Financial Conduct Authority

Asset Management Market Study

Interim Report: Annex 6 – Institutional Econometric Analysis

November 2016

Annex 6: Institutional Econometric Analysis

Introduction

1. A key aim of this market study is to establish whether competition is working effectively in the asset management industry. We consider that an important first step in assessing this is to understand the nature of competition in the asset management industry. This annex is split into two sections. The first section sets out how we have sought to understand the factors over which asset managers compete for the supply of services to institutional investors. The second section looks at the outcomes for institutional investors.

Drivers of institutional net flows

2. Commercial asset managers typically charge investors using an ad valorem fee, set as a percentage of AUM. While there are occasional departures from this fee model in the form of asymmetric performance fees, these performance fees are ultimately applied as a percentage of AUM.[1]

3. An ad valorem fee structure provides asset managers with an incentive to compete for net inflows of assets, and subsequently retain those assets. This is because an additional £ in assets under management represents additional revenues to the asset management firm. So long as the marginal revenue from additional AUM exceeds the marginal cost of servicing that additional AUM, we would expect asset management firms to continue competing for assets and seeking to retain those assets.[2]

4. Ad valorem fees should also provide firms with an incentive to perform well, as this (i) will raise the value of a fund manager's AUM and therefore revenues to the asset manager, even if this does not lead to an increase in inflows; (ii) may subsequently lead to additional inflows of money attracted by the better performance; and (iii) may improve the likelihood of retaining existing client assets. However, given that asset managers continue to be paid at the same rate (percentage of AUM) under an ad valorem fee structure, even if they deliver poor performance, this last incentive may not be strong if assets do not flow out in response to below average performance.[3]

5. We consider that this fee structure gives asset managers an incentive to focus on delivering aspects of performance to investors that result in greater inflows of assets, and that improve the likelihood of retaining assets. These aspects could include, for example, high returns, brand awareness, appearance on distributors' best buy lists and inclusion in adviser recommendations.

---

[1] Performance fees are typically a fixed percentage applied to a measure of outperformance.

[2] These costs may not be captured fully by accounting measures of costs.

[3] To the extent that there is a convex and increasing relationship between fund flows and performance, this could lead to asset management firms facing perverse incentives. For example, if this relationship existed then rational firms could have an incentive to encourage their fund managers to focus their efforts and resources on the current winning fund(s) at the expense of other funds that are currently underperforming. A convex and increasing relationship between fund flows and performance could therefore explain a finding that there exist funds with negative (excess) performance persistence.

6.   In this annex we have sought to analyse (i) the determinants of flows, with particular focus on how investment consultant recommendations affect institutional flows; and (ii) whether these recommendations add value for investors.[4] We have used econometric techniques to identify the determinants of flows. We have performed two analyses as part of this market study, one for institutional end investors, and a second analysis for retail end investors (see separate annex for the retail analysis). The same framework is used for each analysis.

7.   The evidence from this econometric analysis sits alongside other evidence we have collected on the drivers of net flows, which includes questionnaires sent to a large sample of asset managers with a UK presence, surveys of retail and institutional end investors, existing studies on the asset management industry, and statistical analysis. This other evidence is covered in Chapter 8.

Background

8.   Institutional investors are entities that have pooled money in order to invest in assets. We define institutional investors to include organisations such as pension funds, banks, insurance firms, and endowments. The largest of these groups is pension funds. These groups access asset management services either directly or indirectly through intermediaries such as investment consultants.

9.   Investment consultants are important intermediaries in institutional asset management. Many pension funds, foundations, university and other endowments, engage these consultants to provide investment-related professional services.

10. Some investor groups are required by law to obtain specific investment advice from experts. For example, prior to preparing or revising a statement of investment principles, the trustees of a UK trust scheme must 'obtain and consider the written advice of a person who is reasonably believed by the trustees to be qualified by his ability in and practical experience of financial matters and to have the appropriate knowledge and experience of the management of the investments of such schemes'.[5] This legally required advice is typically obtained from investment consultants paid to support the decision making of trustees.

11. Based on responses by asset managers to our questionnaires, and from meetings with asset managers, investment consultants are often seen as gatekeepers to the supply of asset management services to institutional end investors.

12. Investment consultants provide a range of services to institutional investors which include asset/liability modelling, supplying benchmarking data, advising pension funds on their asset allocation strategy, asset manager ratings and recommendations, investment performance monitoring, and providing delegated investment (often called fiduciary management) services to investors.

13. In this annex we are interested in the factors that drive institutional net flows between investment products. We consider that investment consultants' advice on (i) strategic asset allocation; and (ii) ratings and recommendations to investors on which products to select has the potential to drive flows between asset managers.[6]

---

[4] Net flows are inflows less outflows of assets into investment products. Performance is therefore not reflected in this measure.

[5] The Occupational Pension Schemes (Investment) Regulations 2005, Statement of Investment Principles, Regulation 2(2a)).

[6] Under a delegated service investment consultants would select managers themselves, instead of providing recommendations to trustees on which managers to select.

14.   First, the beliefs of investment consultants regarding optimal asset allocation could affect asset flows between asset managers. For example, changes in an investment consultant's view on strategic asset allocation could lead to clients moving money from products investing in certain asset classes and/or geographies into different products. To the extent some asset managers specialise in particular investment styles, this could also lead to assets moving between asset managers.

15.   Second, the framework and techniques used by investment consultants to research and rate investment products will determine whether an asset manager's products will be recommended to institutional investors, or selected by investment consultants as part of a delegated (fiduciary management) service. For example, a downgrade in a rating assigned to a fund manager's products could lead to existing clients of the investment consultant moving their funds to a different fund manager.

16.   Academic literature already exists which examines the empirical relationship between fund flows and various measures of performance. However, there is limited research in the UK on the effect of consultants' ratings and recommendations on institutional fund flows.

