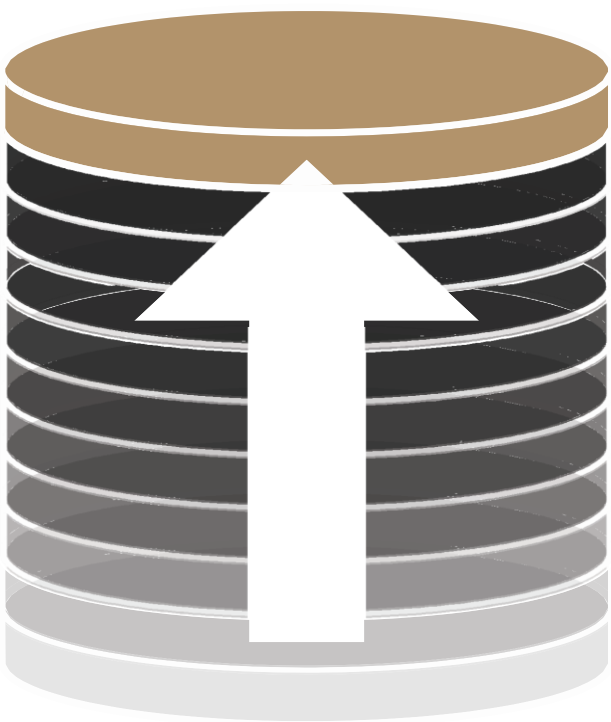
Specific Findings

Royal London was the clear winner within our index, with 9.57% average outperformance. This means the average Royal London fund outperformed its peers by 9.57% over the past five years. This was significantly more than the next closest group.

Royal London, Insight, Invesco and Kames were the most consistent groups. At least 80% of their bond funds outperformed their peers over the five year period.

Kames and Aviva were in the lower half of our fund manager equity index, but both these groups did extremely well with their bond funds and have been awarded an Elite Provider Rating for Bonds as a result.

Invesco and Baillie Gifford were the two groups which did consistently well in both indices.



Elite Provider Ratings

Fund Calibre is awarding the following groups an Elite Provider Rating for Bonds for their consistent outperformance versus their peers:

Royal London

Royal London's fixed income performance has been consistently exceptional and they were significantly ahead of the next closest group in our index. Their veteran team of fixed income analysts are known for their willingness to swim against the tide and invest where others are too afraid. This was best demonstrated by the Royal London Sterling Extra High Yield Bond fund, which returned 69.26% over the past five years with relatively low volatility, an exceptional performance for a bond fund. It was ably supported by the Royal London Corporate Bond, Ethical Bond and Sterling Credit funds, which all significantly outperformed. Royal London funds were also very good on a risk-adjusted basis. Their outperformance was not achieved by taking undue risk.

Insight

Insight is a specialist asset manager which is part of the wider BNY Mellon group. It has historically been particularly strong in fixed income. Over 83% of the company's fixed income funds beat their peers over the past five years. Their strongest performer was the Insight UK Corporate All Maturities Bond fund, which outperformed by 12%, but Insight bond funds were consistently strong across the board.

Invesco

Invesco is one of the largest asset managers in the UK and has a consistent record of delivering for investors. The Invesco Perpetual team are based in Henley-upon-Thames, which helps remove them from the noise of the city and enables them to take a longer-term view. They were one of very few groups which performed well in both our equity and bond indices. The average member of their investment team has 16 years' experience. The Elite Rated Invesco Perpetual High Yield and Invesco Perpetual Monthly Income Plus funds did particularly well, outperforming by 16.15 and 11.50% respectively.

Franklin Templeton

Franklin Templeton is a combination of multiple independent investment teams, each with an area of expertise. This allows them to be highly specialised, whilst still benefiting from the strength of the larger group. They are one of the largest fixed income managers in the world and they employ 170 fixed income professionals with an average of 15 years' experience. The Templeton Global Bond fund was their strongest contributor; it outperformed its peers by 23% over the five year period.

