Investment Consultants Market Investigation

Working paper: Asset manager product recommendations

22 March 2018

This is one of a series of consultative working papers which will be published during the course of the investigation. This paper should be read alongside the background of the issues statement (published on 21 September 2017) and other published working papers.

These working papers do not form the inquiry group's provisional decision report. The group is carrying forward its information-gathering and analysis work and will proceed to prepare its provisional decision report, which is currently scheduled for publication in July 2018, taking into consideration (among other matters) the evidence obtained, responses to the consultation on the issues statement and responses to the working papers as well as other submissions made to us.

Parties wishing to comment on this paper should send their comments to investmentconsultants@cma.gsi.gov.uk by **Thursday 5 April 2018.**

The Competition and Markets Authority has excluded from this published version of the working paper information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂].

Contents

1. Executive summary

- We have conducted quantitative analysis in order to test whether asset management products which are recommended by investment consultants (ICs) outperform their respective benchmarks.
- This analysis fits into our assessment of outcomes in terms of whether ICs are providing value for money in relation to the quality of their services.[1]
- Several parties have claimed (in response to client tenders and in their marketing/other materials) that, on average, 'recommended' products outperform their respective benchmarks.
- The empirical analysis we have conducted has found that this is only the case on a gross of asset management (AM) fees basis.
- We have found no evidence to date that, net of AM fees:
  - 'Buy-rated' products outperform their respective benchmarks to a statistically significant extent on average.
  - 'Buy-rated' products outperform 'unrated' products to a statistically significant extent on average.
- We note that:
  - 'Manager recommendations' is one of a number of services offered by ICs that we are looking at.
  - Our quantitative analysis does not cover all products recommended by ICs: it only looks at the performance of actively-managed asset management products that exist in a database maintained by eVestment, a provider of data on asset management products.
- These are our emerging findings and we invite comments on the analysis. We will present a final version of this work in our provisional decision, taking into account comments received from parties during this consultation.

1. Issues statement, para 38.

2. Recommendations/ratings processes

2. Recommendations/ratings processes (1)

- The FCA conducted a quantitative analysis to test whether products recommended by ICs outperform benchmarks and non-recommended products.
- ICs have told us that manager recommendations is only one service they provide and therefore considering the performance of recommended products is only part of the story.

  - For example, some (e.g. Mercer and Hymans Robertson) have told us that 'asset allocation' is the key decision that trustees make. Some (e.g. Redington, IC Select and Mercer) referred us to papers in the academic literature suggesting asset allocation determines around 90% of performance.
  - However, other papers (Ibbotson (2010) and Hensel, Ezra and Ilkiw (1991)[2]) suggest that a significant amount of variation in performance is determined by factors other than 'asset allocation', such as 'manager selection', for example.

- Whilst we recognise that manager recommendations are only one part of the service that ICs provide, manager recommendations is an area which potentially adds value and can reasonably be measured, and where claims are commonly made.
- We have therefore assessed the performance of ICs' recommended AM products.

2. Ibbotson, R. (2010). The Importance of Asset Allocation. *CFA Digest*, 40(2), pp.37-38. Hensel, C., Ezra, D. and Ilkiw, J. (1991). The importance of the asset allocation decision. *Financial Analysts Journal,* 47(4), pp.65-72.

2. Recommendations/ratings processes (2)

- What is an asset management product?
  - An asset management product (or 'strategy') is defined as 'an investment style/category in which a fund manager offers asset management services'.
  - For example, the asset manager (AM) might select a range of individual stocks or bonds which are related to a particular style of investing, and aggregate these together into one product.
  - Two examples of such products are an 'Emerging Markets Debt Fund GBP' strategy offered by Franklin Templeton, and a 'UK Equity Long Term Recovery Fund CL A (INC)' strategy offered by River and Mercantile.[3]
- Each investment product may be offered in a number of vehicles, which are essentially 'wrappers' for each investment product. But as the underlying product is fundamentally the same, we do not run analysis at the vehicle-level.
- In order to invest in a particular asset class, investors must do so by selecting a particular investment product. ICs often advise clients on which investment products are likely to perform better.
- ICs do not expect clients to invest in their full buy list; they tailor their recommendations to each client. But ICs are unlikely to recommend products to clients which are not on their buy lists.

3. We make use of data from eVestment which covers performance and benchmark information for a high proportion of 'traditional' products available to institutional investors. It also covers some information on 'alternative' products.

2. Recommendations/ratings processes (3)

- We asked ICs how they undertake manager recommendations in practice.
- ICs typically combine both quantitative and qualitative research covering a wide array of themes. Commonly occurring themes include: ‘investment organisation’, ‘investment staff’, ‘investment process’, ‘risk’, ‘performance’ and ‘terms and conditions’.
- Several firms use data on product and AM characteristics as a filter to identify the products which may merit a full review.
- It is common for ICs to meet with asset managers as part of the process.
- It is also common for due diligence on asset managers to be carried out.
- It is common practice for ICs to document their reasoning behind a particular rating in documentation which can be given to clients.

3. Quantitative analysis

3.1. FCA analysis

3.1. FCA analysis (1)

- The Financial Conduct Authority (FCA) looked at whether '[investment] consultants are able to add value through their manager ratings service.'[4]

- They did so by conducting a quantitative analysis using:
  1. Data on the performance of asset management products from eVestment (a provider of data to institutional investors, AMs and ICs), and
  2. 'Recommendations' data from ICs, i.e. information on the asset management products that have been 'recommended' by a given IC.

- The FCA looked at whether:
  1. 'Recommended' and 'non-recommended' products outperform their respective benchmarks (i.e. whether active return[5] for 'recommended' and 'non-recommended' products is positive to a statistically significant extent) on average, and;
  2. 'Recommended' products outperform 'non-recommended' products (i.e. whether the difference in active return for 'recommended' and 'non-recommended' products is positive to a statistically significant extent) on average).
- They did this on a gross of fees, net of AM fees, and net of AM and IC fees basis.

4. FCA Asset Management Market Study Final Report: Annex 5 – Assessment of third party datasets, Appendix 1: Investment consultants manager rating performance sensitivity, para 1
5. Active return is defined as product return minus benchmark return

3.1. FCA analysis (2)

- The FCA considered that the eVestment database could be subject to a number of 'biases'. Table 1 describes these, and summarises how the FCA decided to address them.