17.   Based on 31 meetings with institutional investors we have found that many institutional investors believe in the value offered by active managers, in particular, for investment styles other than 'standard' UK and US equities. We note that index tracker products may not exist in certain investment categories. For example, we understand it is difficult to find a passive manager of a loan or infrastructure portfolio. Whether this belief in active products is encouraged or not by investment consultants, consultants potentially play an important role in guiding institutional investors' search for 'winners' (i.e. those fund managers are most likely to deliver excess returns in the future) through their manager ratings and recommendations services.

18.   In the UK there are no performance reporting requirements for investment consultants. In addition, investment consultants do not disclose their past ratings publicly in a way that would allow investors and analysts to calculate the relative ability of consultants to predict 'winners'. A few investment consultants produce their own calculations of the 'value added' of their manager ratings. These value added calculations compare the performance of the highest rated managers rated by the consultancy against a benchmark. However, not all consultants produce these value added results, the methodology used differs by consultant, and the underlying data is not made available for scrutiny. Therefore, institutional investors do not have access to standardised performance data on investment consultants' ability to (i) allocate money between asset classes effectively over time; or (ii) pick 'winning' fund managers within a given asset class or strategy. Institutional investors also have limited non-standardised information on the value added of consultants' manager ratings.

19.   Given the potential importance of investment consultants' manager ratings in determining which active fund managers are allocated institutional money, we have sought to understand the following:

   •   whether manager ratings by investment consultants actually drive net flows; and

   •   if manager ratings drive net flows, whether they add value for institutional investors (see separate annex); and

20. Following the publication of the interim report, we intend to examine whether the importance of ratings has the potential to distort the way in which asset managers compete with each other.

21. In this annex we assess whether manager ratings by investment consultants drive net flows, and whether these recommendations add value.

22. We have not assessed the value added by strategic asset allocation advice obtained from consultants. We note that strategic asset allocation plays a crucial role in determining the overall return of an investment portfolio.

Existing research findings

23. Investment consultants rate and recommend investment products to institutional, rather than retail, investors. The products these consultants rate are therefore aimed at institutional investors.

24. A large literature already exists which focuses on retail funds, and the value of retail ratings (for example Del Guercio and Tkac (2008)[7]). There is also an emerging literature which examines the value of financial advisers in the retail space (for example Gennaioli et al. (2013)[8]) and the merits of using brokerage firms in terms of fund selection (for example Bergstresser et. al. (2009)[9]).

25. We are aware of only two papers that have analysed the effect and added value of investment consultants' manager recommendations of institutional investors (such as pension funds). One of these papers, Jenkinson, Jones, and Martinez (2016)[10], examined US actively managed long-only equity funds, and analysed "the factors that drive consultants' recommendations, what impact these recommendations have on flows, and how well the recommended funds perform". The authors found "that investment consultants' recommendations of funds are driven largely by soft factors, rather than the funds' past performance, and that their recommendations have a very significant effect on fund flows". Jenkinson, Jones, and Martinez found "no evidence that these recommendations add value, suggesting that the search for winners, encouraged and guided by investment consultants, is fruitless".

26. The second paper, Jones and Martinez (2015)[11], explores whether institutional investors follow investment consultants' recommendations because they find them helpful in forming expectations of manager performance or because consultants' recommendations provide a justification for their selection of managers. Using the same data set as Jenkinson, Jones, and Martinez (2016), the authors find that "fund flows…are driven significantly by…investment consultants' recommendations, far beyond the effect that these have on expectations" and that "[institutional investors follow] consultants' recommendations because they feel that, as a rationale for selecting asset managers, these indicators are more defensible to their superiors, stakeholders and, possibly, the courts than their own expectations are."

---

[7] Del Guercio, Diane, and Paula Tkac, 2002, The determinants of the flow of funds of managed portfolios: Mutual funds versus pension funds, Journal of Financial and Quantitative Analysis 37, 523–557.

[8] Gennaioli, Nicola, Andrei Shleifer and Robert Vishny, 2013, Money Doctors. NBER Working Paper No. 18174.

[9] Bergstresser, Daniel, John M. R. Chalmers, and Peter Tufano, 2009, Assessing the Costs and Benefits of Brokers in the Mutual Fund Industry, Review of Financial Studies 22, 4129 – 4156.

[10] Tim Jenkinson, Howard Jones and Jose Vicente Martinez, 2016, Picking Winners? Investment Consultants' Recommendations of Fund Managers , The Journal of Finance, 71 (5) pp. 2333-2370.

[11] Howard Jones and Jose Vicente Martinez, 2016, Institutional Investor Expectations, Manager Performance, and Fund Flows, The Journal of Financial and Quantitative Analysis (Forthcoming).

27. We have applied the same analytical framework of Jenkinson, Jones, and Martinez (2016) to assess whether UK investment consultants' manager ratings and recommendations drive net flows, but our data set is far broader in terms of both geography and asset class.

Role of investment consultants in driving fund flows

28. Institutional investors use investment consultants' recommendations of fund managers both when they first hire managers in an asset class, and when they replace managers within an asset class. When institutional investors are hiring a manager, investment consultants typically produce a shortlist of the highest rated fund managers. Under an advisory relationship the investor makes the decision on which fund manager(s) to select.

29. Investment consultants' ratings may also be used when investors have delegated some responsibility to investment consultants as part of a fiduciary arrangement. Investment consultants informed us that when selecting managers as part of a fiduciary service they will typically only choose from a list of managers to which they have assigned a high rating.

30. Institutional investors employ investment consultants for a variety of reasons, with overall demand for consultants' services exceeding the minimum legal requirement for UK trustees (see above).

31. By hiring consultants, the main activities of institutional investors are reduced to the hiring, monitoring and firing of the hired investment consultants and fund managers employed by the plan. Regardless of whether investors hire consultants, they are ultimately responsible for deciding on strategic asset allocation whether or not they have taken advice.

