

Hedge Fund Awards: The Impact on Investors and Managers

Hyung Kyu Choi

Byoung Uk Kang

Hong Kong Polytechnic University

April 2019

Abstract

We investigate the impact of hedge fund awards on hedge fund flows, performance, and risk-taking. Using Google search volume and the SEC's EDGAR log file data, we first confirm that investor attention indeed increases following awards announcements. More importantly, we then show that award winners experience a significant increase in fund flows, but find no evidence that they deliver superior alpha subsequently. Meanwhile, fund managers with a feasible chance of winning the award take on increased risk in the later part of the award evaluation period, suggesting tournament behavior among the top performing managers. These results expand our understanding of the behaviour of presumably sophisticated investors in the hedge fund industry and managerial incentives that arise in response.

1. Introduction

Over the last several decades, the finance literature has accumulated ample knowledge about the hedge fund industry despite limited data availability. One of the key datasets we have relied on for academic research is that provided by data vendors such as EurekaHedge or BarclayHedge. Importantly, many of these data vendors organize annual events for hedge fund awards (HFAs hereafter), which the industry participants appear to have cared about but academic research has so far largely overlooked. Using the HFA events that have never been investigated in the hedge fund literature, our paper examines the behaviour of hedge fund investors and managers surrounding these events.

The HFA events have been instrumental for the data vendors' own business. Data vendors select the winners from their own database. Therefore, data vendors encourage fund managers to provide their fund performance data if they want to be considered as the award winners especially when they achieve the stellar performance. Through the events, the data vendors promote their data sales towards the investors who are their major customers.

We identify more than 40 HFA events in the world and objectively select 10 HFAs which are recognized as the most reputable for our empirical study. We can classify these 10 awards into 2 groups based on their winner selection methodology. In the first group, award winners are selected purely based on past performance with a transparent selection rule. We call this group "1QHFA" (only Quantitative evaluation). In the second group, award winners are selected by external panel judges who themselves are mostly hedge fund investors from reputable investing institutions.¹ The judges evaluate not only the fund past performance but also the manager's

¹ For the panel judges list of our hedge fund award samples, please refer to the appendix Table A1.

quality measures such as investment process, risk management, and even depth of research team. They decide the winners after discussing and voting together. We call this group “2QHFA” (both Quantitative and Qualitative evaluation). Given the evaluation method, 1QHFA simply delivers hard information to investors while 2QHFA also contains soft information.

We examine how these events affect investors and managers, more specifically their impact on hedge fund flows, performance, and risk-taking. First, we confirm that hedge fund investors pay attention to the HFA events and winners, using Google search volume and the SEC’s EDGAR log file data, respectively. We then find that investors react to the award results by allocating more capital into the winner funds. The abnormal increase in fund flows to winner funds on average is 25.1% and 54.9% over the following 12-month and 24-month period respectively. We further show that, subsequent to the award announcement, investors not only “chase” winners but also change their attitude towards the entire family: there is a spillover effect of 6.1 percentage points increase in fund flows into the other funds of the family in the subsequent 9 months.

Second, given the investors exhibit flow reactions to awards, we examine whether there is any implication from awards about future fund performance. However, we find no evidence that winners subsequently deliver superior alpha. Meanwhile, we find 2QHFA winners enjoy much stronger fund flows than 1QHFA winners. Specifically, 2QHFA winners receive 74.7% of cumulative fund flow over the 24-month period, while 1QHFA winners receive 26.0% over the same period (see the above mentioned 54.9% fund flow over 24-month period is based on all awards data including both 1QHFA and 2QHFA). Therefore, we further investigate performance implication separately for 2QHFA winners but still fail to find evidence that 2QHFA has a

predictive power for future fund performance. We find investors allocate abnormal capital even to non-winner nominees who rather deliver negative alpha subsequent to the award events.

Lastly, we posit that the managers have incentives to receive awards if the awards bring in additional capital thus test whether managers take a higher fund risk in order to increase their winning probability and eventually exploit the flow benefit. We find that potential award winners increase the fund's risk in the later part of the award evaluation period. Specifically, winners and nominees which we consider as award contenders in the race increase tracking error volatility relative to other funds by 0.22% points and 0.20% points in second half compared to first half of year respectively.

Our paper contributes to hedge fund literature in several ways. First, we introduce a novel, direct measure of allocators' revealed attention to hedge funds using search traffic associated with filings on the EDGAR system of the Securities and Exchange Commission (SEC) such as Form 13F. Previous literature using searching activity on Bloomberg terminals (Ben-Rephael et al., 2017) or on EDGAR system (Drake, Quinn, and Thornock, 2017; Loughran and McDonald, 2017 among others) investigate institutional attention to specific stocks but, to the best of our knowledge, our paper is the first to use the EDGAR data to measure institutional attention to specific hedge fund managers. Our results show that award winners experience a significant increase in searching activity by investors who access to EDGAR system, which complement the institutional attention literature and provide empirical support to the notion that investor's attention leads to demand for financial information.

Second, our paper contributes to the still-nascent literature that examines the limited attention of hedge fund investors and more broadly that of institutional allocators. Previous literature extensively studies the attention effect on the way retail investors select stocks or

mutual funds² but relatively little is studied about the attention effect on the way institutional investors select funds. Our paper helps to narrow this research gap. The hedge fund industry provides an ideal laboratory for exploring the attention effect on institutional or other sophisticated investors.³ Unlike the retail investors in the mutual fund products, hedge fund investors are primarily full-time institutional investors who have sufficient knowledge and resources to closely monitor and analyse hedge fund performance data. One might, thus, expect that the investment decisions of these professional investors would be relatively immune to attention-grabbing signals. Nonetheless, our findings indicate that the announcement of HFAs generate an increased fund flow. What is surprising to us is that hedge fund investors react to not only 2QHFA (which includes the implicit fund quality assessment by panel judges) but also 1QHFA although essentially 1QHFA is a simple repackage of the past performance. These empirical findings suggest that hedge fund investors are not fully attentive to fund performance data available prior to 1QHFA events, instead learning it as new information after the events. The observed behavior of hedge fund investors is consistent with the evidence in the literature that stock prices or mutual fund flows react to salient news that is already public information.⁴ In that sense, our research joins the literature challenging the view that hedge fund investors are sophisticated, such as the work of Agarwal, Green, and Ren (2018), which finds that hedge fund

² The examples of attention-grabbing events to stocks are (1) extreme returns (Seasholes and Wu, 2007; Huddart et al., 2009; Yuan, 2015), (2) trading volume (Gervais et al., 2001; Hou et al., 2009), (3) advertisement (Grullon et al., 2004; Chemmanur and Yan, 2009; Lou, 2014), (4) media coverage (Barber and Odean, 2008; Engelberg and Parsons, 2011; Hillert et al., 2014; Peress, 2014; Engelberg et al., 2015; Kim and Meschke, 2014). The example of attention-grabbing events to mutual funds are (1) market index (Yuan, 2015), (2) fund return volatility (Clifford et al., 2017), (3) advertisement (Capon et al., 1996; Jain and Wu, 2000; Barber et al., 2005; Gallaher et al., 2008), (4) media coverage (Sirri and Tufano, 1998; Kaniel et al., 2007; Solomon et al., 2014).

³ The primary investors in hedge funds are institutional investors who provide more than 60 percent of the capital invested in hedge funds (Preqin report, March 2018, p. 3). Any hedge fund investor must be an accredited (or qualified) investor as defined by Rule 501 of Regulation D under the Securities Act of 1933.

⁴ For examples of stock prices reaction to salient news, see Huberman and Regev (2001), Tetlock (2011), Gilbert, Kogan, Lochstoer, and Ozyildirim (2012). For examples of mutual fund flows reaction, see Kaniel & Parham (2017).

investors react more to the basic CAPM alpha than other more sophisticated performance measures when selecting fund for investment. Their findings indicate hedge fund investors' behavior is not that different from that of retail investors that is documented by Barber, Huang, and Odean (2016) and Berk and van Binsbergen (2016).⁵ Overall, our findings from investors reaction to 1QHFA suggest that hedge fund investors are subject to attention constraints, salience bias, extrapolation biases and chasing trends similar to retail investors therefore HFA may be a good advertising tool for managers to approach the investors who have limited attention.

Third, we find award winners do not deliver alpha subsequent to award event. This suggest that investor's propensity to buy funds which receive the awards is not justified by the subsequent performance of selected fund. Our findings are consistent with the findings that asset allocators (i.e. plan sponsors such as retirement plans and endowments) hire fund managers after large positive excess returns but this return-chasing behavior does not deliver positive excess returns thereafter (Goyal and Wahal, 2008) and that investors can act quickly using widely available "hard information" that is fairly cheap to obtain but the decision turns out as a relatively low quality (Brown et al, 2016).

Forth, we examine both *a pure attention effect* (from 1QHFA) and *an expert opinion effect* (from 2QHFA) under the same event format (i.e., HFA). Both of these effects have been examined separately in previous studies in mutual fund literature (see Kaniel and Parham, 2017 for 1QHFA and Parwada and Tan, 2017 for 2QHFA) but our award dataset (i.e., 1QHFA and 2QHFA) allows us to test both effects simultaneously and to compare them to each other in

⁵ Another example challenging the view that institutional investors are more sophisticated than retail investors is a disposition effect (investors tend to sell their winning stocks and hold on to their losers) that both individual and professional investors similarly exhibit. See, e.g., Genesove and Mayer (2001), Heath, Huddart, and Lang (1999), and Locke and Mann (2000).

terms of effect size and duration.⁶ Our results show that 2QHFA has a greater impact on the subsequent fund flows than 1QHFA (i.e., As mentioned above, 2QHFA winners receive 74.7% of cumulative fund flow over the 24-month period, higher than 26.0% which 1QHFA winners receive over the same period.) One possible explanation for the stronger effect 2QHFA generate beyond the attention effect is the “external certification hypothesis” that investors would rely on the awards not to gain real advice but to merely defend their investment decision, consistent with established literature that looks at the role of fund advisors for institutional mutual fund products (see Jenkinson, Jones, and Martinez, 2016; Goyal and Wahal, 2008; Jones and Martinez, 2017 among others). This hypothesis is supported by our findings that 2QHFA winners deliver no subsequent alpha, consistent with the work of Jenkinson, et al. (2016) who examine the performance of recommendations from fund consultants and find recommendations result in no pecuniary benefit to the end investor.

Fifth, we also show that (1) small funds which are ex ante less visible and (2) funds who use top-tier prime brokers, enjoy a higher fund flow from being selected as award winners. We also find that even during a financial crisis, investors do still react to the HFA announcement by putting additional capital in the winner fund, but the size (4.67% over 12-month after the event) is significantly less than the average in the sample period (25.09%). This suggests that the HFA effect on flows becomes less during an alert period than normal time. In other words, investors probably become more prudent as the sentiment-driven noise allocators exit from the market during low-sentiment period, consistent with the argument by Yu and Yuan (2011) and

⁶ We admit our analysis has a limitation as we cannot control for the characteristics effect, if any, coming from each award organizer: 3 awards under 1QHFA category are all held by HFI while 7 awards under 2QHFA category are organized by 4 different institutions such as Mizuho, HFR, HFM and Allocator.

Stambaugh, Yu, and Yuan (2012) that the stock market is less rational during high-sentiment periods, due to higher participation by noise traders during such periods.

Lastly, our results also have implications for understanding tournament behavior of hedge fund managers. The evidence in this paper shows that fund managers respond to the HFA incentives by increasing the tracking error volatility of their own funds relative to the peers' performance in an attempt to achieve the best among the top performing funds. This indicates that fund managers may understand that winning the HFA could positively influence their fund flows, which are the most important determinant of managerial incentives (Feng, Sherman, and Kapadia, 2011). The previous literature on tournament behaviour focuses on below-average managers: Underperforming manager increase the risk in the later part of the year in an attempt to improve their relative performance (Brown et al., 2001; Aragon and Nanda, 2012; Kolokolova and Mattes, 2017). Our focus is on the top ranking funds and shed new light on tournament behaviour among them. We first document the risk-shifting tendency in top-performing managers and their risk-shifting is affected by the performance gap against the best-performing manager within their own ranking group. We then show the award contenders indeed increase risk probably to take over the "king"'s position. A closer analysis reveals that within potential winner funds, not all but only those who have marginal performance gap against their nearest competitors increase fund risk. Therefore, our analysis provides empirical support to the growing literature on the fund managers' tournament and risk-taking behaviour reported in Brown, Goetzmann, and Park (2001), Basak, Pavlova, and Shapiro (2007) and Aragon and Nanda (2012). Our results are also consistent with the prediction that significantly outperforming managers are less likely to be fired in the future and are also more likely to increase relative risk (Hu, Kale, Pagani, and Subramanian, 2011).

2. Data and Summary Statistics

Our source for hedge fund data is the Lipper TASS database, which includes a history of monthly hedge fund returns as well as a series of fund characteristics. As of August 2017, TASS contains a total of 18,886 live and graveyard funds. Following Chung and Kang (2016, p 3326), we filter out funds, resulting in a sample of 10,168 unique funds (828,502 fund months and 3,858 unique managers). When Assets under Management (“AUM”) data are used in our regression, we convert the local currency AUM into USD terms using the time-matched historical month-end FX data.

After exerting our best efforts, we identify a total of 43 HFA in the global hedge fund industry. We eliminate 3 awards which are given to the best managers (not the best funds). Out of the remaining 40 awards, we select ten HFA as our award sample. These are the awards that are recognized as the most prominent and reputable awards being held in each region of the globe (i.e., US, Europe and Asia) as confirmed through our interviews with the three major global prime brokers. As an objectivity check, we also examine how many news articles relating to each of the awards were published in the professional Bloomberg terminals since 2010. These ten Awards are all ranked within the top eleven. The award we do not choose out of the most published eleven awards is the “Canadian Hedge Fund Awards.” We do not include it in our sample because it is a single-country award. We hand-collect the award data from public domain sources and directly from award presenting organizations if the data are no more available in their websites. We limit our award data collection to the period between October 2002 and October 2017, based on data availability. October 2002 is the oldest award event date for which

award data are available.⁷ We collect a total of 8,020 award fund-month observations (2,123 winners and 5,897 nominees). We filter out fund-months whose fund name does not exist in TASS, leaving a sample of 3,420 fund-months (844 winners and 2,576 nominees). We also drop fund-month observations that do not exist in TASS, resulting in a sample of 2,371 fund-months (662 winners and 1,709 nominees). All the HFA organizers select candidates for the awards from their own regions based on the actual office location of the fund management companies (not the fund domicile).⁸ They classify the awards primarily on the basis of three categories: geography of the investment targets, strategy and fund size. Our award sample data are explained in detail below.

< Table 1 >

< Table 2 >

In our regression, we winsorize all the variables at 1% level (top 0.5% and bottom 0.5%) to exclude outliers. The table below presents summary statistics that show the average fund characteristics of our sample fund universe and the award winner and nominee before and after the HFA announcement.

< Table 3 >

We use a logit model to find HFA determinants. As expected, 1QHFA has a higher R-squared than 2QHFA because 1QHFA selects the winner purely on the basis of fund performance (which is the raw return and volatility) while 2QHFA considers other soft quality factors which may not be captured by our data.

< Table 4 >

⁷ Table 1 shows in detail the missing periods of historical awards data.

⁸ For example, a fund investing in US equity markets that is run by a fund management company located in Asia should be consider as a potential candidate by an “Asia” HFA organizer, not by a “US” HFA organizer.