Table 1: FCA's approach to addressing biases in the eVestment database

Bias	Description	How addressed by FCA
Survivorship bias	Only surviving products remain in the database? (i) Strategies which cease to exist are removed from the database? (ii) Strategies which begin performing poorly cease to report.	(i) Not an issue in eVestment - data is not removed if a product ceases to exist. (ii) The FCA considered unlikely as missing data would be a red flag. FCA found that only 0.29% of products ceased to report and then restarted [although FCA do not give % of just ceased to report].
Simulated returns	New products can simulate past performance data - risk that simulations constructed to make new products appear more attractive.	The FCA found that a very small proportion of products were affected, and that the results are not sensitive to exclusion.
Zero or low access products	Some products available to few investors, may not be options for relevant investors but could have higher or lower performance.	The FCA weighted returns by assets under management in each product, to assign little weight to low access products. Results were not sensitive.
Tax assumptions	(Predominantly) multi-country strategies typically choose a benchmark which reports returns on a net basis, meaning withholding tax deductions that are applied to dividends prior to reinvestment.	The FCA found that only 11% of strategies were affected. Maximum bias is the gross/net index differential. FCA found overall bias was likely no higher than 5bps (0.05%), a relatively small amount.
Backfill bias	(i) Managers report to the database only if they perform well – poor performers are unlisted. (ii) If they perform well in the period before they start reporting, they add historic data to the database.	(i) No solution – poorly performing products are still missing from the database. (ii) The FCA solution was to remove data added historically – i.e. all data 'backfilled' after the product was first listed on eVestment.
Benchmark gaming	Managers select the benchmarks to be compared against, and could choose flattering ones.	The FCA considered this 'unlikely', as managers 'face a strong incentive to ensure that benchmarks are recognised… and… many benchmarks are chosen in consultation with clients'.

3.1. FCA analysis (3)

- The FCA's results are summarised in Table 2.

Table 2: Institutional quarterly performance results: simple comparison

Variables	(1)	(2)	(2) less (1)
	Not highly rated	Highly rated	
Gross quarterly returns over benchmarks	0.08	0.10	0.02
	(1.14)	(1.24)	(0.29)
Gross quarterly returns over benchmarks less asset management charge[+]	0.03	0.04	0.02
	(0.35)	(0.52)	(0.29)
Gross quarterly returns over benchmarks less asset management charge and investment consultant fees [++]	0.00	0.02	0.02
	(0.00)	(0.21)	(0.29)

Source: eVestment data on net flows, returns, AUM. Sample of asset managers' for segregated mandate fees. Ratings data sourced from investment consultant firms in our sample. t-statistics based on standard errors, robust to conditional heteroscedasticity and serial correlation of up to two lags as in Newey and West (1987), are reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1 Therefore none of the figures statistically significant at these levels.
The number of observations reflects the number of time periods (quarters) in our analysis. Returns expressed in percentage points.
[+] We have assumed an average charge of 23bps (see Annex 3: Segregated Mandate Pricing Analysis).
[++] Based on information provided by investment consultants we estimate that fees for advisory services for clients with assets under £50bn range from 5-15bps on an annualized basis (see Chapter 8 of the interim report). We used a midpoint of 10bp as our assumption for consultant fees.

- They found that 'recommended' and 'non-recommended' products do not outperform their respective benchmarks, and 'recommended' products do not outperform 'non-recommended' products.
- These results held on a gross of fees, net of AM fees, and net of AM and IC fees basis.

- In view of this, the FCA concluded that 'investment consultants in our sample were historically not able to pick out products that significantly outperformed (against benchmark) other products.'[6]

6. FCA Asset Management Market Study Final Report Annex 5: – Assessment of third party datasets, Appendix 1: Investment consultants manager rating performance sensitivity, para 18

3. Quantitative analysis

3.2. CMA analysis – methodology

3.2. CMA analysis – methodology (1)

- We have undertaken work to test and expand on the analysis conducted by the FCA.
- The firms included in our sample are as follows: Aon, Capita, Hymans Robertson, Redington, Russell Investments, WTW, KPMG and LCP.[7] Mercer has not been included in this analysis, as it does not subscribe to eVestment, and therefore cannot provide ratings data which can be matched with the eVestment database that was used in this work.
- Our methodology was designed in consultation with several parties. Parties' views on various methodological points are described below and on the following slides.
- Dataset:
  - Time period:
    - We proposed to conduct analysis over 2006 to 2015, consistent with the FCA. Several parties said that a longer timespan would be preferable. No parties told us that their approach to rating or market conditions had changed significantly since 2015. That being said:
      - Hymans Robertson said that a higher proportion of their ratings were now in 'alternative' asset classes.
      - Redington said that ESG factors are now included in their selection criteria.
      - Several parties said that their approach was essentially the same, but that the application of this approach is continually enhanced.
  - Product scope:
    - Most parties said that passively-managed asset management products should be omitted from the analysis. Only one party (Capita) said that they should be included.
    - We agree with most parties and have excluded passively-managed asset management products from the analysis.

7. We have attempted to include Cambridge in our analysis, but we were unable to match any of their ratings into our eVestment dataset.

3.2. CMA analysis – methodology (2)

- 'Backfill bias':
  - We proposed to remove products from the analysis for dates after their inception date but prior to the date they were added to the eVestment database.
  - Russell Investments, Cambridge Associates, Hymans Robertson and Mercer considered this broadly reasonable.
  - Redington and Capita told us that we should include all products from their inception date, although we do not have the data to be able to do this.
  - River & Mercantile considered our proposed correction reasonable for the overall analysis, but not for analysis of individual ICs, because they sometimes rate products outside of the eVestment universe, or products that are yet to join it. We consider that this issue could apply to all ICs, and agree it is a limitation of the eVestment database.
  - JLT told us the correction was reasonable from the perspective of looking at the client experience, which would tend to coincide with looking at products after they have been added to eVestment. However, from the perspective of evaluating manager research, they considered the entire track record should be looked at.
  - WTW noted that one of the eVestment fields that would be used in the correction contains data that is inconsistent with other eVestment fields. We have taken this into account in applying the correction.
  - Some parties argued that it would be inappropriate to remove 'backfill' products from the analysis if they have already been rated, as this would penalise ICs who identify high- (or low-) quality products prior to these being added to eVestment. We disagree with this argument, as ICs may 'highly-rate' products that perform poorly and are never added to eVestment, but it would not be possible to penalise them for this.
  - We ultimately decided to remove products from the analysis entirely if their inception date was at least one quarter prior to the date they were added to the eVestment database, to correct for 'backfill bias'.