Elite Provider Ratings continued

Aviva

Aviva is a large global asset manager which has done particularly well with its fixed income, property and more recently its multi-asset funds. Aviva take a very collaborative approach to investing. Ideas are shared across the whole group and investments are made with a long-term perspective. The company is also distinguished by its heavy emphasis on risk management. Aviva bond funds did particularly well on a risk-adjusted basis with 75% of them outperforming their peers.

PIMCO

PIMCO has a long and proud history as a specialist bond manager. It was one of the first to introduce actively- managed bond portfolios in 1971. Since then it has been the go-to manager for bonds. PIMCO is now part of the German insurer Allianz. It has expanded into other asset classes but fixed income is still the group's major focus. Unsurprisingly, PIMCO funds performed well over the past five years, with the average fund outperforming by 3.12%.

Baillie Gifford

Baillie Gifford are the only fund group to achieve a top 10 position in both our equity and bond indices. They have an unusual partnership structure which ensures that employees own the business. It brings stability and allows them to prioritise investors' needs over shareholders, which might explain some of the reason for their strong performance. Baillie Gifford emphasises investing in the right companies and less attention is paid to managing interest rate risk. They typically run high conviction concentrated portfolios. Their strongest performer was the Baillie Gifford Corporate Bond fund (it actually resides in the strategic bond sector). The fund beats it peers by just under 19% over the past five years.

Kames

Kames is a specialist asset manager, well known for its strong range of fixed income and alternative funds. Over the past five years Kames bond funds were consistently excellent. Although Kames' average fund outperformance was fairly small, it typically took less risk than its peers. Its funds were less volatile and, as a result, Kames' funds had excellent risk-adjusted performance. In fact 100% of Kames' funds outperformed on a risk-adjusted basis, the highest of any group (see table on page 7).

Supplemental Data

Risk-adjusted performance – Sharpe Ratio outperformance

We have based the main results of our index on fund outperformance. However, below we have also included some risk-adjusted data for investor interest.

The Sharpe Ratio is one of the most widely used metrics for measuring a fund's risk-adjusted performance. Very simply, higher performance and a lower volatility gives a higher Sharpe Ratio. The higher the Sharpe Ratio is, the better the fund's risk-adjusted performance.

We compared individual funds' Sharpe Ratios against the average Sharpe Ratio of their sub-sector. In most cases the results were similar to the main index, although it is notable that some groups did do better or worse when volatility was taken into account. Kames were the most consistent group. Every one of their funds beat their peers on a risk-adjusted basis as their funds were typically less volatile than many of their peers.

Risk-adjusted Performance Index

Position	Name	No. of Funds	% of Funds Outperforming Sub-sector Sharpe Ratio Average
1	Kames	5	100.00%
2	Royal London	7	85.71%
3	Aviva	8	75.00%
4	Invesco	7	71.43%
5	Pioneer	6	66.67%
6	Insight	6	66.67%
7	Legg Mason	6	66.67%
8	Pimco	11	63.64%

General Findings

Some groups had a tendency to be more volatile than others

The highest Sharpe Ratios and therefore the funds which delivered the best risk-adjusted performance over the past five years, were in the Strategic Bond sub-sector (average Sharpe Ratio 1.39).

The lowest average Sharpe Ratio was in the Emerging Markets Local Currency sub-sector (average Sharpe Ratio -0.21).

Specific Findings

Kames, Royal London, Aviva and Invesco were the most consistent fund groups. Over 70% of all their bond funds beat their competitors on a risk-adjusted basis.

Extra Considerations

Choosing the right fund group can have an enormous impact on your investment performance. We created these indices to highlight which groups perform consistently well. Up until now this information has not been readily available for investors. Most of the focus from the media and ratings agencies is on individual funds or fund managers. Whilst this Information is very important, we think it is equally important to consider the fund group as a whole.

Our indices have shown that a group's culture, its structure, its personnel, its alignment with its investors' interest and how specialised it is to one area all have a considerable impact on its performance. Yet these factors are currently rarely prioritised by most investors.

Many groups consistently delivered outstanding performance for their clients, more than justifying their annual management charges. However, very few groups were consistently good with both their bond and equity funds.

Groups which specialised in one area, typically outperformed. Of the asset managers who focus on fixed income, PIMCO and Insight did extremely well in our bond index. The top three performers in the equity index, Unicorn, First State Stewart (which recently split into two new groups) and Marlborough Hargreave Hale, all focused on one part of the market.