3. Models and Results

3.1 Award Effect on Fund Flows

3.1.1 Winner Fund Flows

We examine the effect of HFA on investors by measuring fund flows subsequent to the award event. Following Sirri and Tufano (1998), we measure the fund flows as the percentage net growth in fund assets that is driven by the inflow and outflow of fund i over the observation period after the event month t . We run the regression model having fund flows as a dependent variable and winner as an independent dummy variable, while controlling for performance, volatility, flow, and several other fund characteristics that have been shown to influence fund flows:

$$Fund\ Flow_{i,t:t+k} = \beta_1 Winner_{i,t} + \beta_2 Nominee_{i,t} + \gamma Controls_i + \varepsilon_i. \quad (1)$$

Our results show that both HFA winners and nominees receive a significant additional fund flow after the award event. This suggests that investors pay special attention to the award list and consider the HFA to be a valuable source of information to identify skilful fund managers. Moreover, the p-value of difference in the coefficients on fund flows between winner and nominee strongly rejects the null hypothesis that there is no difference, which further strengthens our conclusion given the nominee is the tightest control group versus winner. The significant fund flow increase starts from the first month subsequent to the event. This suggests that some investors rush to buy the winner fund. Significant fund flow to award winners increases continuously until the 29th month following the event, which implies that investors do not all simply rush to invest after the HFA result is announced, but many take even for years probably to investigate their target fund before making an investment decision. Our findings

therefore provide empirical support for the literature which argues that hedge fund investors do not only face high search costs (Jorion and Schwarz, 2015) but they also take a long time to fully digest the “soft” information they take in (Baquero and Verbeek, 2009; Brown, Gredil, and Kantak, 2016).⁹

< Table 5 >

< Figure 1 >

As stated earlier, we have two distinct HFA winner datasets that are based on different evaluation procedures. This makes it possible for us to test these two HFA effects separately on investors. When we compare the effect of the 1QHFA and 2QHFA as shown in Panel B of Table 5, we find that the 2QHFA effect lasts longer than 1QHFA effect. This suggests the investors take the 2QHFA winners list more seriously than the 1QHFA list because 2QHFA has not only an attention-grabbing *performance visibility effect* (Vessey, 1994) but also has an additional *expert opinion effect*.¹⁰ The longer-lasting fund flow effect may also imply that some investors take more time to find out hidden fund quality information implicitly endorsed by panel judges. We attribute the effect of 1QHFA to the *prominence channel effect* suggested by Kaniel and Parham (2017) while the effect of 2QHFA to the *information channel effect* suggested by Del Guercio and Tkac (2008). Our findings are consistent with the notion that *information channel effect* outweighs *prominence channel effect*. Our findings are consistent with Engelberg (2008) who categorizes earnings news into hard (quantitative) and soft (qualitative) information and

⁹ Baquero and Verbeek (2009) explain the hedge funds’ non-standardized, complex and non-transparent investment strategies compels investors to undertake a lengthy investment decision process including quantitative and qualitative screening and a thorough due diligence process.

¹⁰ The judgment of experts matters in many types of markets. For example, the Parker grade has a significant effect on wine prices as determined by professional wine traders (Ali, Lecocq, and Visser, 2008). Zhen and Zheng (2015) examine the effect of an expert opinion of the food product on consumer demand. The findings reported in Hilger, Rafert, and Villas-Boas (2011) suggest that expert opinion transmits quality information and is not limited to only shelf visibility. Beatty and Smith (1987) conclude that a person who is worried about a purchase is highly likely to seek information from someone they know.

examines how they are related to the post-earnings announcement drift. He finds that the asset price impact of harder-to-process soft information extends to a longer horizon compared to that of quantitative information.

Still another possible explanation for the stronger effect of 2QHFA on fund flows comes from the “*external certification*” hypothesis. Hedge fund investors have become increasingly institutionalized¹¹, especially since 2010 however many investors do not have fund size large enough to absorb the high cost of operational due diligence (Brown, Fraser, and Liang, 2008) so allocators might take the 2QHFA as the kind of external certification to justify their investment decisions. According to anecdotes we heard from our own experience in the industry, a partial explanation for why pension funds hire consultants who can advise them on hedge fund selection may not be a straightforward desire for real advice but a need to have an excuse that can be used in an audit in case there is an unexpected investment failure such as the Madoff investment scandal in 2008. This is in line with the previous literature that study (1) the role of investment consultants for institutional investors in mutual fund products (Jones and Martinez, 2017; Jenkinson, Jones, and Martinez, 2016; Goyal and Wahal, 2008)¹² and (2) the tendency of career-concerned mutual fund managers to follow analyst recommendation (Brown, Wei, and Wermers, 2014). Literature conclude that plan sponsors follow the recommendations of investment consultants more than their own expectations regarding the future performance of fund managers because investment consultants may provide a shield that plan sponsors can use to defend their

¹¹ Institutional Investor. (2010). The Institutionalization of the Hedge Fund Industry. Retrieved from <https://www.institutionalinvestor.com/article/b150qcns9fwj1m/the-institutionalization-of-the-hedge-fund-industry>

¹² An article published in the Wall Street Journal reports, on the basis of interviews with Morningstar employees, that some financial advisors use Morningstar ratings as a crutch: www.wsj.com/articles/the-morningstar-mirage-1508946687

decisions. More institutionalization among hedge fund investors might bring a greater demand for the kind of external certification that can be found in the 2QHFA winner list.

For some or all of these reasons, the fund flow effect of 2QHFA is exceptionally strong.

3.1.2 Spillover Effect

The spillover effects of star funds on their fund family are well documented in mutual fund research (Nanda, Wang and Zheng, 2004; Kaniel and Parham, 2017; Parwada and Tan, 2017), but such research is limited in relation to the hedge fund industry. In relation to hedge funds, Kolokolova (2011) documents the existence of a positive spillover effect in hedge fund families on the basis of evidence showing that capital inflow into newly launched funds increases in accordance with the past performance of other family-member funds. Our paper examines the spillover effect when one fund has won the HFA on the other funds that already exist at the hedge fund family level. For the research model, we run the regression having fund flows as a dependent variable and winner family as an independent dummy variable.¹³ We explicitly exclude the winner fund from winner family variable to examine a pure spillover effect on family members. We find that other funds in the same winner fund family also receives a larger fund flow. When we analyse this spillover effect from our combined HFA winner data (which include both 1QHFA and 2QHFA winners), we find a positive fund flow effect amounting to a 6.3% (t-stat 2.06) boost in the 8-month period following the award event, but after that the additional effect is no more statistically significant. When we analyse the effect from 2QHFA separately, however, we find a statistically significant fund flow into the winner family funds in

¹³ Winner family has the same investment style as the HFA winner fund.

the short as well as long horizon.¹⁴ 2QHFA include the implicit fund quality information such as investment process. Investors may believe that such fund characteristics are more applicable to other funds in the same fund family than the simple past performance information embedded in 1QHFA. This interpretation is more consistent with the *information channel* effect suggested by Del Guorcio and Tkac (2008) than with the *prominence channel* effect suggested by Kaniel and Parham (2017).

< Table 6 >

< Figure 2 >

3.1.3 Determinants of Increased Fund Flows

We examine the various determinants of increased fund flow from HFA, among which we focused on (1) fund size (2) prime broker and (3) crisis period. We interact the *Winner* dummy variable with each interaction term and find the incremental flow benefit from the award event is stronger to the winner fund that has a smaller fund size and/or that has a business relationship with a top-ranking prime broker.

3.1.3.1 Less Visible Funds prior to the Event

We examine whether the information cost documented by Huang, Wei, and Yan (2007) is higher for small funds, where search costs are more pronounced. Consistent with this notion, we find that the impact of awards on inflows is significantly stronger among smaller funds. The negative coefficient of the interaction variable between *Winner* and *Fund Size* as shown in Column (1) of Table 7 suggests that the impact of receiving an HFA on fund flows is stronger in the case of smaller funds than it is for larger funds. The untabulated univariate analysis of winner

¹⁴ The parameter estimate for spillover effect on fund flow is significantly positive at the seventh month ($\beta = 5.83\%$, $t=1.83$) as well as at 36th month ($\beta = 77.37\%$, $t=2.04$).

fund size and subsequent fund flow show that winners with smaller fund size receive higher fund flows even in dollar terms than those with larger fund size. This is probably because smaller funds do not have a high enough management fee to allocate resources for marketing expenditures, so they are relatively unknown to the investors (see Agarwal et al., 2013, p. 1271).

3.1.3.2 Influence by Prime Brokers

As shown in Figure 3, the prime broker (PB hereafter) capital introduction team is one of the important channels to disseminate news about awards to potential investors.¹⁵ For the interaction term *PB Tier*, we allocate one of the three tier values (1, 2 or 3) to each prime broker that fund *i* use.¹⁶ In our fund sample, we have the prime broker information not as time-series but snapshot only as of August 2017 (or the last reported fund-month) for each fund *i* therefore we apply the prime broker data only to the latest 36 months fund-months backward from the last reported fund-month, while dropping the fund-month data earlier than 36 months from the last fund-month along with the assumption that fund did not replace its prime broker during the 36 month observation period.¹⁷ Our result provides strong evidence that the top ten PBs are more effective in bringing fund flows to their client winner funds than the below top ten PBs (the base) as shown in column (2) of Table 7. If we break down PBs further to three-tier groups, the results reported in column (3) of Table 7 show that compared with the third-tier PBs (the base), the parameter estimates for the first-tier PBs ($\beta = 72.53\%$, $t=2.25$) and the second-tier PBs ($\beta = 39.55\%$, $t=2.40$) are significantly positive. In addition, the parameter estimates of first-tier is

¹⁵ See Brown et al. (2016) among others for the role of prime brokers in capital introduction. Prime brokers are also among the important financial sponsors of hedge fund award events. They often attend the events and purchase table seats for their client hedge fund managers.

¹⁶ We sort PBs in descending order by the 2017 prime brokers market share data to find their rank and classify PBs in the top three ranks as Tier 1, those in ranks 4-10 as Tier 2, and those below the tenth rank as Tier 3. The Prime Broker market share data source is Hedge Fund Alert which compiles the SEC Form ADV filings by hedge fund managers from 2012 and publishes the results at their website: www.hfalert.com/rankings/rankings.pl

¹⁷ In untabulated figure, we also find no changes in the top 3 ranks (Tier 1) and only a minor change in top 4-10 ranks (Tier 2) over the 2012-2017 period.

significantly higher than that of second-tier (p value = 0.0093). Our results suggest that first-tier PBs are the most effective in terms of information dissemination (due, perhaps, to their stronger marketing channel) and/or that investors give more credit to the winner funds who use higher tier prime brokers than to winner funds that rely on lower tier prime brokers.

3.1.3.3 Less Responsive Investors during Crisis

In terms of an interaction term *Crisis*, we define it as the total 18-month period from September 2008 to February 2010 after the global financial crisis (also known as Lehman crisis) and make a dummy variable *Crisis* equal to one if the fund-month time falls under this period. We examine the HFA effect on fund flows during the crisis by interacting the Winner dummy with the interaction term *Crisis*. Our results in Table 7, Column (5) show that even in periods that are experiencing a financial crisis, investors do still react positively to the HFA announcement by putting additional capital in the winner fund, but the amount (4.67%) is significantly less than the average in the sample period (25.09% in Column (4) of Table 5). This suggests that the HFA attention-grabbing effect on flows becomes less during an alert period than a normal time. In other words, the investors probably become more prudent in terms of capital allocation.

< Table 7 >

3.1.4 Measures of Investors' Attention to the Winner Fund and Manager

We posit that investors who pay attention to the event start a due diligence on the winning managers after they obtain the list of winning funds. We test this hypothesis using two attention measures: (1) download of SEC's EDGAR files for the winner fund management companies and (2) Google Search Volume Index (SVI) for HFA events to get the winners list. Our results show that investor attention increases significantly following awards announcements.

< Figure 3 >

3.1.4.1 EDGAR log file data

Previous papers use Google Search Volume Index (Da, Engelberg, and Gao, 2011) or Bloomberg terminals news searching activity (Ben-Rephael, Da, and Israelsen, 2017) as direct measure of investor attention to stocks. As we investigate investor attention not to stocks but to funds, we propose a novel direct measure of institutional investor attention using the reports (e.g., Form 13F) downloading activity for specific managers from SEC's EDGAR system. EDGAR discloses the number of times users download file for a specific management company and the number of unique IP addresses which access EDGAR to download such file. There are several limitations to using EDGAR log file data as an attention measure. For one thing, not many hedge funds file forms through EDGAR such as Form 13F which is required only to investment managers containing all equity assets under management of at least \$100 million in value. In addition, the filing is required not at the fund level but at the management-company level. Therefore, our analysis may have lower power than our previous analysis given the limited number of observations. Despite that limitation, however, we find a significant result on the investors' attention to the winner's management-company after the award event.

Our data source is United States SEC EDGAR. The sample period is January 2003 to December 2016. The number of manager-month observations is 139,272 from a total of 829 unique investment managers who exist in our TASS fund sample where the total number of unique investment managers is 3,858. Our EDGAR dataset contains four sets of data for each manager-month: the number of (1) any files downloaded, (2) unique IP address which downloaded any files, (3) only 13F files downloaded, (4) unique IP address which downloaded only 13F files. We use these four sets of data as a proxy of Investor Attention ($IA_{i,t}$) to

management company i at month t . Abnormal Investor Attention ($AIA_{i,t}$), the measure to capture the surge in investor's attention to management company i at month t , is defined as

$$\log(IA_{i,t+1}+1) - \log[\text{Average}(IA_{i,t}, \dots, IA_{i,t-11})+1].$$

We postulate that investors take the downloading activity from the EDGAR system at the subsequent month to the award event. In our panel regression, Winner Manager is an independent variable equal to one if the company i receives the award at month t and AIA is the dependent variable to measure the surge in investor attention to the company i at month $t+1$. We get significant results from all four datasets shown in Table 8, Columns (1) through (4). The columns (5) through (8) show the results from the robustness check. We expect a surge in file downloads and IP-address access when new files are uploaded at EDGAR. To control for the download activities associated with a fund's regulatory filings and make sure our findings are not driven by such new-filing effects, we use T1 as an alternative measure to our original four sets of data T0 defined as

$$IA_{i,t_T1} = IA_{i,t_T0} - \text{the number of downloaded files which are uploaded in EDGAR database at month } t, \text{ or the number of unique IP addresses which are accessed to download such files at month } t.$$

We get the similar results from the robustness check.

< Table 8 >

3.1.4.2 Google Search Volume Index (SVI)

We posit that investors learn about the award winners list by first searching the award name in Google and then entering the award organizer's website. To test this hypothesis, we collect the historical Google SVI data about each award name (e.g., EurekaHedge Awards) from Google

Trend. The sample period is January 2004 to October 2017. The Abnormal Search Volume Index (ASVI) measure captures the surge in investor's attention to award i and is defined as

$$\log(\text{SVI}_{i,t}+1) - \log[\text{Average}(\text{SVI}_{i,t-1}, \dots, \text{SVI}_{i,t-12})+1].$$

In our panel regression, Event Dummy is an independent variable equal to one if the award i is announced at month t . We get the significant results shown in Table 9, Column (1) indicating that the award-name search in Google surges in the month when the award event is held. Columns (2) through (6) show the results from the robustness check. Our base month period is 12 months in ASVI calculation. We alternatively apply 3 and 6 months and also use the median of the past months rather than the average. The robustness check yields similarly significant results.