3.2. CMA analysis – methodology (3)

- Simulated returns:
  - Several parties said that we should exclude simulated returns from the analysis.
  - We agree and have excluded simulated returns.
- Ratings categorisation:
  - We proposed to categorise ratings as 'Buy', 'Hold' and 'Sell'.
  - Some parties said that this approach would mean discarding data, as their ratings categorisation is more granular.
  - Several parties said comparing the performance of ‘buy-rated’ and ‘sell-rated’ may be misleading, as 'Sell' ratings are given less frequently than 'Buy' ratings, or because products were only rated 'Sell' until clients had divested holdings in these, for instance.
  - As explained on slide 20, our baseline analysis looks at the performance of ‘buy-rated’ products. Although we found that 'Sell' ratings were assigned less frequently that 'Buy' ratings, we also found that there were a sufficient number of instances to extend the analysis to 'Sell' ratings.
- Lagging ratings data:
  - We proposed to lag ratings data by one quarter, to allow for the fact that it may take time for IC clients to respond to changes in ratings.
  - Redington said this approach would be inappropriate for ‘sell-rated’ products, as this would 'incorporate exactly the performance that the consultant was trying … to avoid'. We don’t agree with this view – we are interested in the ability of ICs to predict future poor performance.
  - Russell Investments noted that quarterly cycles may be important and could influence the analysis, but considered that this effect would be diluted over the market cycle.

3.2. CMA analysis – methodology (4)

- Fees:
  - Some parties, such as Mercer said we should look at performance gross of fees.
  - WTW said that we should look at performance gross and net of fees.
  - We have conducted the analysis for both gross and net of fees; for the reasons set out on slide 31, we place more weight on the results net of fees.

- Statistical tests:
  - WTW said that our statistical tests should be conducted at the quarterly-product level, rather than the quarterly-level (as per the FCA's analysis). As explained on slide 23, we have conducted a sensitivity at the quarterly-product level.
  - Some parties, such as Aon and WTW, said that our 'baseline' test should be whether the active return of 'recommended' products is positive. As explained on slide 20, we adopted this as our 'baseline' test.

- IC breakdown:
  - Some parties, such as Mercer, WTW, River and Mercantile, and Capita said we should conduct the analysis for individual ICs.
  - We conducted the main analysis for all ICs, but conducted a sensitivity looking at the performance of ICs individually.

3.2. CMA analysis – methodology (5)

- Asset class breakdown:
  - Several parties said we should conduct the analysis for individual asset classes.
  - Cambridge said this would be an irrelevance.
  - We conducted the main analysis across all asset classes, but conducted a sensitivity for individual asset classes.
- Risk:
  - WTW, Redington and Hymans Robertson said our analysis should take risk into account, and that we should consider using measures such as the 'information ratio'.
  - We conduct a sensitivity looking at measures of risk for products with different ratings

3.2. CMA analysis – methodology (6)

- Our methodology was designed taking into account the views of parties as described on the previous slides.
- It can be summarised as follows.
    1. First, we created a dataset at the product-quarter level, which contains data on product and benchmark returns. These data were sourced from eVestment.[8]
    2. Then, we merged in ratings data, which specifies the rating that was assigned to a given product/quarter pair by a given IC. The possible ratings are 'Buy', 'Hold', 'Sell', 'Other' and 'Unrated'.
    3. Following this, we calculated active return[9] for each product/quarter.
    4. Then, we used the resulting dataset to test whether 'buy-rated' product/quarter pairs outperform their respective benchmarks (i.e. whether active return for 'buy-rated' product/quarter pairs is positive to a statistically significant extent) on average, and whether 'buy-rated' product/quarter pairs outperform 'unrated' product/quarter pairs (i.e. whether the difference in active return for 'buy-rated' and 'unrated' product/quarter pairs is positive to a statistically significant extent) on average. We did this on a gross of fees and net of AM fees basis.
    5. Following this, we conducted a number of sensitivities/extensions.

8. eVestment is a provider of data on asset management products. Its database doesn't cover all asset management products, and has better coverage with respect to 'traditional' asset management products, as compared with 'alternative' asset management products. Approximately 60% of the ratings we have data on (with 'valid' eVestment product IDs and corresponding to the relevant time period) were merged into our eVestment dataset. Some adjustments were made to the resulting dataset before we conducted our analysis, so it isn't necessarily the case that the same proportion of ratings features in our analysis.
9. Active return is product return minus the return of the corresponding benchmark. It can be expressed on a net or gross basis, depending on whether product return is expressed on a net or gross basis.

3.2. CMA analysis – methodology (7)

- Our ‘baseline’ test was whether ‘buy-rated’ products outperform their respective benchmarks on average. The rationale for this is that this is the standard way in which the performance of asset management products is measured in the financial services industry.
- We also tested whether ‘buy-rated’ products outperform ‘unrated’ products on average. The rationale for this is that it looks at the performance of ‘recommended’ asset management products, as compared with that of other actively-managed asset management products that an IC client may have invested in, if she decided to not take IC ‘recommendations’ into account.
- The following slides discuss specific ways in which our analysis differs from that of the FCA, and also common features.

3.2. CMA analysis – methodology (8)

- Some of the differences between our methodology and that of the FCA relate to the creation of a dataset that can be used to run various statistical tests – these are described below and on the following slides.

1. Build on the FCA's criteria for creating a 'universe' of products in the comparison.
   - We dropped passive products, which should have returns close to benchmark.
   - We expanded the dataset of ratings by recovering data discarded by the FCA but which, with few and plausible assumptions, convey relevant information to increase sample sizes.
2. Expand the FCA's data on product ratings.
   - We increased the sample of firms from 6 to 8. The firms included in the sample are as follows: Aon, Capita, Hymans Robertson, Redington, Russell Investments, WTW, KPMG and LCP.[10]
   - Mercer is not included in this analysis, as it does not subscribe to eVestment, and therefore cannot provide ratings data which can be matched with the eVestment database. Our intention was to conduct a standalone analysis for Mercer using data sourced from Mercer's Global Investment Manager Database.
   - We assessed the performance of products which had ratings attached over this period, not only those which received new ratings.
3. Build on the FCA work on biases affecting the dataset.
   - We improved the correction used by the FCA to address 'backfill bias'.
   - We collected information from the database provider to analyse the safeguards they have in place to prevent identified biases, and have analysed the direction of all identified biases.

10. We attempted to include Cambridge in our analysis, but were unable to match any of their ratings into our eVestment dataset.