32. The amount of advice purchased by investors will depend on the sophistication of the investor, and the chosen complexity of the investment strategy. This can be seen by comparing the amount of advice required for following an equity index-tracker strategy with a strategy involving active managers. In the former case little time and judgement is required to select the best tracker product for a given investment category. However, in the latter case investment consultants may be asked by the investor to produce a shortlist of recommended managers. This shortlist would be drawn up by the consultant from a larger list of highly rated managers. Consultants create ratings of asset managers by performing detailed due diligence exercises.[12]

33. Investment consultants employ teams of analysts to carry out these due diligence exercises. The outcome of due diligence exercises is that investment products offered by asset managers are assigned ratings according to their expected future performance. Investment consultants use different ratings systems, with some using an 'Approved' or 'Buy' list, and others a graded system such as 1-5 or A/B/C ratings.[13]

34. In contrast to ratings for retail funds such as the Morningstar Rating, investment consultants charge investors for their manager recommendation and rating service.

---

[12] Due diligence exercises typically comprise both a qualitative and quantitative assessment. Qualitative factors often include idea generation, the ability to implement these ideas, quality of staff, incentive arrangements, and staff turnover. Quantitative assessments are also undertaken which examine portfolio construction and performance.

[13] In order to combine ratings received from different investment consultants based on different scales, we requested that each consultant in our sample provide information only on those products which they deemed to have been 'highly rated' in the past. Highly rated products are those which a consultant would have considered recommending to clients for investment.

Access to these ratings, and/or a shortlist of recommended managers, is therefore restricted to those that pay for the service.

Data

35.   We have used two sources of data for our analysis of the drivers of net flows.

36.   The first source of data is a monthly history over ten years of those investment products that were highly rated by each investment consultancy in our sample of firms. In this context an investment product is defined as an investment style/category in which a fund manager offers asset management services. A product would be offered to investors in different vehicles, such as in a pooled fund, or in a segregated account.

37.   Information on the historical ratings of investment consultants was provided to the FCA as part of an information request sent to six consulting firms.[14] This source allows us to identify, for each consultancy, when an investment product was first rated highly, the period over which it remained highly rated, and (if applicable) the period when the product was downgraded to a rating that was not highly rated. A highly rated product here equates to a Buy/Approved rating. The consultancies in our sample have provided us with data across a range of asset classes, and for products covering multiple geographies.

38.   The second source of data is eVestment, a third party data provider for the institutional fund management industry. Data are voluntarily submitted by institutional asset managers to this database. eVestment is a leading data repository for the institutional asset management industry, containing data on more than $37 trillion in institutional investment funds that are managed by traditional and alternative external investment managers. The data provides one of the most complete pictures available of traditional and alternative institutional investor and asset management trends. There are several smaller institutional investment vehicles on which eVestment currently does not collect data and these would include real estate and infrastructure investments.[15] eVestment data also does not include any funds that may be self-managed by institutional investors.

39.   We have sourced data for the same ten year period from eVestment on the following variables:
   •   returns of institutional investment products;
   •   manager-specified benchmarks of these products;
   •   assets under management for these products;
   •   net flows of assets for these products; and
   •   charges for 2015 (eVestment does not hold historical charges data).

40.   We have obtained eVestment data on returns and assets under management at a monthly and quarterly level, and data on net flows at a quarterly level.

41.   The returns data are composite returns; individual returns earned by each client invested in that product may deviate from the composite returns, but we have been informed that deviations are typically small.

---

[14] We estimate that these firms collectively have a share ranging between 66-87 per cent (by revenue) of UK pension funds (see Chapter 8).

[15] These illiquid asset classes have become important components of pension and insurance portfolios in recent years.

42. Composite returns are net of trading costs, but gross of investment management fees. Data on investment products (which includes pooled funds as well as segregated accounts) are self-reported to eVestment by fund managers, and data on products which are closed to investors or discontinued are retained in the database by eVestment. The widespread use of the database, and scrutiny by its users, suggests the data are accurate. We have been informed by eVestment that the database is free from survivorship bias (see later in this Annex).

43. In order to assess whether consultant ratings drive fund flows it was necessary to match the products rated by consultants with the equivalent products in the eVestment database. This allowed us to identify which of the products in the eVestment database were highly rated, for each investment consultant, over time.

44. We include in our analysis all institutional products in eVestment in any asset category as long as consultants issue recommendations in that category; this corresponds to approximately 230 out of the 250 eVestment categories.

45. In contrast to retail mutual funds that are rated by firms such as Morningstar and FE Trustnet, the products that are rated by investment consultants do not have unique and widely-used identifying codes such as an ISIN or Sedol. Therefore, matching the data provided by consultants into the eVestment database requires matching on the name of the product. An examination of these product names showed a large amount of variability across consultants in their naming conventions, to such an extent that matching would need to have been manual. We therefore asked investment consultants to identify the product in the eVestment database that each highly rated product corresponded to. We took this step to ensure that the data on highly rated products was accurately matched into the eVestment database.

46. We have provided a summary for Q4 2015 of the number of highly rated products in the eVestment database in the table below. Since there were six consulting firms in our sample, for a given point in time the maximum number of recommendations for an investment product is six. The table shows that where a product was highly rated at a point in time, it was typically only rated highly by one consultant.

Table 1: Number of highly rated products in eVestment in Q4 2015

Number of ratings by consulting firms	Frequency	Percentage
0	27,480	92.5%
1	1,887	6.4%
2	250	0.8%
3	60	0.2%
4	15	0.1%
5	3	0.0%
6	2	0.0%
Total	29,697	100%

Source: Recommendations data sourced from investment consultant firms in our sample.

Methodology

47. Henceforth we use the term 'recommendation' to describe a product that has been highly rated by an investment consultant.

48. In this annex we explore the impact of investment consultants' recommendations (and changes in those recommendations) on flows into and out of investment products. We examine this by taking a standard flow-performance regression (see,

for instance, Ippolito (1992)[16], Chevalier and Ellison (1997)[17], and Sirri and Tufano (1998)[18]) and include additional variables that capture changes in ratings by consultants.

49. We therefore examine the relationship between asset flows at the investment product level on the one hand, and consultants' recommendations on the other, controlling for the past performance of the product and a set of other attributes of the product which could affect flows and recommendations.