< Table 9 >

< Figure 4 >

3.2 Award Effect on Fund Performance

In this section, we use fund performance subsequent to HFA event as the dependent variable in the regression to test whether an HFA provides any additional future performance information as follows:

$$\text{Fund Performance}_{i,t:t+k} = \beta_1 \text{Winner}_{i,t} + \beta_2 \text{Nominee}_{i,t} + \gamma \text{Controls}_i + \varepsilon_i. \quad (2)$$

We consider three performance measures – (1) the raw excess return (2) the Fung and Hsieh (2004) seven-factor adjusted alpha, and (3) the Goetzmann, Ingersoll, Spiegel, and Welch (2007) manipulation-proof performance measure (“MPPM”) because hedge funds can smooth and manipulate their returns. Following the practice recommended in the literature, we use $p \in \{3,4\}$ in MPPM model. Control variables are the past 12-month lag return (to control for the

expected rate of returns that would be predicted by the performance persistence hypothesis), the lag volatility, the fund size and the fund age. We add concurrent flows to control for the mixed effect of flows on performance.¹⁸

After adjusting for covariation with the Fung and Hsieh (2004) seven factors and controlling for other factors that drive fund performance, our regression results using any of three performance measures indicate that HFA does not provide any additional information about future returns for the award winners.

In particular, 2QHFA selection methodology implies that these award organizers intend to select quality managers who can meet the hedge fund investors' demand by consistently achieving superior risk-adjusted performance. Therefore, we do not rule out the possibility that 2QHFA might have some predictive value because of its sophisticated winner selection process, but we find no evidence of above normal future returns even in the 2QHFA despite the fact that the 2QHFA brings a significantly larger increase in fund flows following the award event than 1QHFA.

On the contrary, the results show that 1QHFA nominees actually deliver a statistically significant negative alpha of (negative) -1.5% over the 12 months period following the award event (per Fung and Hsieh 7 factor alpha model). This negative return is even more apparent when we use the MPPM measures, resulting in a (negative) -1.8% change in just the three-month period following the award event. This raises another question that should be examined, namely whether nominees adopt other measures such as aggressive trading tactics that they are unable to

¹⁸ Wermers (2003) and Lou (2012) document a positive relationship between fund flows and future fund performance, and they attribute this positive relationship to price pressure caused by fund flows ("persistent-flow hypothesis"). On the other hand, Parwada and Tan (2017) note the negative effect of Flows on the Performance because award-winning managers are not able to cope with the new money flows efficiently under "diseconomies of scale" and "rational expectations equilibrium" thus the profitable fund investment opportunities are eventually arbitrated away.

control to boost immediate returns by shifting performance between years (Huang, Sialm, and Zhang, 2011; Carhart, Kaniel, Musto, and Reed, 2002), thereby causing the rate of return after award event to fall below the level expected by the other control variables.

< Table 10 >

3.3 Award Effect on ex-ante Risk-Taking

Next, we turn our attention from investors to managers. The positive fund flows to awards relationship creates an implicit incentive for the manager to distort his asset allocation choice so as to increase the likelihood of winning the awards. Our goal is to analyse the effect of incentives provided by awards on the risk-taking behaviour of potential award winners prior to the HFA event. We posit that funds are eager to attain the HFA due to the benefits they receive by virtue of the award, such as increased fund flows and an enhanced career reputation (Malmendier and Tate, 2009). In this situation, we expect fund managers to have a strong incentive to take on a higher level of risk in hopes of winning the race. Literature on the tournament behavior predicts that managers will respond to this motivation by increasing the fund's tracking error volatility relative to its peer hedge funds.¹⁹

3.3.1 Tournament Behavior

Tournament behavior, where fund managers have a strong incentive to take risk in order to rise in tournament rankings, is well documented in the literature. Brown, Goetzmann, and Park (2001)

¹⁹ Chevalier and Ellison (1997), Basak et al. (2007) and Chen and Pennacchi (2009) find mutual fund managers choose to increase the standard deviation of tracking errors, but not the standard deviation of returns, when they respond to the fund's year-to-date return. Brown et al. (2001) find that hedge fund managers decide their annual risk-shifting strategy more based on their relative performance (compared to industry benchmarks) than absolute performance (to the high water mark).

provide evidence that a hedge fund manager's variance strategy depends on relative rather than absolute performance evaluation. Aragon and Nanda (2012) show that tournament-style behavior is the best explanation for why fund managers increase volatility. We follow the research model designed by Aragon and Nanda (2012) in order to have a general understanding about how the fund managers manage their fund risk according to the relative mid-year performance of the fund.

$$\Delta Risk_{i,y} = \beta_1 RelRnk_{i,1h} + \gamma Controls_i + \varepsilon_i$$

The dependent variable $\Delta Risk_{i,y}$ is the change in the fund risk variable (i.e., the standard deviation of a fund i 's monthly return) between the first and second halves at a year y . The independent mid-year fund performance variable $RelRnk$ is the fractional rank of the fund's raw return over the first six months relative to other funds during the same period. As shown in Column (1) of Table 11, a negative coefficient on $RelRnk$ suggests that funds tend to increase their risk in the second half of the year when their relative performance ranking around midyear is poor.

To gain more detailed insight into the way managers take risks, we extend the above Aragon and Nanda (2012) model by replacing $RelRnk$ with $RankDecile$ and adding a new interaction term $PerfDiff$ to $RankDecile$ as follows:

$$\Delta Risk_{i,y} = \sum_j \beta_j RankDecile_{j,1h} + \sum_j \beta_j RankDecile_{j,1h} * PerfDiff_{i,1h} + \beta_1 PerfDiff_{i,1h} + \gamma Controls_i + \varepsilon_i \quad (3)$$

$$PerfDiff_{i,1h} = Return\ of\ Decile\ Top\ Fund_{j,1h} - Return\ of\ Fund_{i,1h}$$

$RankDecile$ is the ten dummy variables based on the fractional rank of the fund's raw return over the first six months relative to other funds. If the fund $RelRnk$ is 0.85, $RankDecile_9$ has a value "one" while the other nine variables have "zero" value. $PerfDiff$ is the difference in the first six month returns between the fund i and the top performance fund j in the decile group

where the fund i belongs. By definition, *PerfDiff* has only positive numbers with a minimum value 0 in case the fund i is the top performance fund within the decile group. We use *PerfDiff* as an interaction term to each decile dummy variable *RankDecile* and focus on the coefficient of the interaction term *RankDecile*PerfDiff* in order to examine how differently from the other decile group funds the fund i manages its risk in the second half of the year subject to the performance distance from the top performance fund j when the fund i belongs to the fund j 's decile group.

The results we obtain in our study Table 11, Column (2) show that the higher the relative rank, the lower the risk taken by funds in second period, observed by comparing funds in the second to eighth decile groups with funds in the first decile group (the base), consistent with Aragon and Nanda (2012). However, funds in the ninth and tenth decile groups take higher risks than funds in decile groups that are one-notch lower. (For example, funds in the 10th decile group take higher risk than funds in the 9th decile group by 0.24% points with p -value 0.0000). If we graph this risk-taking per each decile group, we find a U-shape as shown in Figure 5, consistent with the previous literature on mutual funds (Hu, Kale, Pagani, and Subramanian, 2011).²⁰ This suggests that we can apply the principles of tournament theory not only between the underperforming and outperforming groups but also between the top performing groups (i.e., between the ninth and tenth decile groups). The top performers have an incentive to take higher risks because they have already advanced out of any danger from the fund redemption and liquidation risk. In such circumstances, it is reasonable for them to take more investment risks to

²⁰ Hu et al. (2011) find the evidence that significantly outperforming managers are less likely to be fired in the future and are also more likely to increase relative risk.

achieve even higher rank and capture the advantage of a convex performance-flow relationship.²¹

The motivation for a fund manager to take a higher risk will increase even further if there is an additional incentive provided by an award that is bestowed to only one fund from each award category.

< Figure 5 >

As shown in Column (3) of Table 11, the negative coefficient of the interaction factors *RankDecile*PerfDiff* indicates that the closer the performance of a particular fund *i* to the performance of the top performer fund *j*, the higher risk taken by the fund *i*. We find significant negative coefficients only in ninth and tenth decile groups (in all four cases). This suggests that followers have a higher incentive to catch up with the leader when the performance gap is small and therefore when the probability of that particular fund being able to ultimately emerge as the top performer is higher, but this relationship is actually observed only in the top performing groups (i.e., only 9th and 10th decile group funds). Our findings are consistent with Basak et, al. (2007) who find in their mutual fund study that managers increase risk when moderately behind the benchmark, and cease to do so when they have fallen far behind.

< Table 11 >

3.3.2 Award Contenders

Based on these general observations, we then examine our research question whether the HFA contenders are engaged in more risk-taking activities before the award event in hopes of

²¹ The funds in this high performance group face a convex performance-flow relationship indicating that the potential for managers to gain from additional risk taking is much larger than the potential to lose (Agarwal, Daniel, and Naik, 2004; Baquero and Verbeek, 2009; Getmansky, Liang, Schwarz, and Wermers, 2015; Jorion and Schwarz, 2015). This risk-shifting behavior in the top decile groups is therefore regarded as a rational response by compensation-maximizing managers given a disproportionate amount of investor flow volume is directed toward the top-performing funds each year (Chevalier and Ellison, 1997 Sirri and Tufano, 1998).

increasing their chances of winning the award. In our research models, we take the *ex-post* winners and nominees as the *ex-ante* HFA contenders. We use HFA data only from the award organizers who set “January to December” as a standard evaluation period²² and test for the risk change over the half-on-half year period as a proxy of manager’s risk-taking behaviour because most fund managers control the return and risk over a calendar year to calculate the annual performance fee subject to the high water mark constraint. We require that a fund have full 12 months observations in a calendar year to be included in our model.

For the empirical strategy, we take tracking error volatility measures and a t-test approach, following Kaniel and Parham (2017). Tracking error volatility (“TE”) captures how much a fund’s returns deviate from the average in the hedge fund universe (similar to hedge fund index). A significant increase in the TE measure will indicate that managers are attempting to increase their ranking volatility by “deviating from the herd.”

Because measures based on an individual fund’s monthly returns are inherently noisy, we choose to sort our hedge fund sample into twelve portfolio groups²³ each year consisting of a winner group, a nominee group, and a group for each decile. Except for winner or nominee funds, the individual funds will be designated into one of the decile groups based on the fund’s return rank in the first six months. We assume each hypothetical “fund of funds portfolio” have an equal weight investment into an individual fund within each portfolio. Then we analyse each portfolio’s tracking error volatility relative to the hedge fund universe return. We denote the

²² Total 7 Awards use January to December as their award evaluation period: Absolute Return Awards (2013-2017 Event Years), EuroHedge Awards, EurekaHedge Awards, HFR European Awards (2008-2015 Event), Investors Choice Award (for US, Europe and Asia).

²³ For simpler presentation, we divide the sample funds (excluding winner and nominee funds) into 10 decile groups and thus form a total of 12 portfolio groups. In untabulated tests, we divide the sample funds (excluding winners and nominees) into 50 quantile groups to make the number of funds in each hypothetical group close to that of winner and nominee portfolio groups and arrive at the same conclusion as with its ten decile groups.

return on month m of each portfolio group g by r_m^g . For example, $r_{jan\ 2002}^{10}$ means the tenth decile group's monthly return on January 2002. r_m^u is a monthly benchmark return which is the mean of aggregate hedge fund returns. The tracking error volatility ("TE") for each group over six months is as follows:

$$TE_{g,h} = StDev \{ r_m^g - r_m^u \mid m \in h \} \text{ where } StDev: \text{ standard deviation, } g: \text{ winners, nominees or one of ten decile groups, } u: \text{ hedge fund universe, } h: \text{ first half or second half at a certain year.}$$

We calculate each group TE measures during the first half (pre-formation) and second half (post-formation). Then we demean the TE measure relative to the average TE of all twelve portfolios within each half-year period to remove the effects of market- and hedge fund industry-wide volatility within the same semi-annual period:

$$\widehat{TE}_{g,h} = TE_{g,h} - Mean_j(TE_{j,h}) \text{ with } Mean_j \text{ denoting the TE average across all 12 groups.}$$

Next, we calculate the difference of demeaned TE for each group between first and second half across all 15 one-year periods (2002-2016):

$$\Delta \widehat{TE}_{g,y} = \widehat{TE}_{g,2h} - \widehat{TE}_{g,1h} = \text{changes in the demeaned fund tracking error volatility.}$$

Finally, we run a t-test to check whether each group $\Delta \widehat{TE}_{g,y} = 0$.

Our results in Table 12, Column (1) and (2) show that the fund managers who are participating in the HFA competition increase tracking error volatility relative to other funds.

Next, we postulate that winners and nominees who have a narrower performance gap vis-a-vis their competitors have higher motivation to take additional risk than other fund managers whose performance is either far ahead of followers or far behind from the leader. In the above model, we form a total of twelve groups of funds – Winners, Nominees and ten groups based on the first six-month fund return relative rank. We further divide each Winner and Nominee group of funds into two subgroups by the individual fund's performance difference against its direct

competitors for each award whom we can identify according to the published award winner and nominee list.

$$WinnerDiff_{i,k} = | WinnerPerf_{i,k} - Max(NomineePerf_{j,k}) |$$

$$NomineeDiff_{j,k} = | WinnerPerf_{i,k} - NomineePerf_{j,k} |$$

WinnerPerf is the first six-month fund cumulative raw return of the Winner fund *i* who win the award *k*. Likewise, *NomineePerf* is the fund return of the Nominee(s) fund *j*. At each award *k*, only one *WinnerDiff* value exists while multiple *NomineeDiff* values may exist. If Award *k* does not have both Winner and any of Nominees fund data in our fund dataset, we drop such Winner or Nominee(s) data from our test sample.

$$AvgWinnerDiff_y = Mean(WinnerDiff)_y$$

$$AvgNomineeDiff_y = Mean(NomineeDiff)_y$$

We then calculate the *AvgWinnerDiff* at each year *y* to see if the winner fund *i*'s performance difference is above or below the *AvgWinnerDiff* for the year. We apply the same calculation to the nominee funds. We then divide each winner and nominee fund group into two subgroups. We therefore have a total of four subgroups from winners and nominees to study the risk shifting behavior in each subgroup. "Winners Below Average" group funds must be closely chased by "Nominees Below Average" group funds. Finally, we run the same t-test (following Kaniel and Parham, 2017) after replacing the winner group with two winner subgroups (likewise for each nominee group).²⁴

Table 12, Columns (4) and (5) show that not all the winner and nominee funds increase their risk. Instead, a significant increase in risk is observed only in the funds whose performance

²⁴ We use the mean of *WinnerDiff* and *NomineeDiff* in each year to divide each Winner and Nominee group into two subgroups. As an alternative, we also use the median of performance differences between winners and nominees and arrive at the same result.

level is close to the level of the nearest-competitor funds. Our empirical findings suggest that fund managers understand who their direct competitors are, and they manage their fund risk in a way they take into account the performance of their competitors, consistent to our research Table 11, Column (3).²⁵

< *Table 12* >

²⁵ There are a couple of channels through which the managers can know their direct competitor's performance. First, Bloomberg terminals provide hedge fund performance data to qualified investors including hedge fund managers. Second, according to data vendors, some managers subscribe to the database where they provide their fund performance data for their own reference check. Third, hedge funds in a fund of hedge fund family can access the data if its family has a data subscription (Agarwal, Lu, and Ray (2016) find that about 25% of hedge funds run fund of hedge fund businesses). Last, Hedge Fund Intelligence (the award organizer for AsiaHedge, EuroHedge and Absolute Return Awards) makes a nomination announcement during final months of evaluation period.