3.2. CMA analysis – methodology (9)

4. We refined the 'gross' to 'net' of fee performance conversion.

- Asset Managers told us that ICs are able to successfully negotiate discounts on clients' behalf, usually above the discount rates those clients could achieve individually.
- Our analysis of parties' data on fees their clients actually pay to asset managers shows that only a minority of clients actually pay the rack rate.[11]
    - For the parties included in this analysis, we find that clients received, on average, a discount rate of approximately [✂]%.
    - This rate varied across the parties included, although we note that this variation may be driven by the characteristics of their clients rather than their respective negotiating positions.
    - Given discounts appear to be an important part of pricing in this industry, we consider that it is important to account for this when calculating returns net of fees.
- The FCA's approach was to use the fees for segregated mandates, which typically have negotiated fees. We consider that this approach risks misstating the fee discounts achieved by clients if those using segregated mandates are not representative of the broader client base for ICs.[12]
- Having received data on pre- and post- negotiated fees from ICs, we were able to account more directly for the level of discounted fees, and made use of this data in our analysis to compute average discount rates across all clients (which we use in our headline results), and by IC (which we use in our IC-specific results).[13]

11. Furthermore, because asset management fees per unit of AUM generally decline as AUM increases, and because ICs are sometimes able to negotiate fees across several clients' assets in combination, the prices paid by clients of ICs may be lower than those of comparable size not using ICs.
12. We note that the FCA took into account IC fees as well as AM fees when converting from gross to net. We do not take IC fees into our analysis. Deducting IC fees would reduce the net performance of recommended products, and therefore, given our results, this would not change the emerging findings from the analysis.
13. We acknowledge that the data used to compute these discount rates may not be fully representative. We do not have discount data for smaller clients, and due to returns containing missing or poorly populated fields, we had to drop many records. Nevertheless, we consider that the former issue is likely to overstate the average discount achieved, and the latter is not likely to have a systematic effect. Therefore, we do not think these issues are likely to affect the conclusions drawn from the analysis.

3.2. CMA analysis – methodology (10)

5. We account for potential differences across the time series.
    - We conduct a sensitivity whereby we exclude data from the financial crisis period to see whether predictive ability was higher in periods where markets were under less extreme stress.
6. We (additionally) conduct analysis on product level data, rather than aggregated data, which allows for greater statistical power and robustness.
    - We are more likely to find a statistically significant result, because the sample size is larger.
    - We also correct for the fact that performance in successive quarters is likely to be correlated for individual products at the product level, rather than performing a correction at the aggregate level.

3.2. CMA analysis – methodology (11)

- We also expanded on the FCA's analysis in a number of ways.

1. We test 'negative' and 'neutral' ratings to analyse whether ICs are able to identify products which are less likely to perform well.
   - By extension, we can infer how effective the 'due diligence' role of ICs is.

2. We split the analysis by IC.
   - One average result may mask differences between ICs.

3. We split the analysis by asset class.
   - ICs may be able to identify high performing managers in particular asset classes but not others. For some asset classes, e.g. US Equities, we are told that many ICs will advise their clients to invest passively. Further, some asset classes may have many ratings but receive little client usage, skewing headline results.

4. We looked at measures of risk for products with different ratings.

3.2. CMA analysis – methodology (12)

- In spite of the differences listed on the preceding slides, our methodology remained similar to that of the FCA in the following ways.

1. We used exactly the same source data provided to the FCA by eVestment, covering the period 2006-2015.

2. We also lagged ratings by one quarter.

3. Our headline analysis was also conducted on quarterly aggregate data, and we presented results at quarterly level rather than compounding through time. We also analysed the excess returns of recommended products (rather than e.g. sell-rated products) as our main comparison.

4. We corrected for the same biases (although have additional qualitative analysis which permits tighter interpretation of results)

5. We also dropped simulated returns and inactive products. Performance data of this type would have potentially cause bias to the analysis.

3. Quantitative analysis

3.3. CMA analysis – descriptive information

3.3. CMA analysis – descriptive information (1)

- We have looked at data on the number of ratings per quarter by IC.
- It is clear that this varies quite substantially by IC.
- Approximately 60% of the ratings we have data on (with 'valid' eVestment product IDs and corresponding to the relevant time period) were merged into our eVestment dataset. It is likely that many of the unmatched ratings correspond to alternative products that do not feature in the eVestment database.
- We have also looked at data on the number of ratings given in 2016 and 2017, as a proportion of the average number of ratings given every 2 years over 2006 to 2015, by IC.
- Given 2016 and 2017 are not included in our sample, we are interested in whether ICs have made substantial changes to their approach to rating. As mentioned on slide 14, no parties have told us this is the case.
- Furthermore, the data indicate that most parties haven't rated substantially more products in 2016 and 2017.

3.3. CMA analysis – descriptive information (2)

- We looked at data on whether recommended products commonly appear in more than one IC's buy list.
- Table 3 below shows, for each product that was rated in any given quarter in the period 2006 to 2015, the number of different ICs that assigned a 'Buy' rating to this product/quarter combination.
- We find that the large majority of "Buy" ratings were assigned by a single IC, i.e. there don't appear to be significant overlaps in the sets of products that are rated "Buy" by different ICs.

Table 3: Number of ICs that rated a product 'Buy', for 'buy-rated' products

Number of investment consultants	Frequency	Proportion	Cumulative proportion
1	82,702	95.8%	95.8%
2	2,931	3.4%	99.2%
3	552	0.6%	99.8%
4	116	0.1%	100%
5	26	0.0%	100%
6	4	0.0%	100%

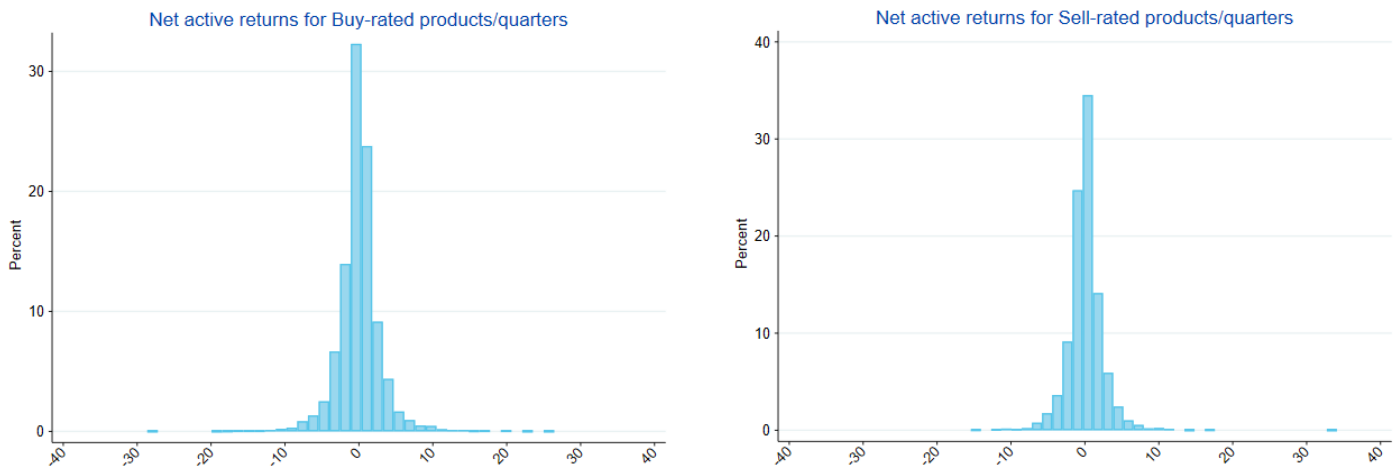
Source: CMA analysis of data sourced from investment consultants

- We also looked at data on inconsistencies between ratings by different ICs. We find, for instance, that:
  - Of products that were buy-rated by at least 1 IC in 2015q4, approximately 3% were hold- or sell-rated by at least 1 other IC, and;
  - Of products that were sell-rated by at least 1 IC in 2015q4, approximately 52% were buy- or hold-rated by at least 1 other IC.