Kames and Royal London were at the top of our bond index (80% and 85.71% of funds outperforming) but were much weaker in equities (12.5% and 37.5% outperforming respectively). The two exceptions which outperformed in both indices were Invesco and Baillie Gifford. The conclusion is that investors should consider specialising when it comes to fund selection.

IA Bond Sectors

The IA bond sectors, as they are currently, do not make it easy to compare different funds. For example, the IA Global Bonds sector has 146 bond funds, amongst which are both US and European bond funds. These funds cannot simply be compared with one another, like for like. Consumers need an easier way to compare funds in order to make better investment choices. For the purposes of this index we split the IA sectors into 20 different sub-sectors.

Future Indices

It is FundCalibre's intention to continue with these indices in the future. We think it is important to continue to hold fund groups to account and to shine a light on the best performers who may not always get the credit they deserve.

We intend to release an equity and a bond index annually.

Fund Management Index: Bonds – Full Table

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7	Baillie Gifford	3.12	£2,595	9	55.56%	2
8	Kames	2.21	£4,166	5	80.00%	1
9	Candriam	2.12	£2,995	5	60.00%	0
10	Pioneer	1.50	£8,813	6	50.00%	0
11	Legg Mason	0.78	£2,008	6	66.67%	0
12	Henderson	0.68	£4,878	6	16.67%	0
13	Standard Life Investments	0.58	£8,757	13	61.54%	1
14	Scottish Widows	0.33	£8,621	6	33.33%	0
15	Newton	-0.37	£959	5	40.00%	0
16	Old Mutual	-0.57	£1,397	8	37.50%	0
17	AXA	-0.63	£1,538	7	42.86%	1
18	Aberdeen	-0.77	£4,465	11	45.45%	1
19	Legal & General	-0.86	£4,767	5	40.00%	0
20	M&G	-0.86	£34,154	12	41.67%	4
21	F&C	-0.90	£442	6	33.33%	0
22	Fidelity	-1.21	£6,830	5	40.00%	1
23	Goldman Sachs	-2.72	£9,917	12	25.00%	0
24	Schroder	-2.94	£11,500	13	30.77%	0
25	Columbia Threadneedle	-2.96	£5,119	16	31.25%	0
26	Baring	-3.28	£621	5	40.00%	0
27	JP Morgan	-3.96	£748	5	60.00%	0
28	Capital Group	-4.59	£741	4	25.00%	0
29	Scottish Widows HIFML	-5.45	£2,196	4	0.00%	0
30	MFS	-6.12	£2,772	4	0.00%	0
31	Investec	-12.82	£1,345	6	16.67%	0

Methodology

All data sourced from FE Analytics*, using main share classes, as determined by FE Analytics. The data does not include any clean share classes as these were unavailable five years ago. Performance data from 30/06/10 to 30/06/15.

Steps to creating the index

- Create bond sub-sectors (see below) excluding funds with less than five years' performance
- Calculate each individual fund's out and underperformance after fees versus its sub-sector over the past five years
- Group individual fund data into fund houses and remove any funds which don't qualify
- Calculate each asset manager's average fund out or underperformance
- Rank asset manager by average fund out or underperformance
- We awarded an Elite Provider Rating for Bonds to the fund groups which have demonstrated the strongest outperformance over the past 5 years
- Supplemental – we calculate individual funds' Sharpe Ratios and Sharpe Ratio out or underperformance versus its sub-sector average Sharpe Ratio

Funds and fund houses excluded from final index data

Passive funds

Equity funds

Multi-manager funds

Institutional funds

Charity funds

Funds with a track record of less than five years

Fund houses with less than four qualifying funds

Methodology continued

Creating the sub-sectors

It is very difficult to compare bond funds. The IA sectors for bond funds are a mix of many different types of fund.

For example, the IA Global Bonds sector includes Global, European, US and various long- and short-duration funds. Comparing individual funds' performance to the sector average would be unfair. We considered comparing funds to their own benchmarks. This proved impractical. Not only are there hundreds of different benchmarks but we realised this method would also be unfair. Some funds compare themselves to LIBOR (the rate at which banks lend to each other), whilst other funds simply use the sector average.