4. Robustness Check

4.1 Excludes Repeating Winners

As a robustness check for our test of “Award Effect on Fund Flows”, we take out all the fund flow effect from the award(s) that an HFA winner receives from any award organizations, both in the 12-month period prior to the HFA announcement event and in the following months until our subsequent flow observation period. The result obtained from this robustness check shows that the period during which the HFA continues to have a significant effect on fund flows is shorter (19 months) than what the original examination indicates (29 months). If we break down HFA into 1Q and 2Q, the 1QHFA effect is no longer significant after the 12th month, compared to the 19th month in the original test. However, the effect of 2QHFA continues until the 29th month (which is the same as the original test) by which time it accumulates to its peak at 63.82% (t-stat 1.96), lower than the original 118.10% (t-stat 3.19). This indicates that a portion of the flow effect we find in the original examination might be driven by another HFA in a previous and a subsequent period. However, the findings from this robustness test still show a significant impact from HFA on the fund flows. In addition, the fund flow effect in cases where an HFA winner fund receives some other award is much stronger than the effect for a single award winner fund over the observed period.

< Table 13 >

4.2 Tighter Control Group

In our original panel regression, we use winners as a treatment group while all fund-month data as a control group. As a robustness check, we use a difference-in-differences methodology in a

regression framework to examine the winner effect on subsequent fund flow compared to the tighter control funds using (1) top-ten rank funds (based on the past 12 months return in each category), (2) top-five rank funds and (3) nominees who fail to become winners. We still find the winners experience a statistically significant increase in fund flows over the following 12-month period compared to all three tighter control groups.

< Table 14 >

5. Conclusions

The effect of limited attention on investment decision making has received much attention in the academic literature covering retail investors and mutual fund managers. We use hedge fund awards as potentially attention-grabbing events to examine whether hedge fund allocators are influenced by such event when they allocate their capital to funds.

The benefit of our empirical study using award events to analyse investor's limited attention is that we are free from causality issue. For many proxies such as extreme returns, trading volume and media coverage, the causal relation is unclear, making it hard to pinpoint the true impact of pure attention effects. For instance, on the one hand, extreme returns may trigger excessive attention, but on the other, excessive attention may trigger demand shocks and thus eventually also cause extreme returns.

Our results show that the award winners experience a significant increase in fund flows after the award event but do not deliver superior performance in the period following the award event. In addition, our results suggest that fund managers who have a feasible chance of winning the award strategically manage the tracking error volatility of their fund.

Consistent with the Limited Attention Hypothesis, our evidence indicates that hedge fund investors face attention limit and they allocate their capital into the funds which capture their attention even when the delivered information is stale.

Our paper contributes to the still-nascent literature that examines the attention effect on sophisticated investors in the hedge fund industry. We analyse both a *performance visibility effect* (from 1QHFA) and an *expert opinion effect* (from 2QHFA) under the same event format (i.e., HFA) which are separately examined in the literature. Our results indicate that hedge fund investors are themselves susceptible to attention-grabbing events and peer investors' opinion. We

also find empirical evidence of tournament behaviour even among top ranking funds while the previous literature on tournament behaviour focuses on below-average managers.

We leave the following questions and research area as future research topics: (1) whether the risk-shifting behaviour by the award contenders is optimal to both investors and managers, (2) whether the behavior by panel members in their winner selection process is rational,²⁶ (3) any star-creating or a special marketing strategy adopted by the hedge fund family to exploit the positive spillover effect (see Nanda, Wang and Zheng (2004) for star-creating strategies by mutual fund families; see Kim (2017) for marketing strategies by mutual fund families when they have star funds in the family), (4) the identification of exogenous events which is based on fundamentally not relevant information and the examination of the effect of such attention-grabbing or distracting factors on hedge fund investors, (5) any attention-grabbing events triggering fund redemption.

Over the last two decades, academia has accumulated the ample knowledge about hedge fund industry using the fund data provided by data vendors. One of the major events held by those vendors is the hedge fund award to which investors and managers pay special attention while academia so far pays limited attention. There may be another important event being held today on the ground calling attention from researchers.

²⁶ Zillante (2005), Allen and Parsons (2006), and Moran (2016) examine the behaviour by the voters in their winner-selection process for the Gold Glove award in the Major League Baseball.

References

- Ackermann, C., Mcenally, R., and Ravenscraft, D. (1999). The Performance of Hedge Funds: Risk, Return, and Incentives. *Journal of Finance*, 54(3), 833–874.
- Agarwal, V., Daniel, N. D., and Naik, N. Y. (2004). Flows, Performance, and Managerial Incentives in Hedge Funds. Working Paper.
- Agarwal, V., Fos, V., and Jiang, W. (2013). Inferring Reporting-Related Biases in Hedge Fund Databases from Hedge Fund Equity Holdings. *Management Science*, 59(6), 1271–1289.
- Agarwal, V., Green, T. C., and Ren, H. (2018). Alpha or beta in the eye of the beholder: What drives hedge fund flows? *Journal of Financial Economics*, 127(3), 417–434.
- Aiken, A. L., Clifford, C. P., and Ellis, J. (2013). Out of the dark: Hedge fund reporting biases and commercial databases. *Review of Financial Studies*, 26(1), 208–243.
- Ali, H. H., Lecocq, S., and Visser, M. (2008). The impact of Gurus: Parker grades and en primeur wine prices. *Economic Journal*, 118(529), 158–173.
- Allen, M. P., and Parsons, N. L. (2006). The Institutionalization of Fame: Achievement, Recognition, and Cultural Consecration in Baseball. *American Sociological Review*, 71(5), 808–825.
- Aragon, G. O., and Nanda, V. (2012). Tournament behavior in hedge funds: High-water marks, fund liquidation, and managerial stake. *Review of Financial Studies*, 25(3), 937–974.
- Baquero, G., and Verbeek, M. (2009). A Portrait of Hedge Fund Investors: Flows, Performance and Smart Money. Working Paper, 1–65.
- Barber, B. M., Huang, X., and Odean, T. (2016). Which Factors Matter to Investors? Evidence from Mutual Fund Flows. *Review of Financial Studies*, 29(10), 2601–2642.

- Barber, B. M., and Odean, T. (2008). All that Glitters: The effect of Attention and news on the Buying Behavior of Individual and Institutional Investors. *Review of Financial Studies*, 21(2), 785–818.
- Barber, B. M., Odean, T., and Zheng, L. (2005). Out of Sight , Out of Mind : The Effects of Expenses on Mutual Fund Flows. *Journal of Business*, 78(6), 2095–2119.
- Basak, S., Pavlova, A., and Shapiro, A. (2007). Optimal Asset Allocation and Risk Shifting in Money Management. *Review of Financial Studies*, 20(5), 1583–1621.
- Bauguess, S. W., Cooney, J., and Hanley, K. W. (2015). Investor Demand for Information in Newly Issued Securities. Working Paper.
- Beatty, S. E., and Smith, S. M. (1987). External Search Effort: An Investigation Across Several Product Categories. *Journal of Consumer Research*, 14(1), 83–95.
- Ben-Rephael, A., Da, Z., and Israelsen, R. D. (2017). It depends on where you search: Institutional investor attention and underreaction to news. *Review of Financial Studies*, 30(9), 3009–3047.
- Berk, J. B., and van Binsbergen, J. H. (2016). Assessing asset pricing models using revealed preference. *Journal of Financial Economics*, 119(1), 1–23.
- Bhardwaj, G., Gorton, G. B., and Rouwenhorst, K. G. (2014). Fooling some of the people all of the time: The inefficient performance and persistence of commodity trading advisors. *Review of Financial Studies*, 27(11), 3099–3132.
- Brown, G. W., Gredil, O., and Kantak, P. (2016). Finding Fortune : How Do Institutional Investors Pick Asset Managers? Working Paper.
- Brown, S. J., Fraser, T. L., and Liang, B. (2008). Hedge Fund Due Diligence: A Source of Alpha in a Hedge Fund Portfolio Strategy. Working Paper, 1–21.

- Brown, S. J., Goetzmann, W. N., and Park, J. (2001). Careers and survival: Competition and risk in the hedge fund and CTA industry. *Journal of Finance*, 56(5), 1869–1886.
- Capon, N., Fitzsimons, G. J., and Prince, R. A. (1996). An individual level analysis of the mutual fund investment decision. *Journal of Financial Services Research*, 10(1), 59–82.
- Carhart, M. M., Kaniel, R., Musto, D. K., and Reed, A. V. (2002). Learning for the Tape: Evidence of Gaming Behaviour in Equity Mutual Funds. *Journal of Finance*, 57(2), 661–693.
- Chemmanur, T. J., and Yan, A. (2009). Advertising, Attention, and Stock Returns. Working Paper.
- Chen, H. L., and Pennacchi, G. G. (2009). Does prior performance affect a mutual funds choice of risk? Theory and further empirical evidence. *Journal of Financial and Quantitative Analysis*, 44(4), 745–775.
- Chevalier, J., and Ellison, G. (1997). Risk Taking by Mutual Funds as a Response to Incentives. *Journal of Political Economy*, 105(6), 1167–1200.
- Chung, J. W., and Kang, B. U. (2016). Prime broker-level comovement in hedge fund returns: Information or contagion? *Review of Financial Studies*, 29(12), 3321–3353.
- Da, Z., Engelberg, J., and Gao, P. (2011). in Search of Attention. *Journal of Finance*, LXVI(5).
- Del Guercio, D., and Tkac, P. A. (2008). Star Power: The Effect of Morningstar Ratings on Mutual Fund Flow. *Journal of Financial and Quantitative Analysis*, 43(4), 907–936.
- Drake, M. S., Roulstone, D. T., and Thornock, J. R. (2015). The Determinants and Consequences of Information Acquisition via EDGAR. *Contemporary Accounting Research*, 32(3), 1128–1161.

- Engelberg, J. E., and Parsons, C. A. (2011). The Causal Impact of Media in Financial Markets. *Journal of Finance*, LXVI(1), 67–97.
- Fang, L. H., Peress, J., and Zheng, L. (2014). Does media coverage of stocks affect mutual funds' trading and performance? *Review of Financial Studies*, 27(12), 3441–3466.
- Feng, S., Sherman, M., and Kapadia, N. (2011). Flows: The “invisible hands” on hedge fund management. Working Paper.
- Fung, W., and Hsieh, D. A. (2004). Hedge Fund Benchmarks: A Risk-Based Approach. *Financial Analysts Journal*, 60(5), 65–80.
- Fung, W., and Hsieh, D. A. (2009). Measurement Biases in Hedge Performance Data: An Update. *Financial Analysts Journal*, 65(3), 36–38.
- Gallagher, S., Kaniel, R., and Starks, L. (2008). Advertising and mutual funds: from families to individual funds. Working Paper, 1–49.
- Gervai, S., Kaniel, R., and Mingelgrin, D. (2001). The High-Volume Return Premium. *Journal of Finance*, 56(3), 877–919.
- Getmansky, M., Liang, B., Schwarz, C., and Wermers, R. (2015). Share restrictions and investor flows in the hedge fund industry. Working Paper.
- Gibbons, B., Iliev, P., and Kalodimos, J. (2018). Analyst Information Acquisition via EDGAR. Working Paper.
- Goetzmann, W., Ingersoll, J., Spiegel, M., and Welch, I. (2007). Portfolio performance manipulation and manipulation-proof performance measures. *Review of Financial Studies*, 20(5), 1503–1546.
- Goyal, A., and Wahal, S. (2008). The Selection and Termination of Investment Management Firms. *Journal of Finance*, LXIII(4), 1–55.

- Grullon, G., Kanatas, G., and Weston, J. P. (2004). Advertising, breadth of ownership, and liquidity. *Review of Financial Studies*, 17(2), 439–461.
- Hilger, J., Rafert, G., and Villas-Boas, S. (2011). Expert Opinion and the Demand for Experience Goods: An Experimental Approach in the Retail Wine Market. *Review of Economics and Statistics*, 93(4), 1289–1296.
- Hillert, A., Jacobs, H., and Müller, S. (2014). Media makes momentum. *Review of Financial Studies*, 27(12), 3467–3501.
- Hou, K., Peng, L., and Xiong, W. (2009). A Tale of Two Anomalies: The Implications of Investor Attention for Price and Earnings Momentum. Working Paper.
- Hu, P., Kale, J. R., Pagani, M., and Subramanian, A. (2011). Fund Flows, Performance, Managerial Career Concerns, and Risk Taking. *Management Science*, 57(4), 628–646.
- Huang, J., Sialm, C., and Zhang, H. (2011). Risk shifting and mutual fund performance. *Review of Financial Studies*, 24(8), 2575–2616.
- Jain, P. C., and Wu, J. S. (2000). Truth in Mutual Fund Advertising: Evidence on Future Performance and Fund Flows. *Journal of Finance*, 55(2), 937–958.
- Jenkinson, T., Jones, H., and Martinez, J. V. (2016). Picking Winners? Investment Consultants' Recommendations of Fund Managers. *Journal of Finance*, 71(5), 2333–2370.
- Jones, H., and Martinez, J. V. (2017). Institutional investor expectations, manager performance, and fund flows. *Journal of Financial and Quantitative Analysis*, 52(6), 2755–2777.
- Jorion, P., and Schwarz, C. (2014). The strategic listing decisions of hedge funds. *Journal of Financial and Quantitative Analysis*, 49(3), 773–796.
- Jorion, P., and Schwarz, C. (2015). Who are the Smartest Investors in the Room? Evidence from U. S. Hedge Funds Solicitation. Working Paper.

- Kaniel, R., and Parham, R. (2017). WSJ Category Kings – The impact of media attention on consumer and mutual fund investment decisions. *Journal of Financial Economics*, 123(2), 337–356.
- Kaniel, R., Starks, L., and Vasudevan, V. (2007). Headlines and Bottom Lines: Attention and Learning Effects from Media Coverage of Mutual Funds. Working Paper.
- Koehler, J. J., and Mercer, M. (2009). Selection Neglect in Mutual Fund Advertisements. *Management Science*, 55(7), 1107–1121.
- Kolokolova, O. (2011). Strategic behavior within families of hedge funds. *Journal of Banking and Finance*, 35(7), 1645–1662
- Li, F. W., and Sun, C. (2017). Information Acquisition and Expected Returns: Evidence from EDGAR Search Traffic. Working Paper.
- Lou, D. (2012). A flow-based explanation for return predictability. *Review of Financial Studies*, 25(12), 3457–3489.
- Lou, D. (2014). Attracting investor attention through advertising. *Review of Financial Studies*, 27(6), 1797–1829.
- Loughran, T., and McDonald, B. (2017). The Use of EDGAR Filings by Investors. *Journal of Behavioral Finance*, 18(2), 231–248.
- Lu, Y., Musto, D., and Ray, S. (2014). Alternative marketing for alternative investments. Working Paper.
- Malmendier, U., and Tate, G. (2009). Superstar CEOs. *Quarterly Journal of Economics*, 124(4), 1593–1638.
- Moran, E. K. (2016). A Statistical Scoring System for Manager Voting for the Rawlings Gold Glove Award. PhD Thesis Paper.

- Nanda, V., Wang, Z. J., and Zheng, L. (2004). Family values and the star phenomenon: Strategies of mutual fund families. *Review of Financial Studies*, 17(3), 667–698.
- Parwada, J. T., and Tan, E. K. M. (2017). Superstar Fund Managers. Working Paper, 1–58.
- Peng, L., and Xiong, W. (2006). Investor attention, overconfidence and category learning. *Journal of Financial Economics*, 80(3), 563–602.
- Peress, J. (2014). The media and the diffusion of information in financial markets: Evidence from newspaper strikes. *Journal of Finance*, 69(5), 2007–2043.
- Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies*, 22(1), 435–480.
- Reuter, J., and Zitzewitz, E. (2006). Do Ads Influence Editors? Advertising and Bias in the Financial Media. *Quarterly Journal of Economics*, 197–227.
- Seasholes, M. S., and Wu, G. (2007). Predictable behavior, profits, and attention. *Journal of Empirical Finance*, 14(5), 590–610.
- Sirri, E., and Tufano, P. (1998). Costly Search and Mutual Fund Flows. *Journal of Finance*, 53(5), 1589–1622.
- Solomon, D. H., Soltes, E., and Sosyura, D. (2014). Winners in the spotlight: Media coverage of fund holdings as a driver of flows. *Journal of Financial Economics*, 113(1), 53–72.
- Vessey, I. (1994). The effect of information presentation on decision making: A cost-benefit analysis. *Information and Management*, 27(2), 103–119.
- Wermers, R. R. (2003). Is Money Really “Smart”? New Evidence on the Relation Between Mutual Fund Flows, Manager Behavior, and Performance Persistence. Working Paper.
- Yuan, Y. (2015). Market-wide attention, trading, and stock returns. *Journal of Financial Economics*, 116(3), 548–564.