3.3. CMA analysis – descriptive information (3)

- We looked at the ratings of 'very' poorly and 'very' strongly performing products (defined as the worst and best performing 5% of product-quarter combinations respectively).
- We found that 4.1% of ‘buy-rated’ product/quarter combinations appear in the worst performing 5% of product-quarter combinations.
- This undermines, to some extent, the assertion that ICs are unlikely to assign 'Buy' ratings to ‘very’ poorly performing products.
- Furthermore, we found that 2.9% of ‘sell-rated’ product/quarter combinations appear in the best performing 5% of product-quarter combinations.
- The charts below in Figure 1, show the histograms of net active returns for ‘buy-rated’/’sell-rated’ products/quarters.
- They are both centred around zero, and there are some extreme values on both sides of the distribution on both charts.

Figure 1: Distribution of net active returns for ‘Buy’ and ‘Sell’ ratings



3. Quantitative analysis

3.4. CMA analysis – initial results

3.4. CMA analysis – initial results (1)

- Our headline initial results are summarised in Table 4 below

Table 4: Headline initial results of quantitative analysis

	Average active return	
	Gross	Net
Buy	0.230***	0.033
	(0.005)	(0.691)
Buy - Unrated	0.096	0.057
	(0.227)	(0.552)

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses

- We found that the gross active return[14] of 'buy-rated' products was positive to a statistically significant extent on average.
  - More specifically, we found that the gross product return of 'buy-rated' products is 0.23% higher than benchmark return on average per quarter.
- The net (of AM fees) active return of 'buy-rated' products was also positive on average, but not to a statistically significant extent.
- On a gross or net (of AM fees) basis, the active return of 'buy-rated' products is greater than that of 'unrated' products on average, but not to a statistically significant extent.
- For the purposes of this empirical exercise, we placed more weight on the figures net of AM fees, as these are a better approximation of the return on investment an IC client could expect to receive if it invested in a 'buy-rated' product.
- Further, this analysis also accounted for the fact that ICs appear to be able to negotiate asset manager fee discounts on behalf of their clients. We note that the fees actually paid will vary substantially between clients, and that some but not all of the discount is attributable to IC negotiation.

14. Active return is product return minus the return of the corresponding benchmark.

3.4. CMA analysis – initial results (2)

- In addition to that presented on the previous slide we have also looked at:
  1. Whether 'hold-rated', 'sell-rated', or 'other-rated'[15] products outperform their respective benchmarks (i.e. whether active return for 'hold-rated', 'sell-rated' or 'other-rated' products is positive to a statistically significant extent) on average, and;
  2. Whether 'buy-rated' products outperform 'hold-rated' or 'sell-rated' products (i.e. whether the difference in active return for 'buy-rated' products and 'hold-rated' or 'sell-rated' products is positive to a statistically significant extent) on average.
- Our initial results are summarised in Table 5.

Table 5: Initial results of quantitative analysis – alternative 'comparators'

	Average active return Net (discounted 'rack rates')
Hold	0.108
	(0.265)
Sell	0.070
	(0.448)
Other	0.082
	(0.286)
Buy - Hold	-0.075
	(0.270)
Buy - Sell	-0.037
	(0.706)

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses

- We found that the net (of AM fees) active return of 'hold-rated', 'sell-rated', or 'other-rated' products was positive on average, but not to a statistically significant extent.
- The net (of AM fees) active return of 'buy-rated' products was lower than that of 'hold-rated' or 'sell-rated' products, but not to a statistically significant extent.
- One caveat to the above was that performance data in eVestment may be upwards biased.[16] To the extent this is the case, the performance of 'sell-rated' products is likely overstated, meaning it is less likely that we would find 'buy-rated' products to outperform 'sell-rated' products.

15. 'Other' ratings are those that parties were unable to map to 'Buy', 'Hold' or 'Sell'.
16. I.e. the performance of products in the eVestment database may appear to be strong when compared to that of products in a hypothetical database which is 'perfect', in that it covers every product which has existed at some point in time, and has completely accurate performance data on those products.

3.4. CMA analysis – initial results (3)

- In the appendix, we set out four sensitivities/extensions conducted – these are summarised below.

1. We conduct the analysis for each IC individually. As such, we found that, on a net of (AM) fees basis, 'buy-rated' products did not outperform their respective benchmarks on average for any individual IC, and 'buy-rated' products did not outperform 'unrated' products on average for any individual IC.

2. We conducted the analysis for individual asset classes. We found that, on a net of (AM) fees basis, 'buy-rated' hedge-fund products outperformed their respective benchmarks on average, and 'buy-rated' hedge-fund products outperformed 'unrated' hedge-fund products on average. We found these results did not hold for other asset classes.

3. We used an alternative methodology which likely had greater 'statistical power'. We find that the results were consistent with those presented on slides 31 and 32, on a net basis.

4. We generated results over 2012 to 2015 (i.e. excluding data from the financial crisis of 2007-8 and a number of years afterwards). We found some evidence that, for IC clients who wished to invest in actively-managed asset management products, they would have been better off investing in 'buy-rated' products, as compared with 'unrated' products.

5. We looked at measures of risk for products with different ratings. We didn't find definitive evidence that 'buy-rated' products are more risky or less risky than 'unrated' products.

3. Quantitative analysis

3.5. CMA analysis – emerging findings

3.5. CMA analysis – emerging findings

- We find that, on a net (discounted 'rack rates') basis:
  - 'Buy-rated' products do not outperform their respective benchmarks (i.e. the active return of 'buy-rated' products is positive, but not to a statistically significant extent) on average, and
  - 'Buy-rated' products do not outperform 'unrated' products (i.e. the active return of 'buy-rated' products is greater than that of 'unrated' products, but not to a statistically significant extent) on average.
- Furthermore, we have conducted various sensitivities/extensions:
  - We find that the above results hold for all ICs individually, and for all significant asset classes.
  - That being said, we find that 'buy-rated' hedge-fund products outperform their respective benchmarks on average, and 'buy-rated' hedge-fund products outperform 'unrated' hedge-fund products on average.
  - Furthermore, we find some evidence that, for IC clients who wish to invest actively, they would have been better off investing in 'buy-rated' products over 2012 to 2015, as compared with 'unrated' products.