50. We define net flows in two ways. First, we define them as the change in the USD amount of assets flowing into and out of a product, minus appreciation:

$$Flow_{i,t} = TNA_{i,t} - TNA_{i,t-1} * (1 + r_{i,t})$$

In the expression above $TNA_{i,t}$ is the total net assets for product i at time period t, and $r_{i,t}$ is the return on product i between time periods t-1 and t. Therefore, this measure of net flows reflects the change in size of an investment product in excess of the amount of growth that would have occurred had no new assets flowed in, but dividends had been reinvested.

51. Second, we measure the percentage flow relative to the total net assets invested in the product three years previously:

$$\%Flow_{i,t} = {\$Flow_{i,t}}\Big/{TNA_{i,t-3.}}$$

52. In the expression above we have divided by *TNA* at t-3 owing to the persistence of the recommendation effect (see Results section below).

53. We estimate the response of flows to consultants' recommendations with yearly data using the following regression:

$$Flow_{i,t} = \alpha_t + \beta1 f(ConsultantRec_{i,t-1\ to\ t-5}) + \beta2 PastPerf_{i,t-1} + \gamma Controls_{i,t-1} + \varepsilon_{i,t}$$

54. The variables in the regression above are as follows.

- $Flow_{i,t}$ is the USD or percentage net flow of product i between period t-1 and period t. A single currency was used to make comparison clear, and USD was chosen because this was the most widespread currency in which products were denominated in eVestment.

- $f(ConsultantRec_{i,t-1\ to\ t-5})$ is a function (or a number of alternative functions) of the number of recommendations product *i* received between time period t-1 and t-5. The functions we use include the number of recommendations received by consultants in our sample at the end of the previous year (t-1), the number of additions and deletions from the consultants' recommendations lists in any of the five previous years (captured by 10 different dummy variables), or the net number of additions and deletions to consultants' recommendations lists over the previous five years (captured by 5 different dummy variables).

- In particular, we have examined the following variables. Recommendations captures the level of the number of recommendations received by a product from consultants. Chg in Rec captures the change in the number of recommendations received by a product from consultants. Add to Rec captures additions to the

---

[16] Ippolito, R., 1992, Consumer reaction to measures of poor quality, Journal of Law and Economics 35, 45–70.

[17] Chevalier, Judith, and Glenn Ellison, 1997, Risk taking by mutual funds as a response to incentives, Journal of Political Economy 105, 1167–1200.

[18] Sirri, Erik, and Peter Tufano, 1998, Costly search and mutual fund flows, Journal of Finance 53, 1589–1622.

number of recommendations received by a product from consultants, while Rem from Rec captures reductions to the number of recommendations received by a product from consultants.

- The consultants' recommendation variable represents the number of consultants at a point in time that have highly rated a given investment product. There are six consultants in our sample for the analysis of flows, and therefore the maximum number of recommendations that an investment product can receive at a point in time is six. Investment consultants use different ratings systems, with some using an 'Approved' or 'Buy' list, and others a graded system such as 1-5 or A/B/C ratings. In order to combine ratings received from different investment consultants based on different scales, we requested that each consultant in our sample provide information only on those products which they deemed to have been 'highly rated' in the past.[19] Highly rated products are those which a consultant would have considered recommending to clients for investment.

- The control variables are as follows: the performance percentile rank compared to other funds in the same eVestment classification between t-1 and t; the excess performance (i.e. excess over the eVestment benchmark for that product) percentile rank compared to other funds in the same eVestment classification between t-1 and t; fees at the end of the sample; return volatility between t-3 and t-1; the total net assets at t-1 (for the relative flow regressions we use the log of this number instead); and a full set of time (year or quarter depending on the model) dummies. For the relative flow regressions we impose the additional restriction that funds/products should have TNA at time t-3 > 10 USD million.

55. We estimate separate regressions using annual and quarterly data.

Results

56. Tables 2 and 3 report the results from estimating the above regressions, using a pooled time-series of cross-sectional data. Each column in this table represents the results from a separate regression. The table presents the magnitude and sign of the coefficients of the variables in each regression.

57. Column 1 of Table 2 shows the impact of investment consultants' recommendations in year t-1 on total net assets in year t. The coefficient associated with Recommendations (t-1) shows the yearly impact of being in one of the recommendation list of one of the consultants in our sample. This impact is an average impact of different consultants and products in different asset classes. Column 4 shows the impact of consultants' recommendations as the percentage change in total net assets between year t-3 and year t.[20]

58. Columns 2 and 5 include a recommendation level variable (as in columns 1 and 4) plus the change in the number of recommendations. Thus the row Chg in Rec (t-1) shows the change in total net assets at time t for one extra recommendation from the consultants in our sample at time t-1. In this case the change leads to a change of USD460m in assets or to an increase of 53%. We also run regressions for the effect of recommendation changes from t-2 to t-5. The coefficients up to and including t-4 are statistically significant and economically important; for example, the effect of an additional recommendation in year t-4 is an increase of USD194m or

---

[19] We intend to perform sensitivities on the rating grades used following the publication of the interim report.

[20] In each regression t-statistics are based on clustered standard errors, which are White heteroskedastic-consistent standard errors corrected for possible correlation across observations of a given investment product (White, 1980; and Rogers, 1993). This method seems sensible given the size of the data panel (see Petersen, 2009).

12% of total net assets in year t. To understand the full impact of a recommendation on flows it is necessary to include the impact of all the lags.

59.   Columns 3 and 6 break down the changes in recommendations into additions to and deletions from the list of recommendations. The signs of the coefficients show that flows (where statistically significant) are in the direction of the recommendation change. In USD terms the additions and deletions have effects which are in a similar order of magnitude, e.g. an increase of USD419m at year t for a single addition to the number of recommendations in year t-1 and a decrease of USD601m for a single deletion from the number of recommendations. However, these amounts correspond to markedly different percentages: an 80% increase in total net assets versus a decrease of 13%, showing that additions to recommendations are made more to small funds than large funds relative to deletions from recommendations.