Zhen, C., and Zheng, X. (2015). The Effects of Expert Opinion on Consumer Demand for Goods with Credence Attributes: Evidence from a Natural Experiment. Working Paper, 0–29.

Zillante, A. (2005). Reputation Effects in Gold Glove Award Voting. Working Paper, 1–13.

Table 1: Award information and our award sample collection period

This table provides information on the name of award organizer, the manager's designated location where the award selects the winner, and the first year when the award event was held for each award. Our award sample for four award names (AsiaHedge, HFM Europe, HFM US and HFR European) do not have the full historical data due to the limited data availability. Three awards are classified as 1QHFA and the other seven awards are as 2QHFA category based on the award selection methodology.

Award Name	Award Organization	Award Region	1 st Event Year	Missing Years in Winner Data	Missing Years in Nominee Data
1QHFA					
AsiaHedge	HFI	Asia	2002		2002-2006
Absolute Return	HFI	US	2005		
EuroHedge	HFI	Europe	2003		
2QHFA					
EurekaHedge	Mizuho	Asia	2004		
HFM European	HFM	Europe	2008	2008-2009	2008-2009
HFM US	HFM	US	2007	2007, 2009	2009
HFR European	HFR	Europe	2001	2001-2007	2001-2007
Investors Choice - Europe	Allocator	Europe	2012		
Investors Choice - US	Allocator	US	2015		
Investors Choice - Asia	Allocator	Asia	2015		

Table 2: Number of our award sample dataset

This table shows the number of our award samples. We collect a total of 4,576 unique funds (8,020 winner and nominee fund-months) from our award samples and filter out the funds which do not exist in TASS database, leaving a sample of 1,590 unique funds (3,420 winner and nominee fund-months).

	Total award fund dataset			Fund name existing in TASS		
	Winner	Nominee	Total	Winner	Nominee	Total
1QHFA						
AsiaHedge	222	782	1,004	99	319	418
Absolute Return	216	983	1,199	88	427	515
EuroHedge	321	1,555	1,876	139	722	861
Subtotal - 1QHFA	759	3,320	4,079	326	1,468	1,794
2QHFA						
EurekaHedge	215	1,135	1,350	112	584	696
HFM European	271	63	334	100	22	122
HFM US	275	175	450	112	92	204
HFR European	267	251	518	80	93	173
Investors Choice - Europe	210	614	824	67	179	246
Investors Choice - US	102	284	386	36	106	142
Investors Choice - Asia	24	55	79	11	32	43
Subtotal - 2QHFA	1,364	2,577	3,941	518	1,108	1,626
Total	2,123	5,897	8,020	844	2,576	3,420
Unique Fund	1,624	3,625	4,576	449	972	1,590

Table 3: Summary Statistics – Average fund characteristics

This table displays summary statistics for fund-month observations of our award and fund sample. This table reports the average fund characteristics for award-winners, non-winner nominees and all sample funds. The variable Fund Return is a fund's monthly net return; Fund Size is the AUM of the fund in millions of dollars; Fund Age is the age of the fund in years, calculated as the difference between the data date and the date the fund first appeared in the TASS database; Fund Flow is the measure of asset inflow and outflow, following Sirri and Tufano (1998); Volatility is measured by the standard deviation of a fund's monthly net returns; Fund Alpha is the conditional fund alpha using the Fung and Hsieh (2004) seven-factor model (an equity market factor, an equity size spread factor, a bond market factor, a credit spread factor, and trend-following factors for bond, currency, and commodity); LTM stands for Last Twelve Months and N12M does for Next Twelve Months (Likewise for N24M and N36M). The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	1Q Winner	1Q Nominee	2Q Winner	2Q Nominee	Total	Difference			
						1Q Winner vs Nominee <i>p</i> -value	2Q Winner vs Nominee <i>p</i> -value	1Q Winner vs Total <i>p</i> -value	2Q Winner vs Total <i>p</i> -value
Number of Fund-Month Observations	260	1,061	402	648	828,502				
Fund Return (%)	1.36	1.12	0.26	-0.12	0.46				
Fund Size (\$millions)	534.92	452.87	493.81	302.06	127.23				
Fund Age (years)	6.29	7.21	7.78	6.21	5.50				
Fund Flow (%)									
LTM	84.95	46.89	47.17	68.48	27.41	0.010***	(0.063)*	0.000***	0.014**
N12M	41.71	21.60	22.85	23.12	27.41	0.087*	(0.976)	0.193	(0.505)
N24M	66.95	38.35	73.24	53.63	76.64	0.3126	0.529	(0.706)	(0.900)
N36M	91.24	42.32	71.31	70.27	131.77	0.3664	0.977	(0.423)	(0.009)***
Fund Raw Return (%)									
LTM	25.44	15.12	15.04	15.39	6.29	0.000***	(0.749)	0.000***	0.000***
N12M	7.62	5.11	5.45	5.46	6.29	0.056*	(0.987)	0.271	(0.262)
N24M	14.26	11.06	9.63	12.96	13.55	0.150	(0.093)*	0.733	(0.008)***
N36M	23.86	17.39	18.60	22.17	21.57	0.046**	(0.249)	0.445	(0.201)
Monthly Volatility (%)									

LTM	2.88	2.56	2.64	3.30	2.54	0.035**	(0.000)***	0.016**	0.296
N12M	2.97	2.56	2.70	3.61	2.54	0.016**	(0.000)***	0.007***	0.181
N24M	3.42	2.75	2.98	3.89	2.70	0.003***	(0.000)***	0.001***	0.039**
Fund Alpha									
(%)									
LTM	17.60	9.73	10.10	9.29	1.92	0.000***	0.366	0.000***	0.000***
N12M	4.03	2.74	3.17	2.70	1.92	0.22	0.604	0.032**	0.057*
N24M	8.75	5.99	5.42	6.68	4.31	0.142	(0.455)	0.013**	0.397
N36M	13.55	8.68	10.61	11.09	7.01	0.067*	(0.854)	0.008***	0.072*

Table 4: Award Determinants – Winner & Nominee

This table reports the determinants of the winners and nominees using logistic models. For variable descriptions, see the appendix. We find other significant determinants such as prime broker, high water mark and fund location but do not present here for brevity.

VARIABLES	(1) WINNER	(2) NOMINEE	(3) WINNER 1Q	(4) NOMINEE 1Q	(5) WINNER 2Q	(6) NOMINEE 2Q
LTM_RETURN_w	0.06*** (20.28)	0.03*** (21.17)	0.07*** (17.96)	0.03*** (16.38)	0.05*** (13.33)	0.04*** (16.79)
LTM_VOL_w	-0.16*** (-4.88)	-0.01 (-0.28)	-0.20*** (-4.20)	-0.01 (-0.45)	-0.14*** (-3.27)	-0.01 (-0.26)
LN_AUM	0.88*** (9.22)	0.79*** (12.91)	0.80*** (7.92)	0.82*** (11.59)	0.92*** (7.10)	0.73*** (7.08)
LN_AGE	-0.08 (-0.48)	-0.05 (-0.51)	-0.02 (-0.11)	-0.09 (-0.87)	-0.11 (-0.53)	0.05 (0.29)
LN_FM_AUM	-0.26*** (-2.58)	-0.26*** (-4.15)	-0.10 (-0.93)	-0.20*** (-2.74)	-0.37*** (-2.77)	-0.37*** (-3.61)
LN_FM_AGE	0.18 (1.05)	0.00 (0.04)	-0.11 (-0.57)	0.12 (0.95)	0.39* (1.67)	-0.21 (-1.20)
Constant	-18.72*** (-23.92)	-15.75*** (-31.57)	-21.18*** (-22.45)	-18.08*** (-30.46)	-18.17*** (-17.19)	-13.45*** (-19.96)
Observations	447,749	447,749	447,749	447,749	447,749	447,749
Winner	443		184		259	
Nominee		1083		703		380
Fund Cluster	YES	YES	YES	YES	YES	YES
Pseudo R-squared	0.145	0.103	0.176	0.106	0.110	0.0883

Table 5: HFA Impact on Cumulative Fund Flows

This table presents OLS estimates of Equation (1) relating HFA to subsequent fund flows to award winners and nominees. Panel B shows the coefficient of 1QHFA and 2QHFA *WINNER* when we divide *WINNER* in Panel A into two subgroups based on the award selection methodology (likewise for *NOMINEE*). When we calculate the effect of awards in dollar terms using the average fund size of winner and nominee and regression coefficient, it is economically significant as the abnormal cumulative fund flow to a winner and a nominee on average is \$143 million and \$53 million respectively over 12-month period. For variable descriptions, see the appendix. We factor in time and style fixed effect. Standard errors, reported in parentheses, are based on clustering at the fund level to allow for heteroscedasticity and autocorrelation in the residuals across time, as in Petersen (2009). Statistical significance (two-sided) at the 10%, 5%, and 1% level is denoted by *, **, and ***, respectively.

FUND FLOW	(1) N3M FLOW	(2) N6M FLOW	(3) N9M FLOW	(4) N12M FLOW	(5) N24M FLOW	(6) N36M FLOW
Panel A						
WINNER	5.84*** (4.53)	12.14*** (5.00)	16.82*** (4.86)	25.09*** (4.77)	54.86*** (3.37)	47.51*** (2.74)
NOMINEE_NW	2.77*** (4.12)	6.54*** (4.62)	8.41*** (3.95)	13.59*** (3.90)	28.51*** (3.08)	37.49*** (2.11)
LTM_RETURN_w	0.25*** (31.98)	0.52*** (29.40)	0.77*** (26.17)	1.00*** (23.72)	2.08*** (16.65)	3.11*** (11.78)
LTM_RETURN_w_sq	-0.00*** (-7.43)	-0.00*** (-6.57)	-0.00*** (-6.26)	-0.01*** (-5.84)	-0.02*** (-5.52)	-0.02*** (-3.80)
LTM_VOL_w	0.06* (1.65)	-0.15 (-1.52)	-0.50*** (-2.75)	-0.88*** (-3.10)	-2.05* (-1.92)	-2.99 (-1.16)
LTM_FLOW_w	0.03*** (31.76)	0.05*** (22.49)	0.06*** (17.06)	0.07*** (13.67)	0.11*** (7.24)	0.12*** (4.11)
LN_AUM	-0.76*** (-15.36)	-2.63*** (-17.75)	-5.22*** (-17.70)	-8.27*** (-17.02)	-24.86*** (-13.90)	-46.85*** (-11.73)
LN_AGE	-1.82*** (-15.58)	-4.33*** (-14.78)	-7.02*** (-13.40)	-10.14*** (-12.51)	-25.50*** (-9.98)	-41.56*** (-8.30)
Observations	373,385	350,772	329,559	309,146	238,217	182,114
R-squared	0.097	0.104	0.106	0.106	0.114	0.125
Winner	402	369	354	326	241	172
Nominee	1021	940	896	844	623	466
p-value of difference between Winner and Nominee	0.03	0.04	0.03	0.05	0.10	0.59
Time*Style FE	YES	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES	YES

Panel B						
WINNER_1Q	6.66*** (2.96)	13.42*** (3.04)	15.77*** (2.71)	24.11*** (2.76)	26.03* (1.88)	11.79 (0.55)
WINNER_2Q	5.34*** (3.63)	11.35*** (4.17)	17.47*** (4.27)	25.72*** (3.95)	74.65*** (3.09)	75.77*** (3.28)
NOMINEE_NW_1Q	3.92*** (4.42)	8.70*** (4.84)	10.42*** (4.22)	15.24*** (3.62)	27.18** (2.26)	28.62 (1.32)
NOMINEE_NW_2Q	0.85 (0.95)	2.75 (1.35)	5.03 (1.52)	10.83** (2.17)	30.72*** (2.68)	54.75** (2.05)
Observations						
Winner_1Q	153	140	135	127	98	76
Winner_2Q	249	229	219	199	143	96
Nominee_1Q	640	599	563	528	395	309
Nominee_2Q	381	341	333	316	228	157

Table 6: HFA Spillover Effect on Flows of Winner Fund Family after the event

This table provides the OLS regression results of the effect of winning the HFA on a winner family's future fund flow. The dependent variable is Fund Flow, which measures the percentage growth of a fund over the k months period. The independent variable *FM_WINNER* is a binary indicator equal to one if the fund belongs to the family hosting the winner fund. Panel B shows the coefficient of *FM_WINNER_2Q* when we run the regression separately with 2QHFA winner family *FM_WINNER_2Q* as an explanatory variable. For variable descriptions, see the appendix. Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

FUND FLOW	(1) N3M FLOW	(2) N6M FLOW	(3) N9M FLOW	(4) N12M FLOW	(5) N24M FLOW	(6) N36M FLOW
Panel A						
FM_WINNER_S	1.30 (1.10)	4.24* (1.86)	6.07* (1.79)	4.81 (1.11)	10.28 (0.87)	36.36 (1.51)
FM_NOMINEE_NW_S	1.11 (1.16)	1.05 (0.55)	1.80 (0.67)	8.41* (1.84)	19.65 (1.44)	19.66 (1.13)
LTM_RETURN_w	0.25*** (32.01)	0.52*** (29.44)	0.77*** (26.20)	1.01*** (23.73)	2.09*** (16.65)	3.11*** (11.78)
LTM_RETURN_w_sq	-0.00*** (-7.43)	-0.00*** (-6.58)	-0.00*** (-6.27)	-0.01*** (-5.84)	-0.02*** (-5.52)	-0.02*** (-3.80)
LTM_VOL_w	0.07* (1.66)	-0.15 (-1.51)	-0.50*** (-2.74)	-0.88*** (-3.09)	-2.05* (-1.91)	-2.99 (-1.16)
LTM_FLOW_w	0.03*** (31.77)	0.05*** (22.50)	0.06*** (17.07)	0.07*** (13.68)	0.11*** (7.24)	0.12*** (4.12)
LN_AUM	-0.75*** (-15.23)	-2.62*** (-17.67)	-5.20*** (-17.64)	-8.24*** (-16.98)	-24.81*** (-13.88)	-46.81*** (-11.72)
LN_AGE	-1.82*** (-15.59)	-4.34*** (-14.80)	-7.02*** (-13.41)	-10.15*** (-12.51)	-25.51*** (-9.98)	-41.55*** (-8.30)
Observations	373,385	350,772	329,559	309,146	238,217	182,114
Winner Family	414	400	385	355	268	215
Nominee Family	794	732	701	667	522	387
R-squared	0.097	0.104	0.105	0.106	0.114	0.125
Time*Style FE	YES					
Fund Cluster	YES					
Panel B						
FM_WINNER_2Q_S	0.90 (0.71)	2.83 (1.05)	5.98 (1.47)	6.10 (1.09)	29.62* (1.66)	77.37** (2.04)
Observations						
2QHFA Winner Family	253	245	238	214	155	123