4. Parties' claims

4.1. Background

4.1. Background

- We have compared our analysis with the parties' own claims and analysis:
  - We have reviewed the parties' client facing claims on performance of their recommendations, through a review of marketing materials and information provided in tenders as well as to existing clients.
  - We also received a bespoke analysis by WTW submitted to the CMA in response to this workstream.
- In our analysis, 'buy-rated' products only outperform their respective benchmarks (i.e. the active return of 'buy-rated' products is positive to a statistically significant extent) on average on a gross (of AM fees) basis. On a net (of AM fees) basis, 'buy-rated' products do not outperform their respective benchmarks (i.e. the active return of 'buy-rated' products is positive, but not to a statistically significant extent) on average.
- In contrast, we identify several claims by ICs that 'recommended' products outperform their respective benchmarks.
- Key reasons for this difference appear to be that parties:
  - Show results gross of fees, whereas the headline result we place the most weight on is presented net of fees, as this is a better approximation of the return on investment an IC client could expect to receive if it invested in a 'buy-rated' or 'recommended' product.
  - Compound results over several years of performance, and;
  - Show results for a subset of asset classes or recommended products.
- In what follows we provide some initial analysis of these points.

4. Parties' claims

4.2. Information presented in tenders

4.2. Information presented in tenders (1)

- For fiduciary tenders, it is common for trustees to ask for details of the scheme's recommended managers. The issue is reasonably prominent.
- Firms tend to provide the same statistics to all clients asking this question.

Example 1 – 'Describe your approach to investment manager selection (including whether it is done internally or externally), monitoring, selection and change. Please demonstrate how it adds value' **[✂]Tender**

Example 2 – '*What is your competitive advantage in manager selection? Please demonstrate where you have added value with your manager selection?*' **[✂]Tender**

[✂] response

[✂] response

[Example Response – Redacted]

[Example Response – Redacted]

4.2. Information presented in tenders (2)

- For advisory tenders, manager performance is not generally prominent. This is largely because trustees do not tend to ask specific questions on this topic.
- However, firms sometimes provide the information 'proactively'. Where they do this, again they use the same charts.

[✂] response

Example 3 – 'what is your approach to research including how you monitor the universe of fund managers?' **[✂]Tender**

[Example Response – Redacted]

4.2. Information presented in tenders (3)

Example 2 – '*What is your competitive advantage in manager selection? Please demonstrate where you have added value with your manager selection?*'
[✂]Tender

- ICs' responses to tenders often differed in a number of ways.
- For instance, two example ICs, (IC1 and IC2), responded to the question above as follows:
  - IC1 included a chart showing the performance on all 'buy-rated' products in an asset class, but didn't include every asset class on the chart (data is presented on approximately 40% of the possible asset classes).
  - IC2 included a chart showing the performance of a subset of 'buy-rated' products which its consultants have added to a 'model portfolio'. There is no evidence any asset classes have been omitted.
- Furthermore:
  - The asset class categorisation differs between the ICs.
  - IC1 reported performance gross of fees, whereas IC2 reported performance net of fees.
  - The time period over which performance is compounded differed between the ICs.

4. Parties' claims

4.3. Information presented in marketing/other materials

4.3. Information presented in marketing/other materials (1)

- Some ICs told us they do not present information on the aggregate performance of their recommended managers externally.
  - These ICs include KPMG and Redington.
  - Reasons given include short track records, and that they do not collate the information.
  - These firms sometimes provide 'partial' information, for example Redington has given the performance of its recommended products within multi asset class credit in a given tender.
- However, others do analyse and present this information.
  - These ICs include Aon, Mercer, WTW, and Cardano.[17]
  - Further, some ICs make their performance information publicly available on their websites (e.g. Aon (since October 2017)).
- External scrutiny of methodologies used by ICs appears uncommon, although Hymans Robertson told us that theirs is reviewed by an independent auditor on a quarterly basis.
- As in our review of tender documents, the presentation differs. Again, methodologies also differ both within and across ICs.
- We set out the key methodologies used on the following slide.

17. Cardano presents this information in response to tenders, but not in marketing or other materials.

4.3. Information presented in marketing/other materials (2)

- We have categorised the most commonly used methodologies as follows:
  1. Assess aggregate performance of 'buy-rated' managers against benchmarks over a specified number of years.
  2. Compare performance of 'buy-rated' managers to 'sell-rated' managers.
  3. Construct a 'model portfolio' to show the performance of managers the IC would select if it had no constraints.
  4. Show the performance of rated products which have performance data available for a specified number of years.
- We considered that there was merit in the first and second approaches.
- The third approach may have been valid if (i) the model portfolio is (essentially) identical to a portfolio that is actually available to clients, e.g. as part of the full FM offering, or if (ii) the portfolio is not available, but this fact is declared.
- The fourth approach had potential limitations over periods of longer than 1-3 years. This is because the method was subject to survivorship bias. That is, any subset of products which existed for 10 years is likely to outperform the benchmark (comprised of all products, however long they existed for).
- It is important to note that there was significant variation in the application of the four methodologies listed above. Table 6, which is taken from slide 89 of the working paper for information on fees and quality, indicates variation in the application of the 1st methodology listed above.

Table 6: Variation in application of particular methodology used to assess 'manager recommendations'

	Main outcome measure	Time-period	Manager fees	Example asset classes
[✂]	Return of highly-rated managers vs benchmark. Split by asset class.	Calendar years + 3, 5 years and 10 years.	Net.	Unconstrained UK equity. Unconstrained global equity.
[✂]	Return of highly-rated managers vs benchmark. Split by asset class.	By calendar year, they show 3 and 5 year performance.	-	UK equity. Global equity.
[✂]	Return of highly-rated managers vs benchmark. Split by asset class.	Calendar years + quarter, 1, 2 … 10 years + since inception.	Gross.	UK equity, small cap. Global equity, core.
[✂]	Return of highly-rated managers vs benchmark. Split by asset class.	Varies; up to 10 years.	Gross.	Equities. Credit. Hedge funds.

4. Parties' claims

4.4. WTW submission

4.4. WTW submission (1)

- We received a specific submission from WTW which responded to the FCA analysis of manager recommendations. Because the core of our approach is similar to the FCA's, their critique would generally apply to our work too.
- We have not reviewed the underlying code or dataset used. The dataset appears to be similar to ours, but richer since it contains (i) more eVestment fields and (ii) additional information from e.g. managers which were missing in eVestment.
- The submission describes several analyses conducted by WTW,[18] three of which we discuss below.
- Analysis 1:
  - They first analyse the aggregate cumulative return against benchmarks for product ratings which have existed for 1, 3, 5 and 10 years. This is using methodology 4 from slide 44, which we consider is likely to be subject to survivorship bias. They do not discuss survivorship bias in their submission.
  - WTW say that 'this analysis is appropriate for the context in which it is used: to monitor the individual long-term performance of managers that are 'upgraded' to a FREX1/Positive rating.
  - This is not the context in which it is used in the submission to us, which addresses the question of whether WTW's manager product selection process in aggregate identifies products which outperform benchmarks.