60.   The lag of up to four years in the effect of recommendation changes on flows could be explained by a delay in the response of asset owners to such changes. It may also reflect the fact that the investment consultants in our sample, while they have a high combined share of the UK investment consulting market, are not the only consultants to provide recommendations of investment products on a global basis. The net flows variable that we have analysed in the regression above represents flows from UK and non-UK investors. Therefore, for product categories in which UK asset owners are relatively small players, the consultants in our sample may represent a minority of the total number of consultants issuing recommendations. If the recommendations of the consultants in our sample are correlated with those of consultants not included (not just contemporaneously but also in lead-lag relationships), our flow analysis may reflect the impact of recommendations and changes which are not in the sample. Therefore, while it remains the case that a positive coefficient for our recommendation variables means that recommendations affect flows, the impact may show up as more long-lived and greater than it actually is. Following the interim report, we will explore this question by comparing the effect of recommendations on flows in fund categories in which our sample of consultants has a high market share (notably UK categories) with the effect in fund categories in which their market share is relatively low.

Table 2: Institutional net flows regression results: annual

Variables	(1)	(2)	(3)	(4)	(5)	(6)
		Net flows			Relative net flows	
Recommendations (t-1)	133.51**	99.08	67.48	0.20***	-0.09*	-0.11*
	(1.98)	(0.66)	(0.49)	(3.50)	(-1.76)	(-1.76)
Chg in Rec (t-1)		460.12***			0.53***	
		(5.22)			(5.10)	
Chg in Rec (t-2)		293.81***			0.22***	
		(4.46)			(2.80)	
Chg in Rec (t-3)		267.74***			0.19***	
		(3.86)			(3.93)	
Chg in Rec (t-4)		194.88**			0.12***	
		(2.41)			(2.84)	
Chg in Rec (t-5)		15.16			0.07	
		(0.17)			(1.60)	
Add to Rec (t-1)			419.08***			0.80***
			(3.69)			(4.52)
Add to Rec (t-2)			373.33***			0.24*
			(3.47)			(1.69)
Add to Rec (t-3)			324.22***			0.14*
			(2.59)			(1.80)
Add to Rec (t-4)			305.94**			0.09
			(2.39)			(1.34)
Add to Rec (t-5)			35.68			0.01
			(0.34)			(0.15)
Rem. from Rec. (t-1)			-601.43***			-0.13**
			(-3.57)			(-1.99)
Rem. from Rec. (t-2)			-242.32***			-0.20***
			(-3.24)			(-4.24)
Rem. from Rec. (t-3)			-238.69***			-0.26***
			(-2.69)			(-5.30)
Rem. from Rec. (t-4)			32.24			-0.18***
			(0.22)			(-3.86)
Rem. from Rec. (t-5)			16.00			-0.25***
			(0.09)			(-4.53)
Perf. Rank - Return (t-1)	238.86***	144.82	148.78	0.58***	0.39	0.38
	(3.95)	(1.54)	(1.58)	(2.92)	(1.25)	(1.25)
Perf. Rank - Exc. Return (t-1)	288.61***	366.55***	363.99***	0.62***	0.80***	0.80***
	(4.92)	(3.89)	(3.89)	(3.14)	(2.64)	(2.65)
Fee T	-2.55***	-3.45*	-3.45*	0.00287***	0.00311**	0.00314**
	(-3.99)	(-1.84)	(-1.84)	(2.75)	(2.50)	(2.53)
Return volatility (t-1)	-300.50	-1,542.96***	-1,556.29***	-2.12***	-2.22***	-2.26***
	(-0.77)	(-3.02)	(-3.05)	(-3.09)	(-2.83)	(-2.87)
Total Net Assets (t-4)	-0.05***	-0.09**	-0.09**	-0.09***	-0.05***	-0.05***
	(-3.66)	(-2.36)	(-2.37)	(-7.52)	(-3.41)	(-3.41)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	38,226	16,869	16,869	26,214	13,576	13,576
R-squared	0.08	0.22	0.22	0.01	0.02	0.02

Source: eVestment data on net flows, returns, AUM, and fees. Recommendations data sourced from investment consultant firms in our sample. Robust t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1. Fee variable is expressed in basis points.

Table 3: Institutional net flows regression results: quarterly

Variables	(1)	(2)	(3)	(4)	(5)	(6)
		Net flows			Relative net flows	
Recommendations (t-1)	61.47***	20.12	31.88	0.09***	0.04**	0.01
	(3.04)	(0.79)	(1.07)	(4.43)	(2.30)	(0.67)
Chg in Rec (t-1)		185.34***			0.19***	
		(5.51)			(3.51)	
Chg in Rec (t-2)		150.98***			0.26**	
		(5.70)			(2.48)	
Chg in Rec (t-3)		159.05***			0.16***	
		(2.90)			(3.69)	
Chg in Rec (t-4)		101.19***			0.19***	
		(4.08)			(2.75)	
Chg in Rec (t-5)		93.79***			0.18***	
		(4.46)			(2.89)	
Chg in Rec (t-6)		66.25***			0.08**	
		(3.42)			(2.29)	
Chg in Rec (t-7)		87.84***			0.16**	
		(4.25)			(2.30)	
Chg in Rec (t-8)		93.84***			0.13*	
		(4.60)			(1.91)	
Chg in Rec (t-9)		57.80***			0.03	
		(3.12)			(0.37)	
Chg in Rec (t-10)		48.89***			0.02	
		(2.66)			(0.26)	
Chg in Rec (t-11)		75.26***			0.08***	
		(3.22)			(2.94)	
Chg in Rec (t-12)		85.89***			0.04**	
		(2.98)			(2.31)	
Add to Rec (t-1)			159.35***			0.30***
			(3.28)			(3.13)
Add to Rec (t-2)			113.89***			0.43**
			(3.24)			(2.46)
Add to Rec (t-3)			79.89***			0.26***
			(2.66)			(3.43)
Add to Rec (t-4)			44.15			0.33***
			(1.49)			(2.79)
Add to Rec (t-5)			50.85*			0.27***
			(1.80)			(2.68)
Add to Rec (t-6)			33.45			0.13**
			(1.25)			(2.33)
Add to Rec (t-7)			68.18***			0.24**
			(2.68)			(2.06)
Add to Rec (t-8)			81.80***			0.18*
			(3.48)			(1.75)
Add to Rec (t-9)			63.64***			0.11
			(2.86)			(1.29)
Add to Rec (t-10)			31.50			0.09**
			(1.43)			(2.04)
Add to Rec (t-11)			74.19**			0.09**
			(2.49)			(2.36)
Add to Rec (t-12)			84.42**			0.04*
			(2.18)			(1.65)
Rem. from Rec. (t-1)			-203.19***			-0.11***
			(-4.97)			(-3.82)
Rem. from Rec. (t-2)			-188.30***			-0.06
			(-4.55)			(-1.41)
Rem. from Rec. (t-3)			-265.55*			-0.07***
			(-1.70)			(-4.00)
Rem. from Rec. (t-4)			-176.69***			-0.03