To solve this problem we created our own sub-sectors to compare funds. FundCalibre decided how to build these sub-sectors and therefore our results are based on FundCalibre's opinions and quantitative data provided by FE Analytics. Every effort has been made to ensure fairness and accuracy. In most cases building the sub-sector was fairly simple; we grouped together funds with the same or very similar benchmarks. For example, we split the IA UK Corporate Bond sector into three sub-sectors: short duration, long duration and 'normal'.

For the IA Global Bonds sector we split some funds into different regions e.g. Europe and the US. If a fund held over 80% of its assets in one region it was moved into that regional sub-sector.

We also added back bond funds which were hiding in the specialist, unclassified or flexible sectors in order to ensure fairness and accuracy. Many funds were in these sectors for legitimate reasons and in some cases we created whole new sub-sectors. For example, we collected all the convertible bond funds in the Specialist sector to create a new convertible bond sub-sector.

Sub-sectors include passive, charity and institutional funds (note these funds are excluded from the final Fund Management Index as the goal is to measure actively managed funds available to retail investors). Funds with less than a five-year track record are excluded. Each sub-sector needed a minimum of four funds to qualify, otherwise the fund went into the miscellaneous category (see below). In total there were 20 different sub-sectors.

Comparing funds

We took the mean of all the funds in each sub-sector to create a sub-sector average. We then compared each fund's performance to its sub-sector to determine each fund's outperformance.

Methodology continued

Miscellaneous funds

Where a fund did not have a sub-sector, their out or underperformance is determined by the fund's benchmark, if it is deemed to be appropriate, otherwise the fund is excluded.

Miscellaneous funds are included in the final out or underperformance data. They are not included in the supplemental data on Sharpe Ratio out or underperformance of the sub-sector (see more details below).

Risk-adjusted measures of performance

Although our main index looks at sector outperformance, we also wanted to assess groups on a risk-adjusted basis. We looked at various methods of doing this. By far the most consistent and fair metric, in our view, was the Sharpe Ratio. The Sharpe Ratio is one of the most recognised risk-adjusted performance measures in the industry.

We concluded that looking at fund houses' mean (average) Sharpe Ratios on an absolute basis was unfair. This is because some sectors, most notably the strategic bond sector, have much higher Sharpe Ratios than others. Therefore a fund house with lots of funds in the strategic bond sector would be more likely to rank highly on our index.

In our view a fund group can only provide the best risk-adjusted returns for the part of the market they sit in. Therefore, a much fairer measure was to consider each fund's Sharpe Ratio versus the mean Sharpe Ratio in its sub-sector.

The houses which had a high percentage of funds with Sharpe Ratios higher than their sub-sectors were delivering consistently good risk-adjusted performance.

Sharpe Ratio

(annualised return – risk free rate)/annual standard deviation

The annual return was compiled using 5-year daily data from FE Analytics.

The annual standard deviation data was compiled using 5-year weekly data from FE Analytics.

The risk free rate was taken to be the shortest dated government bond. Since this is primarily an index of UK funds, we decided that the 1-month UK T-Bill was most appropriate. The annual return of the risk free rate was therefore calculated as 0.36%, from data provided by FE Analytics.

Methodology continued

Compiling the final index

Firstly, we collect the performance data for each asset manager's qualifying funds. We then determined the following for each group:

- The number of qualifying funds
- The average (mean) out/underperformance for each fund
- The percentage of funds which outperform their sub-sector
- The total AUM of the group's funds
- The number of qualifying funds for Sharpe Ratios (excludes miscellaneous funds)
- The percentage of funds which outperform their sub-sector Sharpe Ratio
- The number of funds which have an Elite Rating

The index is ranked, then ranked by each fund group's mean out/underperformance versus their sector average. Fund groups required at least four qualifying funds to be included in the index.

We have also included a risk-adjusted index where we rank the fund groups by the percentage of funds which outperform their sub-sector average Sharpe Ratio.

The index does not account for survivorship-bias. Funds which have been closed down or merged have not been included.