18. One of these does not relate solely to 'manager recommendations.'

4.4. WTW submission (2)

- Analyses 2 and 3:
  - Next, they analyse all quarters for which a product was 'buy' rated since the year 2000. That is, they assess whether any product rated at any point since 2000 beat benchmarks, for all product-quarter combinations which had ratings over this time.
  - Method 2: they conduct the analysis using the FCA's quarterly-aggregate approach used in our main specification.
  - Method 3: their preferred specification for this analysis is however to use the 'panel' approach which we use as a robustness check for our main results (see slide 59).[19]
  - They find in both cases that outperformance is statistically significant on a gross basis at the 5% level. On a net basis, they find statistically significant results for all asset classes using the 'panel' approach, but only for equities using the quarterly-aggregate approach. When WTW account for 'backfill bias', positive but not statistically significant outperformance is identified. When the results are weighted by AUM, the level of outperformance remains positive for all asset classes, and becomes statistically significant for equities.
  - The key differences from our results are therefore that:
    1. They find outperformance for equities using the quarterly aggregate approach, and;
    2. They find outperformance for all asset classes using the 'panel' approach.
  - There are several reasons why the net results may differ. Some of these differences may be due to different asset class categorisation and underlying data, although the magnitudes are generally not incomparable with those estimated in our analysis. In such cases, the statistical significance of the results still differs from our own results. This appears to be at least in part because the statistical test applied differs.[20]
    - In particular, the statistical tests applied by WTW do not appear to account for autocorrelation in returns. We consider that may be important.

19. WTW also tested whether recommended managers outperform their benchmark with a probability of more than 50%, although conclusions did not differ materially for this analysis.
20. WTW also use a one sided statistical test, which does not allow for the possibility of underperformance of its recommended products. It appears that most results would likely remain statistically significant at the 5% level using a two sided test.

4. Parties' claims

4.5. Emerging findings

4.5. Emerging findings

- As regards figures presented to clients, magnitudes of claims vary significantly.
- All ICs' analysis we have reviewed has claimed that, on average, 'recommended' products outperform their respective benchmarks. Further, where broken down by asset class, ICs generally claim this holds in (almost) all asset classes.
- We have tried to sense-check the IC claims with our own analysis. It is difficult to understand the precise reason for the difference between the claims and our initial results because:
  - There is a lot of variation around the magnitude of the claims, and different methodologies used, and;
  - It is not usually clear whether these results are statistically significant.
- Where we can compare them, or where we have 'standalone estimates' from parties, claims generally amount to outperformance of around 1-2% (gross of fees) p.a..
- When we annualise our quarterly headline figures of 0.23% (gross of fees), we find outperformance of nearly 1% per year (0.92%) (not allowing for compounding).

5. Emerging findings

5. Emerging findings

- We have conducted quantitative analysis in order to test whether asset management products which are recommended by investment consultants (ICs) outperform their respective benchmarks.
- This analysis fits into our assessment of outcomes in terms of whether ICs are providing value for money in relation to the quality of their services.[21]
- Several parties have claimed (in response to client tenders and in their marketing/other materials) that, on average, 'recommended' products outperform their respective benchmarks.
- The empirical analysis we have conducted has found that this is only the case on a gross of asset management (AM) fees basis.
- We have found no evidence to date that, net of AM fees:
  - 'Buy-rated' products outperform their respective benchmarks to a statistically significant extent on average.
  - 'Buy-rated' products outperform 'unrated' products to a statistically significant extent on average.
- We identified claims by ICs in their marketing and tender documents that their recommended products outperform their respective benchmarks. Many of these figures are gross of fees. The outperformance claimed by some parties is higher than our analysis finds. We consider that results which do not account for fee levels omit key information relevant for clients evaluating the IC's performance.
- We do not propose to undertake detailed work to check/quality assure the parties' claims, but intend to analyse further the methodologies underlying some of these claims.
- These are our emerging findings and we invite comments on the analysis. We will present a final version of this work in our provisional decision, taking into account comments received from parties during this consultation.

21. Issues statement, para 38.

6. Potential remedies

6. Potential remedies

- In our analysis we have found firms present information on the potential or actual impact of their asset manager product recommendations in different formats and using different terminology. If we were to find that this is a feature that constitutes an AEC we would need to consider potential ways to address this, for example by improving this information. To consider the design of any potential remedies we are keen to hear views from parties on the following:

1. Are trustees easily able to compare claims regarding the impact of asset manager product recommendations made by different firms during a tender, for instance?
2. Would trustees benefit most from information on returns achieved by recommended asset manager products on a gross or net basis?
3. How could the presentation of the impact of asset manager product recommendations be made more comparable, comprehensive, relevant and useful?
4. What are the challenges of developing a common methodology? Should this be mandatory and, if so, should there be scope for divergence in specific circumstances?
5. Should any claim in relation to the impact of a firm's recommendations be subject to external benchmarking or scrutiny and should this be assessed against a common methodology for presenting impact?
6. How should any change in presentation be implemented and enforced?

7. Appendices

7.1. Appendix 1: Quantitative analysis – IC breakdown

7.1. Quantitative analysis – IC breakdown

- We conducted our quantitative analysis for ICs individually, using the same methodology, except for the fact that we calculated discounted 'rack rates' using IC-specific average discounts.
- Our headline initial results are summarised in Table 7.

Table 7: Initial results of quantitative analysis – IC breakdown

	Average active return (net (discounted 'rack rates'))					
	IC1	**IC2**	**IC3**	**IC4**	**IC5**	**IC6**
Buy	0.057	-0.392*	0.026	N/A	0.036	0.067
	(0.445)	(0.051)	(0.848)		(0.765)	(0.432)
Buy - Unrated	0.054	-0.328	0.055	N/A	0.059	0.064
	(0.598)	(0.119)	(0.679)		(0.651)	(0.440)
n	8,576	580	832	33	59,912	32,760

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses
n refers to the number of rated products/quarters for a given IC

- We found that the net active return of 'buy-rated' products is positive on average for some ICs, but not to a statistically significant extent.
- Furthermore, we found that the net active return of 'buy-rated' products is greater than that of 'unrated' products on average for some ICs, but not to a statistically significant extent.
- As such, we found that 'buy-rated' products do not outperform their respective benchmarks on average for any individual IC, and 'buy-rated' products do not outperform 'unrated' products on average for any individual IC.

7. Appendices

7.2. Appendix 2: Quantitative analysis – asset class breakdown

7.2. Quantitative analysis – asset class breakdown

- We also conducted our quantitative analysis for individual asset classes, using asset class data in the eVestment database.
- Our headline initial results are summarised in Table 8.