Variables	(1)	(2)	(3)	(4)	(5)	(6)
			(-2.87)			(-1.15)
Rem. from Rec. (t-5)			-152.90***			-0.08*
			(-3.83)			(-1.88)
Rem. from Rec. (t-6)			-110.88***			-0.04**
			(-3.10)			(-1.97)
Rem. from Rec. (t-7)			-110.95***			-0.07***
			(-3.37)			(-3.62)
Rem. from Rec. (t-8)			-103.92***			-0.10***
			(-3.15)			(-2.71)
Rem. from Rec. (t-9)			-33.59			0.09
			(-1.28)			(0.56)
Rem. from Rec. (t-10)			-78.22***			0.11
			(-2.59)			(0.62)
Rem. from Rec. (t-11)			-66.97*			-0.07***
			(-1.93)			(-4.31)
Rem. from Rec. (t-12)			-80.66**			-0.07***
			(-2.04)			(-2.76)
Perf. Rank - Return (t-1)	81.81***	61.97***	62.09***	0.12	0.11	0.11
	(5.23)	(3.50)	(3.50)	(1.59)	(1.26)	(1.28)
Perf. Rank - Exc. Return (t-1)	70.47***	84.01***	82.95***	0.20***	0.21***	0.21***
	(4.41)	(4.67)	(4.68)	(2.71)	(2.66)	(2.68)
Fee T	-0.67***	-0.66***	-0.65***	0.00**	0.00**	0.00**
	(-4.45)	(-3.30)	(-3.30)	(2.23)	(2.54)	(2.40)
Return volatility (t-1)	-141.08	-209.63*	-206.66	-0.58***	-0.66***	-0.67***
	(-1.29)	(-1.65)	(-1.63)	(-3.07)	(-3.36)	(-3.40)
Total Net Assets (t-4)	-0.02***	-0.02***	-0.02***	-0.03***	-0.03***	-0.03***
	(-4.15)	(-3.13)	(-3.13)	(-8.19)	(-7.31)	(-7.44)
Quarter dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	157,887	111,191	111,191	95,815	83,625	83,625
R-squared	0.05	0.06	0.06	0.01	0.01	0.01

Source: eVestment data on net flows, returns, AUM, and fees. Recommendations data sourced from investment consultant firms in our sample. Robust t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1. Fee variable is expressed in basis points.

62. Table 3 shows the same regressions as Table 2 but using quarterly, rather than annual, data. The results are qualitatively similar to the annual results. The quarterly analysis shows that flows are quick to respond to changes in recommendations; for example, an additional recommendation from the consultants in our sample at time t-1 (i.e. one quarter before) leads to USD185m in additional assets or to an increase of 19%.

Drivers of institutional net flows - conclusions

63. We find that changes in investment consultants' recommendations in our sample have a large and statistically significant effect on net flows into institutional investment products. This finding is consistent with responses to our questionnaires to asset managers, discussions with institutional investors, and consultants' financial data showing the revenues relating to the sale of advisory services to investors.

Institutional outcomes analysis

64. In this annex we compare the performance of recommended products (i.e. those products that have been assigned a high rating by a consultant) with that of non-recommended products. We consider that this is a valid test of whether consultant recommendations add value to end investors. From the perspective of an

institutional investor paying a consultant to provide a shortlist of recommended managers in a given asset class/style, the investor is asking the consultant to pick the expected 'winners' relative to other managers in that asset class/style. We consider it reasonable for that end investor to expect that on average consultants would be able to identify these winners, and that the benefits from the service exceed the fees of the consultants' service.

65.   This annex does not seek to assess whether investment consultants' overall services are adding value to investors, and focuses on one aspect of a consultant's offering. In particular, we have not assessed the value to investors from asset allocation advice provided by consultants.

66.   In addition, we have not assessed the possibility that the due diligence processes of consultants raise the overall quality of institutional asset managers. To the extent this occurs consultants could be adding substantial value to end institutional investors. Furthermore, we would expect this added value to spill over to those retail investors that are invested in investment products offered by fund managers to both retail and institutional investors.

Methodology

67.   We assess the outcome of following investment consultants' recommendations by comparing the performance of the products which they recommend with the performance of non-recommended products and against benchmarks.

68.   We start with a time series analysis of the gross returns of recommended and non-recommended products in excess of manager selected benchmarks (as reported by eVestment). We also present results on a net basis, i.e. after asset manager charges, which arguably represent a more meaningful assessment of performance from the perspective of an institutional investor. eVestment does not retain historical charges information in its database, but does present information on 'current' composite fees. When presenting results net of charges we have used the 'current' fee information and applied it backwards to earlier periods. To the extent that fees in prior years were higher than they were in 2015, our methodology would overstate net performance.

69.   Our net returns do not take into account the impact of the fees of the investment consultants themselves.

70.   We then conduct a similar analysis, but this time comparing the performance of recommended funds with non-recommended funds in the same eVestment category; again we conduct the analysis separately on a gross and net basis. We also break down the recommendations between those issued by larger or smaller investment consultants in our sample, to investigate whether there is any difference in ability to pick 'winners' that is correlated with size.