Table 7: HFA Winner's Impact on Cumulative Fund Flow – Interactions with Fund Size, Prime Brokers and Crisis

This table provides the OLS regression results of the effect of winning the HFA on a fund's future fund flows. The key variable of interest is the interaction terms between the winner dummy variable and three moderators (winner fund size, winner's prime broker and crisis period) to find the incremental flow benefit from the award event. For variable descriptions, see the appendix. Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

N12M_FLOW	(1) Fund Size	(2) PB Top10	(3) PB Tier3	(4) Fund Size & PB Tier3	(5) Crisis
LTM_RETURN_w	1.01*** (23.72)	1.00*** (12.33)	1.00*** (12.34)	1.00*** (12.34)	1.01*** (23.73)
LTM_RETURN_w_sq	-0.01*** (-5.84)	-0.00 (-1.13)	-0.00 (-1.10)	-0.00 (-1.10)	-0.01*** (-5.84)
LTM_VOL_w	-0.88*** (-3.09)	-0.75 (-1.61)	-0.76 (-1.62)	-0.76 (-1.62)	-0.88*** (-3.10)
LTM_FLOW_w	0.07*** (13.67)	0.05*** (5.02)	0.05*** (5.03)	0.05*** (5.02)	0.07*** (13.67)
LN_AGE	-10.15*** (-12.51)	-9.97*** (-5.88)	-9.96*** (-5.87)	-9.94*** (-5.87)	-10.15*** (-12.52)
LN_AUM	-8.25*** (-16.99)	-8.90*** (-9.44)	-8.92*** (-9.46)	-36.66*** (-2.59)	-8.25*** (-17.01)
WINNER	175.21* (1.66)	-6.37 (-0.68)	-6.31 (-0.68)	543.21* (1.95)	28.07*** (4.85)
PB_Top_10		5.08** (2.07)			
PB_Tier1			6.37** (2.26)	6.37** (2.26)	
PB_Tier2			3.63 (1.24)	3.63 (1.24)	
<u>Interaction with Fund Size</u>					
WINNER*LN_AUM	-15.91*** (-3.03)			-27.76** (1.97)	
<u>Interaction with PB</u>					
WINNER*PB_Top_10		56.25*** (2.87)			
WINNER*PB_Tier1			72.53** (2.25)	71.55** (2.25)	
WINNER*PB_Tier2			39.55** (2.40)	31.76 (1.64)	
<u>Interaction with Crisis</u>					
WINNER*Crisis					-23.40* (-1.85)

Observations	309,146	57,830	57,830	57,830	309,146
R-squared	0.106	0.121	0.121	0.122	0.106
Winner@AUM<\$100mm	57			16	
Winner@AUM<\$200mm	55			17	
Winner@AUM<\$500mm	93			30	
Winner@AUM>\$500mm	121			37	
Winner @ PB Tier 1		76	38	38	
Winner @ PB Tier 2			38	38	
Winner @ PB Tier 3		24	24	24	
Winner @ Crisis					45
Winner @ Normal					281
Time*Style FE	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES

Table 8: Investors' Attention Measures - EDGAR Files Download and Access

This table presents OLS estimates of regression relating HFA event to subsequent download of EDGAR files and IP access to EDGAR database related to the winner fund management-company as a part of due diligence process. *Winner Manager* is an independent variable equal to one if the management-company i receives an award at month t . The dependent variable is abnormal institutional attention calculated from the number of EDGAR files download and IP access related to each management-company which reports the required files such as 13F to EDGAR. For variable descriptions, see the appendix. Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1) T0 down_all	(2) T0 ip_all	(3) T0 down_13f	(4) T0 ip_13f	(5) T1 down_all	(6) T1 ip_all	(7) T1 down_13f	(8) T1 ip_13f
WINNER MANAGER	0.10** (2.07)	0.08* (1.72)	0.11** (2.02)	0.08* (1.79)	0.11** (2.06)	0.09** (2.21)	0.10 (1.63)	0.09* (1.86)
LTM_RETURN_w	0.00*** (6.40)	0.00*** (6.88)	0.00*** (5.82)	0.00*** (6.41)	0.00*** (6.73)	0.00*** (7.54)	0.00*** (5.69)	0.00*** (6.71)
LTM_RETURN_w_sq	0.00 (1.58)	0.00 (1.62)	0.00 (1.36)	0.00 (1.31)	0.00 (1.47)	0.00 (1.50)	0.00 (1.37)	0.00 (1.35)
LTM_VOL_w	-0.00** (-2.07)	-0.00** (-2.41)	-0.00** (-2.18)	-0.01*** (-3.03)	-0.00 (-1.12)	-0.00 (-1.21)	-0.00 (-1.48)	-0.00** (-2.35)
LTM_FLOW_w	0.00 (1.07)	0.00* (1.86)	0.00 (0.02)	0.00 (0.67)	0.00 (0.31)	0.00 (1.35)	-0.00 (-0.84)	-0.00 (-0.15)
LN_AUM	0.00** (2.52)	0.00 (0.60)	0.00** (2.15)	-0.00 (-0.05)	0.00 (1.53)	-0.00 (-0.23)	0.00 (0.82)	-0.00 (-1.35)
LN_AGE	-0.01** (-2.29)	-0.00 (-0.70)	-0.01** (-2.43)	-0.00 (-0.53)	-0.01*** (-3.32)	-0.00 (-1.54)	-0.02*** (-3.52)	-0.01* (-1.83)
Observations	84,165	84,165	78,889	78,889	83,633	83,633	78,323	78,323
R-squared	0.258	0.275	0.255	0.288	0.214	0.238	0.198	0.231
Time*Style FE	YES	YES	YES	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES	YES	YES	YES

Table 9: Investors' Attention Measures - Google SVI

Event Dummy is an independent variable equal to one if the award i is announced at month t . The dependent variable is abnormal SVI calculated from Search Volume Index (SVI) data related to the award name from Google Trend. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1) Avg_12M _ASVI	(2) Avg_6M _ASVI	(3) Avg_3M _ASVI	(4) Med_12M _ASVI	(5) Med_6M _ASVI	(6) Med_3M _ASVI
Event_Month	1.62*** (7.98)	1.58*** (4.67)	1.34*** (4.20)	1.55*** (4.96)	1.65*** (5.74)	1.25** (3.96)
Observations	768	804	822	768	804	822
R-squared	0.330	0.305	0.257	0.291	0.279	0.254
Time FE	YES	YES	YES	YES	YES	YES
Award Cluster	YES	YES	YES	YES	YES	YES

Table 10: Fund Return Predictability by Award

This table presents OLS estimates of Equation (2) relating hedge fund awards to subsequent fund performances of award winner and nominee, respectively. For brevity, we only present the coefficients of Winner and Nominee dummy variables without the coefficients of the control variables. Panel B shows the coefficient of 1QHFA and 2QHFA *WINNER* when we divide *WINNER* in Panel A into two subgroups based on the award selection methodology (likewise for *NOMINEE*). Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1) N3M RETURN	(2) N6M RETURN	(3) N9M RETURN	(4) N12M RETURN	(5) N24M RETURN	(6) N36M RETURN
Panel A						
FH7 Factor Alpha						
WINNER	0.08 (0.32)	0.09 (0.22)	-0.16 (-0.30)	-0.56 (-0.78)	-2.08 (-1.51)	-1.76 (-0.89)
NOMINEE_NW	-0.21 (-1.24)	-0.28 (-1.07)	-0.69* (-1.88)	-1.21*** (-2.78)	-0.75 (-1.01)	-1.14 (-0.93)
Excess Return						
WINNER	0.08 (0.33)	0.03 (0.06)	-0.40 (-0.61)	-0.52 (-0.63)	-1.98 (-1.27)	0.13 (0.05)
NOMINEE_NW	-0.33* (-1.81)	-0.41 (-1.46)	-1.00** (-2.56)	-1.57*** (-3.24)	-0.39 (-0.44)	-1.06 (-0.77)
MPPM3						
WINNER	0.46 (0.45)	0.31 (0.34)	-0.39 (-0.44)	-0.37 (-0.46)	-1.18 (-1.57)	-0.55 (-0.73)
NOMINEE_NW	-1.51** (-2.03)	-0.91* (-1.67)	-1.29** (-2.47)	-1.49*** (-2.98)	0.10 (0.22)	-0.13 (-0.32)
MPPM4						
WINNER	0.45 (0.44)	0.39 (0.41)	-0.42 (-0.46)	-0.37 (-0.43)	-1.29 (-1.62)	-0.75 (-0.93)
NOMINEE_NW	-1.53** (-2.03)	-0.96* (-1.72)	-1.34** (-2.48)	-1.52*** (-2.92)	0.10 (0.19)	-0.10 (-0.21)
Observations	388,066	369,076	350,270	331,565	263,129	206,416
R-squared	0.301	0.320	0.324	0.320	0.316	0.295
<i>p</i> -value of difference between Winner and Nominee						
FH7 Factor Alpha	0.41	0.36	0.38	0.31	0.69	0.64
Excess Return	0.16	0.34	0.48	0.22	0.63	0.81
MPPM3	0.12	0.22	0.46	0.20	0.33	0.44
MPPM4	0.12	0.18	0.47	0.21	0.31	0.30
Time*Style FE	YES	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES	YES

Panel B						
FH7 Factor Alpha						
WINNER_1Q	0.13 (0.31)	0.09 (0.13)	-0.79 (-0.86)	-1.10 (-0.99)	-2.53 (-1.17)	-3.43 (-1.23)
WINNER_2Q	0.05 (0.15)	0.09 (0.18)	0.22 (0.36)	-0.23 (-0.28)	-1.80 (-1.16)	-0.54 (-0.22)
NOMINEE_NW_1Q	-0.31 (-1.60)	-0.55* (-1.88)	-1.00** (-2.50)	-1.54*** (-2.95)	-1.72** (-2.11)	-2.86** (-2.09)
NOMINEE_NW_2Q	-0.05 (-0.18)	0.21 (0.47)	-0.15 (-0.25)	-0.65 (-0.92)	0.94 (0.70)	2.24 (1.05)
Excess Return						
WINNER_1Q	0.10 (0.23)	0.01 (0.02)	-0.93 (-0.92)	-0.70 (-0.57)	-1.59 (-0.67)	0.27 (0.08)
WINNER_2Q	0.07 (0.23)	0.04 (0.07)	-0.07 (-0.10)	-0.41 (-0.43)	-2.23 (-1.23)	0.02 (0.01)
NOMINEE_NW_1Q	-0.42** (-2.01)	-0.83*** (-2.60)	-1.35*** (-3.19)	-1.94*** (-3.46)	-1.46 (-1.52)	-2.95** (-1.96)
NOMINEE_NW_2Q	-0.19 (-0.56)	0.33 (0.67)	-0.41 (-0.60)	-0.94 (-1.17)	1.49 (0.98)	2.66 (1.12)
MPPM3						
WINNER_1Q	0.43 (0.25)	0.07 (0.05)	-1.50 (-1.08)	-0.87 (-0.75)	-1.25 (-1.14)	-0.80 (-0.76)
WINNER_2Q	0.47 (0.37)	0.47 (0.42)	0.29 (0.29)	-0.07 (-0.07)	-1.14 (-1.25)	-0.37 (-0.39)
NOMINEE_NW_1Q	-1.84** (-2.19)	-1.68*** (-2.69)	-1.70*** (-2.99)	-1.60*** (-2.87)	-0.20 (-0.44)	-0.61 (-1.32)
NOMINEE_NW_2Q	-0.96 (-0.71)	0.44 (0.42)	-0.60 (-0.66)	-1.31 (-1.51)	0.63 (0.78)	0.79 (1.04)
MPPM4						
WINNER_1Q	0.44 (0.26)	0.07 (0.05)	-1.70 (-1.18)	-1.00 (-0.84)	-1.56 (-1.34)	-1.31 (-1.13)
WINNER_2Q	0.46 (0.36)	0.58 (0.52)	0.36 (0.35)	0.02 (0.02)	-1.12 (-1.15)	-0.35 (-0.34)
NOMINEE_NW_1Q	-1.84** (-2.16)	-1.66*** (-2.61)	-1.66*** (-2.84)	-1.51*** (-2.63)	-0.09 (-0.17)	-0.50 (-1.00)
NOMINEE_NW_2Q	-1.00 (-0.73)	0.29 (0.27)	-0.79 (-0.84)	-1.54* (-1.68)	0.42 (0.46)	0.68 (0.78)
Observations	388,066	369,076	350,270	331,565	263,129	206,416
R-squared	0.301	0.320	0.324	0.320	0.316	0.295
Time*Style FE	YES	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES	YES

Table 11: Tournament behaviour measured by fund return volatility change

The table provides the OLS estimates relating the relative mid-year fund performance *RelRnk* to subsequent fund risk-taking measured by ΔRisk . The dependent variable, ΔRisk , is the change in the fund risk variable (i.e., the standard deviation of a fund *i*'s monthly return) between the first and second halves at a year. Column (1) shows the results following the Aragon and Nanda (2012) model. Column (2) shows the results when we replace *RelRnk* with *RankDecile* in the Aragon and Nanda (2012) model and Column (3) shows the results when we further add a new interaction term between *PerfDiff* and *RankDecile*. For variable descriptions, see the appendix. Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Unit: %	(1) Aragon and Nanda (2012)	(2) Universe Rank Decile	(3) PerfDiff	(4) Aragon and Nanda (2012)	(5) Category Rank Decile	(6) PerfDiff	(7) Aragon and Nanda (2012)	(8) Universe Rank Decile	(9) PerfDiff	(10) Aragon and Nanda (2012)	(11) Category Rank Decile	(12) PerfDiff
Vol_1H_w	-0.33*** (-40.57)	-0.38*** (-43.12)	-0.40*** (-43.37)	-0.33*** (-40.48)	-0.37*** (-42.65)	-0.39*** (-45.17)	-0.33*** (-35.05)	-0.37*** (-37.05)	-0.39*** (-36.91)	-0.33*** (-35.09)	-0.37*** (-37.04)	-0.39*** (-38.70)
Flow_2H_w	-0.00 (-0.23)	-0.00 (-0.88)	-0.00 (-1.11)	-0.00 (-0.46)	-0.00 (-0.95)	-0.00 (-1.12)	-0.00 (-0.65)	-0.00 (-1.12)	-0.00 (-1.23)	-0.00 (-0.70)	-0.00 (-1.19)	-0.00 (-1.27)
RelRnk_1H	-0.36*** (-8.57)			-0.32*** (-8.30)			-0.46*** (-7.88)			-0.43*** (-7.99)		
2 Decile Group		-0.59*** (-11.90)	-0.28*** (-4.23)		-0.48*** (-9.86)	-0.29*** (-4.51)		-0.56*** (-8.41)	-0.32*** (-3.51)		-0.50*** (-7.67)	-0.31*** (-3.62)
3 Decile Group		-0.70*** (-14.01)	-0.31*** (-4.53)		-0.63*** (-13.40)	-0.30*** (-5.00)		-0.77*** (-11.57)	-0.43*** (-4.76)		-0.74*** (-11.79)	-0.40*** (-4.88)
4 Decile Group		-0.79*** (-16.36)	-0.28*** (-4.24)		-0.68*** (-14.56)	-0.41*** (-6.73)		-0.88*** (-13.60)	-0.47*** (-5.11)		-0.77*** (-12.23)	-0.51*** (-6.24)
5 Decile Group		-0.82*** (-17.12)	-0.37*** (-5.69)		-0.74*** (-16.38)	-0.36*** (-6.21)		-0.96*** (-14.74)	-0.48*** (-5.40)		-0.86*** (-14.26)	-0.49*** (-6.20)
6 Decile Group		-0.81*** (-16.68)	-0.37*** (-5.71)		-0.70*** (-15.29)	-0.35*** (-6.14)		-0.89*** (-13.59)	-0.45*** (-5.10)		-0.83*** (-13.58)	-0.47*** (-6.17)