Table 8: Initial results of quantitative analysis – asset class breakdown

	Average active return (net (discounted 'rack rates'))			
	Alternatives	**Equity**	**Fixed income**	**Hedge funds**
Buy	1.550	-0.035	0.166	0.811*
	(0.327)	(0.698)	(0.323)	(0.084)
Buy - Unrated	1.808	-0.007	0.137	0.919***
	(0.152)	(0.946)	(0.111)	(0.001)
% of universe	0.69	69.75	23.36	4.08

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses

- We found that the net active return of 'buy-rated' products is positive to a statistically significant extent on average for hedge funds, but not for other asset classes.
- Furthermore, we found that the net active return of 'buy-rated' products is greater than that of 'unrated' products to a statistically significant extent on average for hedge funds, but not for other asset classes.
- As such, we found that 'buy-rated' hedge-fund products outperform their respective benchmarks on average, and 'buy-rated' hedge-fund products outperform 'unrated' hedge-fund products on average. We find these results do not hold for other asset classes.

7. Appendices

7.3. Appendix 3: Quantitative analysis – alternative methodology

7.3. Quantitative analysis – alternative methodology (1)

- We also used an alternative methodology which likely has greater 'statistical power'.
- In our original methodology, we calculated the average active return for a group of products (e.g. 'buy-rated' products) in a given quarter. Conducting the analysis at this level of aggregation likely means it has less 'statistical power'.
- In this alternative methodology, we conducted the analysis at the product-quarter level (rather than the quarter level). Our statistical tests are conducted on the basis of both standard errors that are 'clustered' at the product-level (to account for the fact that there may be autocorrelation in the performance data) and Driscoll-Kraay standard errors (to account for the fact that there may be autocorrelation in the performance data, and that there may be cross-sectional correlation in the performance data).[22]
- Our headline initial results are summarised in Table 9.

Table 9: Initial results of quantitative analysis – alternative methodology

	Average active return (net (discounted 'rack rates'))		
	Time series	Panel	
	Newey-West SEs	Clustered SEs	Driscoll-Kraay SEs
Buy	0.033	0.035	0.035
	(0.691)	(0.344)	(0.690)
Buy - Unrated	0.057	0.029	0.029
	(0.552)	(0.449)	(0.785)

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses

- We found that, under both specifications, the results are qualitatively the same as those presented on slide 31, on a net basis.

22. In our original methodology, our statistical tests are conducted on the basis of Newey-West standard errors (to account for the fact that there may be autocorrelation in the performance data).

7.3. Quantitative analysis – alternative methodology (2)

- As we did for our original methodology, we have also looked at 'comparator' sensitivities.
- Our initial results are summarised in Table 10.

Table 10 - Initial results of quantitative analysis – alternative 'comparators' and methodology

	Average active return (net (discounted 'rack rates'))		
	Time series	Panel	
	Newey-West SEs	Clustered SEs	Driscoll-Kraay SEs
Hold	0.108	0.135***	0.135*
	(0.265)	(0.002)	(0.080)
Sell	0.070	0.048	0.048
	(0.448)	(0.177)	(0.531)
Other	0.082	0.069***	0.069
	(0.286)	(0.000)	(0.305)
Buy - Hold	-0.075	-0.100*	-0.100
	(0.270)	(0.072)	(0.208)
Buy - Sell	-0.037	-0.013	-0.013
	(0.706)	(0.798)	(0.889)

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses

- We found some evidence that 'hold-rated' and 'other-rated' product/quarter pairs outperformed their respective benchmarks on average.
- However, we did not attach much weight to these findings, as the fact that 'hold-rated' products outperform their respective benchmarks doesn't tell us much in isolation, and the performance of 'other-rated' products is difficult to interpret – this refers to ratings that ICs would not classify as 'Buy', 'Hold' or 'Sell'.

7. Appendices

7.4. Appendix 4: Quantitative analysis – initial results over 2012 to 2015

7.4. Quantitative analysis – initial results over 2012 to 2015

- We also generated results over 2012 to 2015. The motivation for this was to see if asset manager product recommendations perform better outside of times of extreme 'system stress' (i.e. a number of years after the financial crisis of 2007-8).
- Our headline initial results are summarised in Table 11.

Table 11 - Initial results of quantitative analysis – 2012 to 2015

	Average active return	
	Gross	Net (discounted 'rack rates')
Buy	0.275***	0.040
	(0.006)	(0.610)
Buy - Unrated	0.242***	0.198***
	(0.000)	(0.001)

Source: CMA analysis of data sourced from eVestment and investment consultants

Notes:
*** p < 0.01, ** p < 0.05, * p < 0.1
p values are reported in parentheses

- We found that, on a net (discounted 'rack rates') basis:
  - The active return of 'buy-rated' products was positive on average, but not to a statistically significant extent.
  - The active return of 'buy-rated' products was greater than that of 'unrated' products to a statistically significant extent on average.
- As such, we found that 'buy-rated' products did not outperform their respective benchmarks on average, but 'buy-rated' products outperform 'unrated' products on average.

- Whilst noting that these results only correspond to a four year period, we believe that they provided some evidence that, over a limited time period, for IC clients who wish to invest actively, they would have been better off investing in 'buy-rated' products, as compared with 'unrated' products.
- That being said, we believe our results over 2006 to 2015 are likely to be more robust, and more representative of the time horizon over which an IC client would likely invest.

7. Appendices

7.5. Appendix 5: Quantitative analysis – measures of risk

7.5. Quantitative analysis – measures of risk

- We are interested in whether products with different ratings tend to have different levels of risk.
- We assessed this by calculating the average value of two commonly used measures of risk for different groups of products.[23] The two measures are as follows:
  1. Standard deviation of product return (SD), and;
  2. Tracking error (TE), which is defined as the standard deviation of active return (product return minus the return of the corresponding benchmark).
- Our initial results are shown in Table 12.

Table 12: Measures of risk for products with different ratings

	Standard deviation of product returns (%)	Tracking error (%)
Buy	8.70	2.33
Hold	8.64	2.18
Other	9.18	2.48
Sell	9.14	2.08
Unrated	8.00	2.46

Source: CMA analysis of data sourced from eVestment and investment consultants

- We found that:
  - SD was higher, on average, for 'buy-rated' products, as compared with 'unrated' products, indicating a relatively high level of risk for 'buy-rated' products.
  - TE was lower, on average, for 'buy-rated' products, as compared with 'unrated' products, indicating a relatively low level of risk for 'buy-rated' products.
- As such, the evidence is inconclusive as to whether 'buy-rated' products are more risky or less risky than 'unrated' products on average.
- In subsequent work, we may explore the possibility of incorporating risk into our analysis, possibly by using measures of risk-adjusted return, such as the Sharpe ratio or information ratio.

23. We note that neither of these measures are a perfect indicator of the risk that an investor would be exposed to if she invested in a given asset management product.