Results

71.   Table 4 assesses the performance of recommended products based on gross excess returns (top panel) and net excess returns (lower panel).[21]

Table 4: Institutional quarterly performance results: simple comparison

---

[21] The results for recommended products assume that investors invest only in those products that are recommended, and update their portfolios in accordance with changes to those recommendations.

Variables	(1) Not recommended	(2) Recommended	(3) Recommended weighted	(2) less (1)	(3) less (1)
Gross quarterly excess returns over benchmarks					
Constant	0.23***	0.20***	0.19***	-0.03	-0.04
	(3.32)	(2.91)	(2.89)	(-0.84)	(-0.80)
Observations	39	39	39	39	39
Net quarterly excess returns over benchmarks					
Constant	0.06	0.01	0.00	-0.05	-0.06
	(0.85)	(0.12)	(-0.02)	(-1.08)	(-1.11)
Observations	39	39	39	39	39

Source: eVestment data on net flows, returns, AUM, and fees. Recommendations data sourced from investment consultant firms in our sample. t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1 For recommended products we take a simple average and also a weighted average (giving more weight to products receiving more recommendations). The number of observations reflects the number of time periods (quarters) in our analysis. Returns expressed in percentage points.

72. Column 1 of Table 4 shows the average excess quarterly return in terms of quarterly percentage points of all non-recommended products in the sample over their respective benchmarks and column 2 shows a simple average of the excess returns over benchmark of recommended products. For example, a quarterly figure of 0.2 in the table equates to an excess return of approximately 80 basis points on an annualized basis. Column 3 shows a weighted average of the performance of recommended products, in which each product is weighted by the number of recommendations received.[22]

73. Both recommended and non-recommended products outperform their benchmark by between 80 and 100 basis points per annum (we multiply the quarterly figures by four), and in both cases the results are statistically significant. However, as we see in columns 4 and 5, there is no significant difference between the performance of recommended and non-recommended products.

74. Turning to the net-of-fees analysis in the lower panel, the difference between recommended and non-recommended products remains insignificant. We also find that the outperformance by both groups on a gross basis disappears on a net basis, and the net-of-fees excess returns are statistically indistinguishable from zero.

75. The outperformance of both recommended and non-recommended products on a gross basis is consistent with the findings of other papers (e.g. Jenkinson, Jones, and Martinez (2016)). As well as the possibility that institutional products in general outperform benchmarks on a gross basis, we set out in the Conclusion section below a number of other explanations for this result which we will explore following the interim report.

[22] We adopt a simple comparison in this table in which we do not condition on recommended and non-recommended products being in the same investment category. We perform a matched comparison in Table 5.

76.   Nonetheless, according to our findings, any gross outperformance is eliminated by asset manager charges, so that the average effect of investing in recommended or non-recommended products is a performance with little or no significant excess return over benchmark. These net returns do not reflect advisor fees. 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).[23]

77.   Table 5 presents the results of an analysis in which, for each recommended product and quarter, we compute the average return (or excess return over benchmark) of all non-recommended products in the same eVestment category.[24] We then calculate a time series of the difference in returns (or excess returns over benchmarks) between recommended products and all non-recommended products in the same eVestment category, and report the average of this time series together with t-stats based on Newey-West standard errors. The top panel of Table 5 shows the analysis on a gross basis, and the lower panel on a net-of fees basis.

Table 5: Institutional quarterly performance results: matched comparison

Variables	(1) Return difference	(2) Excess return difference	(3) Return difference weighted	(4) Excess return difference weighted
Gross quarterly return differences (to products in the same category)				
Constant	-0.07**	-0.06*	-0.07**	-0.07*
	(-2.05)	(-1.96)	(-2.02)	(-1.96)
Observations	39	39	39	39
Net quarterly return differences (to products in the same category)				
Constant	-0.10**	-0.08*	-0.11**	-0.09*
	(-2.36)	(-1.73)	(-2.26)	(-1.73)
Observations	39	39	39	39

Source: eVestment data on net flows, returns, AUM, and fees. Recommendations data sourced from investment consultant firms in our sample. t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1 For recommended products we take a simple average and also a weighted average (giving more weight to products receiving more recommendations). The number of observations reflects the number of time periods (quarters) in our analysis. Returns expressed in percentage points.

78.   Column 1 of Table 5 shows the difference in returns between recommended and non-recommended products, while column 2 shows the difference in excess returns in the performance of these categories (the result of -0.06 per quarter in column 2 can be compared with the relative performance of -0.03 in column 4 of Table 4; the divergence is explained by the fact that, in Table 5, recommended products are being compared only with other products *in the same* eVestment category. Columns 3 and 4 of Table 5 show the same analysis as columns 1 and 2, respectively, except

---

[23] To compare these annual advisor fees with Table 4 the returns in Table 4 should be annualized and converted into basis points by multiplying them by 400.

[24] There are approximately 250 eVestment categories in the database. Categories include, for example, "eVestment Europe ex-UK All Cap Core Eq", "eVestment US Enhanced Mid Cap Equity", and "eVestment Global Tactical Asset Alloca".

that in columns 3 and 4 we weight the recommended products by the number of times they were recommended.

79.   These findings confirm those of Table 4 that recommended products do not outperform non-recommended products. However, in this analysis the underperformance of recommended products becomes statistically significant (see columns 1 and 3).

80.   In the lower panel of Table 5 we show the same analysis on a net-of-fees basis. With the same levels of statistical significance as in the gross-of-fees analysis, the relative performance of recommended funds becomes slightly worse.

81.   Table 6 shows the same matched analysis as in Table 5, but instead of splitting between gross and net performance splits between the recommendations of larger and smaller investment consultants. There are three consultant firms in each sub-group.

Table 6: Institutional quarterly performance results: matched comparison for large and small investment consultants

Variables	(1) Return difference	(2) Excess return difference	(3) Return difference weighted	(4) Excess return difference weighted
Gross quarterly return differences (to products in the same category) for large investment consultants				
Constant	-0.06*	-0.06*	-0.07*	-0.07*
	(-1.95)	(-1.96)	(-1.94)	(-1.91)
Observations	39	39	39	39
Gross return differences (to products in the same category) for small investment consultants				
Constant	-0.08	0.03	-0.08	0.01
	(-1.12)	(0.39)	(-1.14)	(0.17)
Observations	39	39	39	39

Source: eVestment data on net flows, returns, AUM, and fees. Recommendations data sourced from investment consultant firms in our sample. t-statistics in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$ For recommended products we take a simple average and also a weighted average (giving more weight to products receiving more recommendations). The number of observations reflects the number of time periods (quarters) in our analysis. Returns expressed in percentage points.