7 Decile Group	-0.74*** (-15.24)	-0.31*** (-4.67)		-0.75*** (-16.62)	-0.40*** (-6.93)		-0.92*** (-14.41)	-0.63*** (-7.10)		-0.89*** (-14.50)	-0.54*** (-6.91)	
8 Decile Group	-0.82*** (-16.77)	-0.43*** (-6.55)		-0.66*** (-14.10)	-0.28*** (-4.60)		-0.90*** (-13.59)	-0.44*** (-4.88)		-0.77*** (-12.25)	-0.38*** (-4.60)	
9 Decile Group	-0.70*** (-13.48)	-0.14** (-2.03)		-0.61*** (-12.75)	-0.24*** (-3.75)		-0.74*** (-10.84)	-0.24** (-2.43)		-0.70*** (-10.78)	-0.31*** (-3.48)	
10 Decile Group	-0.46*** (-7.54)	0.16 (1.24)		-0.40*** (-7.06)	0.13 (1.12)		-0.56*** (-6.78)	-0.04 (-0.25)		-0.50*** (-6.37)	0.01 (0.05)	
PerfDiff from DecileTop		0.09*** (9.30)			0.10*** (8.76)			0.09*** (6.96)			0.10*** (7.04)	
1 Decile Group*PerfDiff		Base Rank (omitted)			Base Rank (omitted)			Base Rank (omitted)			Base Rank (omitted)	
2 Decile Group*PerfDiff		0.03 (0.83)			0.08** (2.16)			0.06 (1.38)			0.08* (1.87)	
3 Decile Group*PerfDiff		-0.00 (-0.06)			0.00 (0.05)			0.04 (0.76)			0.01 (0.11)	
4 Decile Group*PerfDiff		-0.18*** (-2.99)			0.10* (1.68)			-0.02 (-0.29)			0.12* (1.88)	
5 Decile Group*PerfDiff		-0.08 (-1.32)			-0.06 (-1.10)			-0.11* (-1.66)			-0.02 (-0.37)	
6 Decile Group*PerfDiff		-0.06 (-1.06)			-0.03 (-0.70)			-0.05 (-0.91)			-0.01 (-0.15)	
7 Decile Group*PerfDiff		-0.06 (-1.51)			-0.03 (-0.71)			0.10** (2.03)			0.01 (0.11)	
8 Decile Group*PerfDiff		-0.02 (-0.71)			-0.07** (-2.02)			-0.09*** (-2.62)			-0.06 (-1.48)	
9 Decile Group*PerfDiff		-0.13*** (-7.24)			-0.08*** (-3.74)			-0.10*** (-4.16)			-0.07*** (-3.14)	
10 Decile Group*PerfDiff		-0.10*** (-8.79)			-0.10*** (-8.48)			-0.09*** (-6.29)			-0.10*** (-6.55)	
Constant	0.25 (1.50)	0.81*** (4.70)		0.18 (1.12)	0.69*** (4.10)		0.28* (1.68)	0.92*** (5.18)		0.23 (1.42)	0.78*** (4.56)	
Observations	37,761	37,761	37,761	37,761	37,761	37,761	25,031	25,031	25,031	25,031	25,031	25,031
R-squared	0.320	0.329	0.335	0.319	0.327	0.334	0.319	0.328	0.333	0.319	0.327	0.333
Fund of Funds Included	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO
PerfDiff from Decile Top Base	Universe	Universe	Universe	Style	Style	Style	Universe	Universe	Universe	Style	Style	Style

Time*Style FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Table 12: Change in Tracking Error Volatility from 1st half to 2nd half by Winner and Nominee Funds Group

We use the tracking error volatility analysis designed by Kaniel and Parham (2017). The table below shows the average differences in tracking error volatility between first and second half of year from 2002-2016 per winner, nominee and each decile group (similar to fund of funds). We find some evidence that the winner and nominee fund groups increase their fund tracking error volatility during the second half and this risk increase is apparent in the winner and nominee groups whose performance difference between each other is relatively small as shown in Column (3) and (4). We run our model including and excluding Fund of Hedge Fund (“FOF”) data in our fund sample dataset because it is relatively difficult for FOF to change their fund risk profile within a one-year period and get the similar result.

Unit: % Group	(1) Sample including FOF	(2) Sample excluding FOF	PerfDiff Mean	(3) Sample including FOF	(4) Sample excluding FOF
WINNER	0.22*** (3.20)	0.22** (2.66)	Above	-0.15 (-0.56)	-0.12 (-0.42)
			Below	0.35*** (4.07)	0.35*** (4.53)
NOMINEE	0.15** (2.21)	0.20** (2.49)	Below	0.10* (1.78)	0.14** (2.22)
			Above	-0.05 (-0.39)	-0.02 (-0.16)
10 Decile Group	-0.03 (-0.28)	-0.07 (-0.58)		-0.02 (-0.18)	-0.06 (-0.51)
9 Decile Group	-0.08 (-1.62)	-0.03 (-0.46)		-0.06 (-1.27)	-0.02 (-0.36)
8 Decile Group	-0.06 (-2.44)	-0.06 (-1.80)		-0.05 (-1.71)	-0.05 (-1.24)
7 Decile Group	-0.02 (-0.48)	-0.04 (-1.17)		-0.01 (-0.16)	-0.03 (-0.86)
6 Decile Group	-0.05 (-1.20)	-0.02 (-0.57)		-0.04 (-0.88)	-0.02 (-0.35)
5 Decile Group	0.01 (0.34)	-0.02 (-0.35)		0.02 (0.60)	-0.01 (-0.18)
4 Decile Group	0.01 (0.32)	0.01 (0.22)		0.03 (0.61)	0.02 (0.32)
3 Decile Group	-0.02 (-0.75)	-0.02 (-0.59)		-0.01 (-0.20)	-0.02 (-0.33)
2 Decile Group	-0.03 (-0.88)	-0.11* (-2.13)		-0.02 (-0.39)	-0.10 (-1.61)
1 Decile Group	-0.10 (-1.35)	-0.07 (-0.91)		-0.08 (-1.11)	-0.06 (-0.78)
PerfDiff					
Winner - Mean				8.44	8.50
Winner - SD				8.80	8.88
Nominee - Mean				8.73	8.81

Nominee - SD				8.54	8.63
No of Fund-Year	57,441	35,930		56,673	35,190
Winner	323	313	Above	77	74
			Below	134	130
Nominee	1,069	1,030	Below	263	254
			Above	150	145

Table 13: HFA effect on flow excluding Repeated Winner

As a robustness check for our test of “Award Effect on Fund Flows”, we add two new variables to Equation (1) which are (1) *WR_L12M* and (2) *WR_N_M* to take out all the fund flow effect from the award(s) that an HFA winner receive from any award organizations, both (1) in the 12-month period prior to the HFA announcement event and (2) in the following months until our subsequent flow observation period. Panel B shows the coefficient of 1QHFA and 2QHFA *WINNER* when we divide *WINNER* in Panel A into two subgroups based on the award selection methodology (likewise for *NOMINEE*). For variable descriptions, see the appendix. Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1) N3M FLOW	(2) N6M FLOW	(3) N9M FLOW	(4) N12M FLOW	(5) N24M FLOW
Panel A					
WINNER	5.26*** (4.24)	10.24*** (4.46)	12.16*** (3.95)	16.49*** (3.55)	23.88* (1.75)
NOMINEE_NW	2.55*** (3.84)	5.65*** (4.06)	6.44*** (3.17)	10.28*** (3.09)	13.85* (1.65)
LTM_RETURN_w	0.25*** (31.92)	0.51*** (29.28)	0.76*** (25.98)	0.98*** (23.47)	1.99*** (16.25)
LTM_RETURN_w_sq	-0.00*** (-7.44)	-0.00*** (-6.62)	-0.00*** (-6.33)	-0.01*** (-5.89)	-0.02*** (-5.57)
LTM_VOL_w	0.06 (1.63)	-0.15 (-1.52)	-0.50*** (-2.75)	-0.89*** (-3.13)	-2.15** (-2.02)
LTM_FLOW_w	0.03*** (31.73)	0.05*** (22.46)	0.06*** (17.04)	0.07*** (13.66)	0.11*** (7.22)
LN_AUM	-0.78*** (-15.64)	-2.70*** (-18.04)	-5.37*** (-18.01)	-8.55*** (-17.36)	-26.07*** (-14.28)
LN_AGE	-1.81*** (-15.51)	-4.31*** (-14.69)	-6.95*** (-13.29)	-10.02*** (-12.38)	-24.93*** (-9.79)
WR_L12M	1.76*** (2.94)	3.66*** (2.69)	5.75** (2.57)	6.39* (1.96)	14.36 (1.56)
WR_N_M t:t+k-1	5.33*** (5.34)	13.28*** (6.20)	24.63*** (6.99)	38.81*** (7.19)	99.54*** (7.06)
Observations	373,373	350,760	329,547	309,134	238,205
R-squared	0.097	0.104	0.107	0.108	0.119
Winner	402	369	354	326	241
Nominee	1021	940	896	8444	623
Winner Record L12M	3958	3720	3458	3219	2253
Winner Record N_M	799	1890	2776	3514	5321
Time*Style FE	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES

Panel B

WINNER_1Q	6.26*** (2.80)	11.95*** (2.74)	10.80* (1.94)	16.21* (1.90)	1.40 (0.10)
WINNER_2Q	4.63*** (3.28)	9.18*** (3.55)	13.00*** (3.44)	16.67*** (2.86)	39.39* (1.88)
NOMINEE_NW_1Q	3.71*** (4.21)	7.92*** (4.44)	8.48*** (3.58)	12.21*** (3.00)	13.57 (1.21)
NOMINEE_NW_2Q	0.60 (0.68)	1.68 (0.84)	3.00 (0.93)	7.07 (1.46)	14.35 (1.34)
Observations					
R-squared	0.097	0.104	0.107	0.108	0.119
Winner_1Q	153	140	135	127	98
Winner_2Q	249	229	219	199	143
Nominee_1Q	640	599	563	528	395
Nominee_2Q	381	341	333	316	228
Time*Style FE	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES

Table 14: The Effect of HFA on the subsequent 12-month fund flows compared with tighter control group

In Table 5, we use all fund-month sample data as the control group. As a robustness check, we use (1) only top-ten funds based on the past 12 months return in each category (2) only top-five and (3) nominees, as our control group. The dependent variable is the next twelve month fund flow which measures the percentage growth of a fund over t to $t + 12$ period. Time and style fixed effects are included in each regression and standard errors are clustered at the fund level and reported in parentheses. The superscripts *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

VARIABLES	(1) Top10	(2) Top5	(3) Top10	(4) Top5	(7) Nominee	(8) Nominee
WINNER	27.77*** (2.96)	24.96** (1.98)	20.62** (2.42)	19.91* (1.76)	15.85** (1.99)	14.55* (1.86)
NOMINEE_NW	11.72 (1.45)	5.59 (0.48)	5.44 (0.66)	3.52 (0.30)		
LTM_RETURN_w	0.64* (1.68)	0.56 (1.40)	0.47 (1.59)	0.59 (1.63)	0.59 (1.44)	0.88*** (2.60)
LTM_RETURN_w_sq	-0.00 (-0.77)	-0.01 (-1.24)	-0.00 (-0.39)	-0.00 (-0.84)	-0.01 (-0.82)	-0.01 (-1.14)
LTM_VOL_w	-3.79*** (-2.72)	-3.01* (-1.83)	-3.36** (-2.55)	-3.78** (-2.36)	0.05 (0.03)	-1.23 (-0.72)
LTM_FLOW_w	0.09*** (4.82)	0.11*** (4.36)	0.09*** (3.80)	0.10*** (3.93)	0.07*** (2.67)	0.06** (2.07)
LN_AUM	-12.12*** (-5.33)	-16.07*** (-4.44)	-7.87*** (-3.25)	-11.84*** (-3.79)	-12.36*** (-2.75)	-13.39*** (-2.65)
LN_AGE	-16.63*** (-3.75)	-14.28** (-2.03)	-22.27*** (-5.11)	-21.29*** (-4.16)	-10.55* (-1.82)	-11.09* (-1.85)
Observations	12,194	6,511	2,652	1,770	984	847
R-squared	0.307	0.390	0.248	0.312	0.396	0.387
Time*Style FE	YES	YES	YES	YES	YES	YES
Fund Cluster	YES	YES	YES	YES	YES	YES
Fund-Month data whose fund style is j at a month t when no award is given to any fund whose style is j	KEEP	KEEP	DROP	DROP	KEEP	DROP

Robust t-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Figure 1: HFA Effect on Cumulative Fund Flows

This figure shows the trend of coefficient of indicator variable winner and nominee as shown in Table 5 (Chart A for Panel A and Chart B for Panel B in Table 5). The coefficient suggests the additional cumulative fund flow the winner and nominee receive following the award announcement conditional on the other control variables.

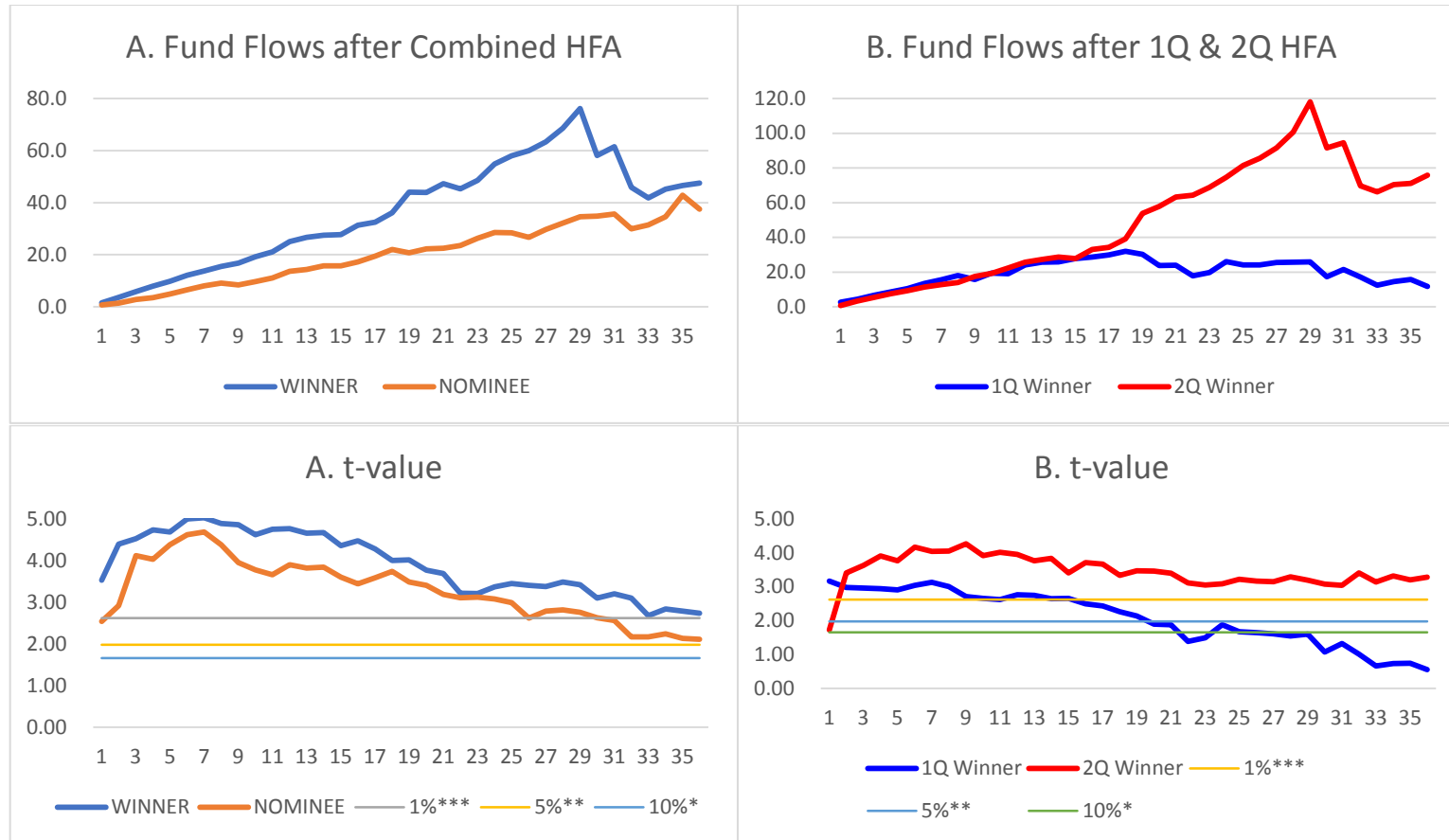


Figure 2: HFA Spillover Effect on Fund Flows of Fund Family over 36 months after the event

This figure shows the trend of coefficient of indicator variable *Winner Family* as shown in Table 6 compared to *Winner* as shown in Table 6 (Chart A for Panel A and Chart B for Panel B in Table 6). The coefficient suggests the additional cumulative fund flow the *Winner Family* receive following the award announcement conditional on the other control variables.