82.   The comparison suggests that there is a difference in performance of investment products recommended by small versus large consultants. Recommendations by large consultants do worse (at the 10% level) than non-recommended funds. By contrast, small consultant recommendations do not perform significantly worse than non-recommended products. Following the publication of the interim report we intend to examine these apparent differences further, by examining the performance of individual consultants.

Institutional outcomes analysis - conclusions

83.   Our analysis of the performance of investment products recommended by investment consultants shows that, across all product categories taken together, they do not perform better than non-recommended products. In further work which we will carry out after the interim report we will explore this finding by breaking down the sample in various ways, notably by product category.

84.   However, we found that both recommended and not-recommended products outperform their benchmarks on a gross basis by between 80 and 100 basis points on average on an annualized basis. Nonetheless, according to our findings, any gross outperformance is eliminated by asset manager charges, so that the average effect of investing in recommended or non-recommended products is a net performance with little or no significant excess return over benchmark.

85.   The finding that on a gross basis both recommended and not-recommended products outperform their benchmarks requires further investigation as it suggests that on average institutional products outperformed their manager-specified benchmarks. This could reflect genuine outperformance by institutional products, in which case (given that there is a zero sum game across fund and non-fund investors) other investors must collectively have been underperforming. In order to establish whether this is a genuine finding, we have considered four other possible explanations set out below.

Third party databases could be subject to survivorship bias

86.   Third party databases could in theory be subject to survivorship bias, in that only surviving products are present and therefore returns are overstated compared to actual returns. eVestment has informed us that their database is survivorship bias free, and firms cannot remove data that has been submitted to eVestment; it remains there forever. We have therefore ruled out this potential explanation.

Fund managers potentially cease reporting poor performance data to third party databases

87.   In theory it is possible that fund managers that perform poorly cease reporting returns data, and may cease reporting altogether or only start reporting returns data again when their performance improves. Since third party databases rely on data that is self-reported by fund managers it is in theory possible that managers cease reporting returns data when they perform poorly.

88.   We have been informed by eVestment that it is not possible for a manager to cease reporting performance data and then resume reporting. In this case eVestment requires the manager fill in the missing historical data. We have investigated whether this policy is consistent with the actual eVestment database and found very few instances where managers report information, stop reporting it for a period, and then start again. Out of the 43,098 products we have examined in eVestment's database, this feature occurs for just 124 of them (0.29%). We have therefore ruled out the possibility that institutional fund managers temporarily cease reporting bad performance.

89.   We have also considered whether managers may cease reporting data forever once an institutional product performs poorly. We consider that there are incentives which work against fund managers stopping reporting returns data: investment consultants

may decide not to rate or recommend a product that has missing returns data, and end investors also may not invest in such products. Investment consultants may decide not to rate/recommend a product because we have been informed that several consultants use the eVestment database for their due diligence work. If consultants and investors respond in this fashion then the fund manager's product could experience negative net flows and potentially close. For this reason we consider that a large institutional product would be unlikely to cease reporting poor performance data. However, a small product with little to lose other than the reputation of its manager(s) may be more inclined to cease reporting performance data. If the return was very poor then the product may be very likely to close anyway, so there may be little downside to stopping reporting. The upside from the fund manager's perspective is that their name would not be forever attached to a very poor return, which may allow the manager to have a second life at another product or firm. We recognise that this possibility is speculative and we do not have evidence that supports or rejects this possibility. We have therefore provisionally decided to rule out the possibility that institutional managers cease reporting data forever on poor performing products. We welcome views from third parties on this point.

Manager-specified benchmarks could be gamed by fund managers

90.   In theory the benchmarks which institutional fund managers report to third party databases could be chosen to artificially inflate their performance. If this occurred then one might expect to see that on average institutional asset managers delivered returns greater than the benchmark. However, institutional asset managers may face a greater incentive to ensure that their chosen benchmarks are recognised by investment consultants and potential investors.

91.   Following the publication of the interim report we intend to investigate this possibility further. We are considering two analyses. First, we may re-calculate the average excess returns of institutional asset managers using alternative benchmarks chosen by the FCA, to understand whether we obtain a different result. A significant risk with such an analysis is that the results are driven by a subjective assessment of the 'correct' benchmark. We are therefore considering an alternative analysis: calculating abnormal returns for institutional investors by using academic factor models.

Tax assumptions used in calculating the returns of benchmark indices could overstate excess performance

92.   A further possible explanation for a finding that on average performance exceeds the benchmark is the tax assumption used in calculating the return of benchmark indices. We understand that the returns of certain indices assume withholding tax applies on dividends, when in practice many funds can avoid withholding tax through their choice of domicile. For example, analysis by Morningstar of ETFs tracking the EURO STOXX 50 shows that these ETFs typically achieved around 50 basis points of outperformance because their benchmark assumes withholding tax (i.e. the index was net of tax, not gross of tax). [25] To the extent that the version (and the implications) of the benchmark declared by institutional managers is not transparent to consultants and investors, this could partly explain an average outperformance finding. In addition, this could be distorting investors' asset placement decisions.

---

[25]

http://media.morningstar.com/uk/MEDIA/Research_Paper/Morningstar_Report_Measuring_Tracking_Efficiency_in_ETFs_February_2013.pdf

93. Following the publication of the interim report we intend to investigate further the extent to which the tax assumptions used in calculating the returns of benchmark indices could explain outperformance.

94. If none of the above explanations apply, then we must conclude that institutional products on average perform 'better' (in that they genuinely outperform their benchmarks) than other products in the same market. Given that there is a zero sum game across fund and non-fund investors, collectively other investors must be underperforming.