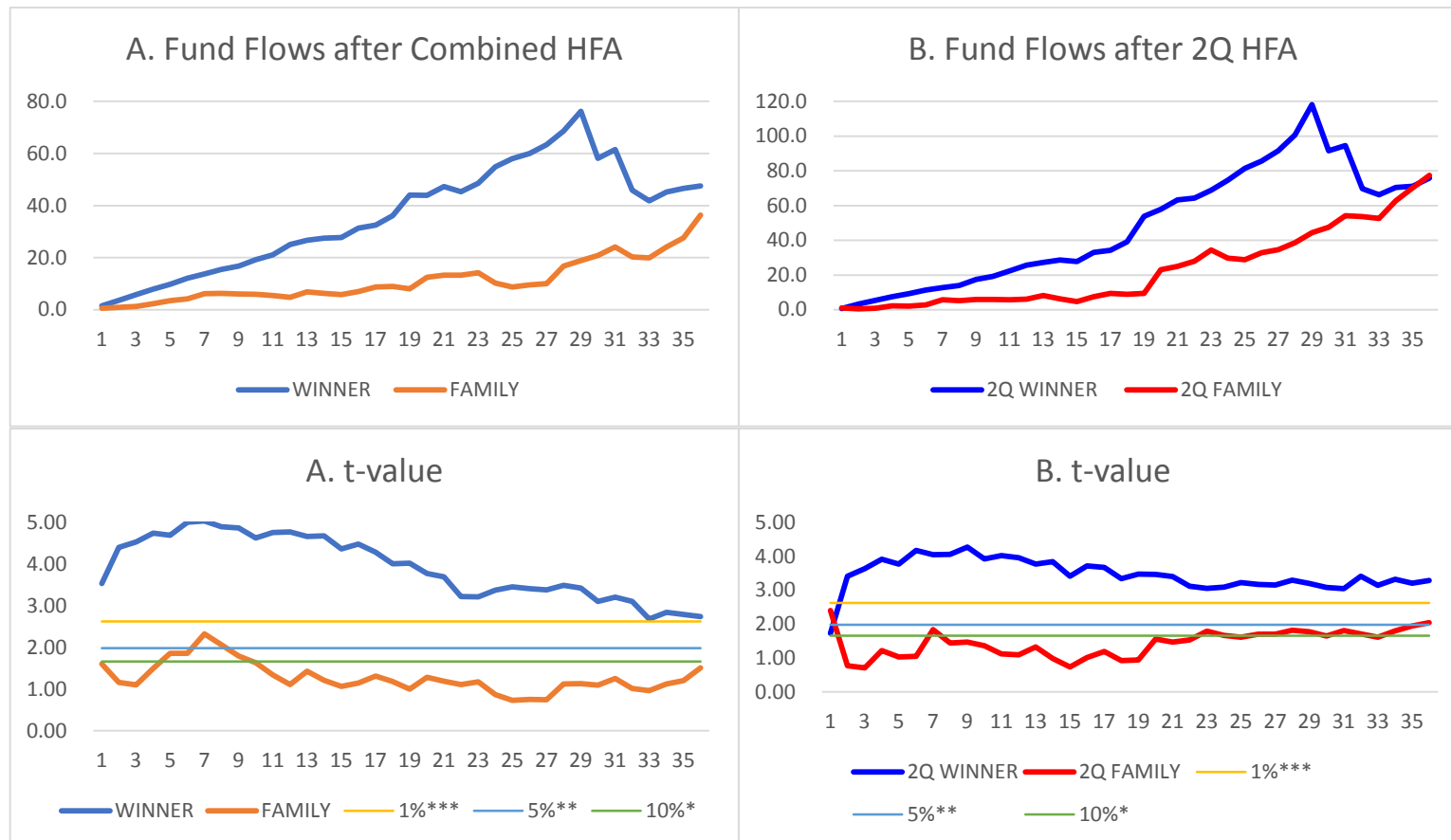


Figure 3: Event news dissemination channels & Investor's decision-making process

The figure shows digestion mechanisms of award information by investors after awards events. The HFA event captures the attention of a wide array of investors through diverse information dissemination channels such as news media, prime broker's capital introduction team, the award organizers and the HFA winners' own marketing channels. The examples of media channels we find to have published the HFA news are the award organizer's direct publication (e.g. its own website, e-newsletter, paper magazine), professional news (e.g. Bloomberg, CNBC, PR Newswire, Business Newswire, Wealth Management) or even general daily newspapers (e.g., City AM). In addition, the HFA winner firms often highlight their awards in their website, e-mail banner or marketing materials in a way that is similar to the way mutual fund firms often cite Morningstar ratings (if they get five-star) in their advertising.

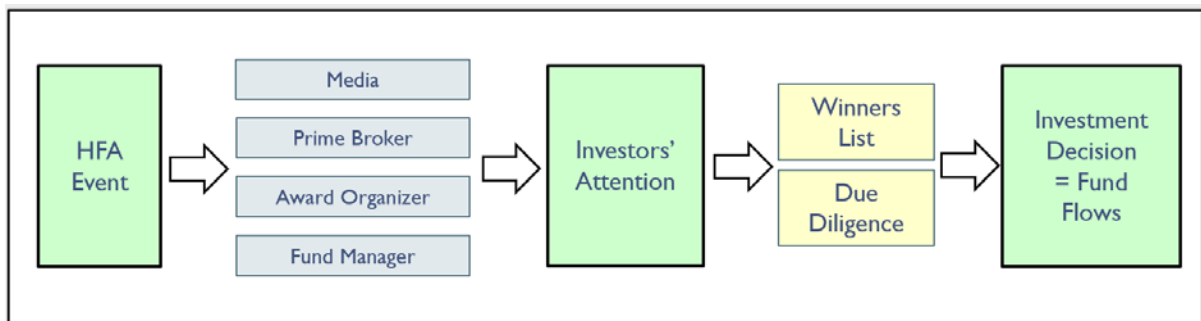


Figure 4: The Example of Google SVI

For example, if we type in “EurekaHedge Awards” in Google Trends, we find the historical monthly Google SVI data.

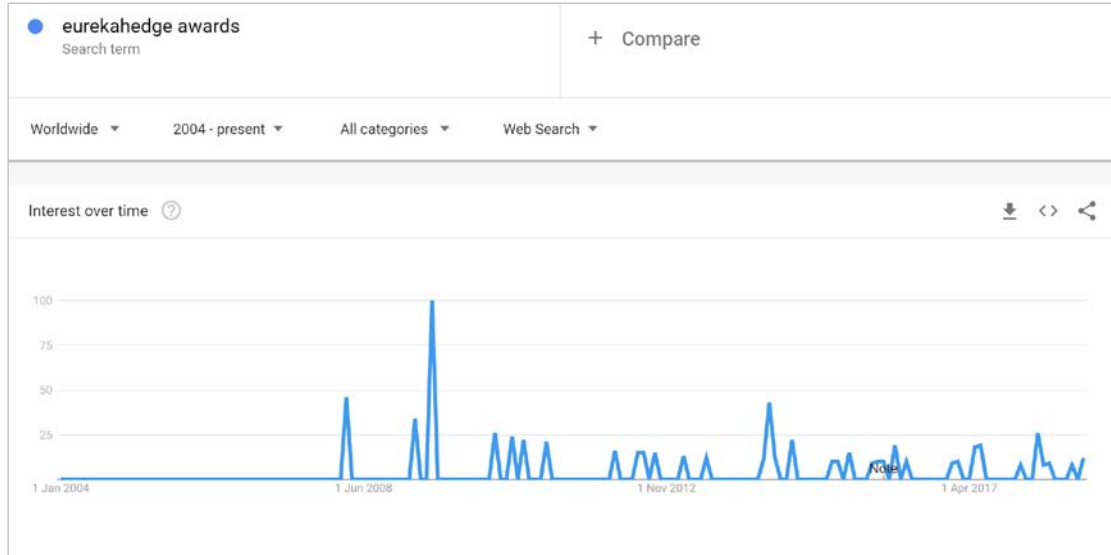
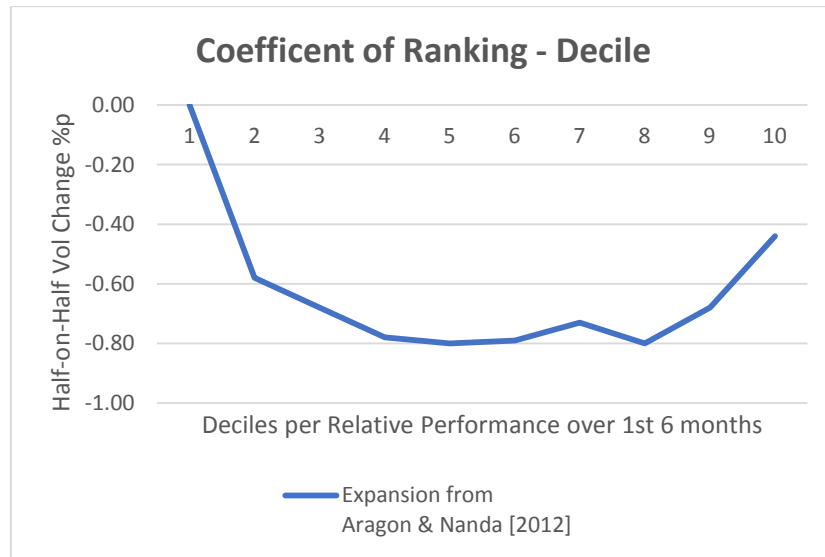


Figure 5: Risk change from first to second half of year as a function of Relative Rank

If we graph the risk-taking per each decile group in Table 12 Column (2), we find a U-shape as shown in the below chart, consistent with the previous literature on mutual funds (Hu, Kale, Pagani, and Subramanian, 2011). Decile 1 is the base in the regression.



Appendix

Table A1: Award organizers website - Award selection method and panel judges list

The award organizers publicly open in their website the information about the award selection methodology and the full list of panel judges (in case of 2QHFA).

HFM (owned by Pageant Media) acquired HFI (Hedge Fund Intelligence, a sister company of Euromoney) in January 2017. HFR (Hedge Funds Review owned by Infopro Digital Risk Limited, a publisher of Risk.net magazine) has partnered with BarclayHedge and shares its database to identify the best performing European hedge funds. Allocator is a trademark of HedgePo Limited which provides online business networking services connecting institutional investors with investment funds. CNBC is the exclusive broadcasting partner of the award event. Allocator announced a partnership with Preqin to integrate the fund data in April 2018.

Award Name	Organizer	Website
1QHFA List		
AsiaHedge Awards	HFI	hfm.global/asiahedge
EuroHedge Awards	HFI	hfm.global/eurohedge
Absolute Return Awards	HFI	hfm.global/absolutereturn
2QHFA List		
EurekaHedge Asian Hedge Fund Awards	Mizuho	www.eurekahedge.com/NewsAndEvents/Eurekahedge_Awards
HFM European Hedge Fund Performance Awards	HFM	hfmeuropeanperformanceawards.awardstage.com/#Panel
HFM US Hedge Fund Performance Awards	HFM	www.eiseverywhere.com/ehome/258530/590048
Hedge Funds Review European Performance Awards	HFR	www.hedgefundsreviewawards.com/static/judging-panel
Investors Choice Awards (London, Hong Kong, New York)	Allocator	www.investorschoiceawards.com/methodology.html

Table A2: Summary of Award Selection Method

Award Name	Winner	Nominee
AsiaHedge Awards	The highest returns - so long as they are within 25% of the best Sharpe ratios within their nominated peer groups	The strongest Sharpe ratios, so long as they also beat the median returns in their relevant peer groups and are also within 10% of their high-water mark that was set before the start of the 12-month period under review
Absolute Return Awards		
EuroHedge Awards		
EurekaHedge Asian Hedge Fund Awards	Winners are selected by the panel of judges, weighing in on both quantitative and qualitative aspects of the funds in question.	Nominees are selected through voting by an independent panel of judges
HFM European Hedge Fund Performance Awards	Judges will take part in a judging conference call, where the winners will be decided, with one expert per category being asked to summarize the judges' comments and provide any additional input	
HFM US Hedge Fund Performance Awards		
Hedge Funds Review European Performance Awards	The judging panels consider the results of the quantitative analysis and select a shortlist and winner in each category. In selecting the winning funds, the judges consider the quantitative analysis as well as the funds' qualitative experience and expertise.	The process begins by running a quantitative screen where funds are ranked on the basis of their returns, Sharpe and Sortino ratios and downside deviation
Investors Choice Awards - Europe, US, Asia	The judges review manager profiles on the Allocator portal and independently assign a score from 1 to 10 in each of the qualitative assessment areas for each fund. Average scores for the qualitative and quantitative sets of criteria are then calculated and combined in equal measure to reach the total score. This total score determines the winner in each category.	A set of qualitative criteria covering the investment process, risk management framework and depth of research team, as well as a set of quantitative performance measures including annualized returns, volatility and maximum drawdown.

Table A3: Variable descriptions

Variable name	Description
<i>WINNER</i>	Dummy variable equal to one if the fund wins the HFA and zero otherwise
<i>NOMINEE_NW</i>	Dummy variable equal to one if the fund is nominated but does not win the HFA (thus, non-winner-nominee).
<i>LTM_RETURN_w</i>	The previous 12 months lag raw return
<i>LTM_RETURN_w_s</i>	The previous 12 months lag raw return squared (to control for q convexity in the performance-flow relationship)
<i>LTM_VOL_w</i>	The standard deviation of a fund's previous 12 months monthly raw returns
<i>LTM_FLOW_w</i>	The previous 12 months fund flow to measure asset inflow and outflow, following Sirri and Tufano (1998) (to control for "persistent-flow" effect)
<i>LN_AUM</i>	The natural logarithm of the fund's AUM in millions of US dollars
<i>LN_AGE</i>	The natural logarithm of the fund's age in years calculated as the difference between the data date and the date the fund first appeared in the TASS database
<i>LN_FM_AUM</i>	The natural logarithm of the fund family's AUM in millions of US dollars
<i>LN_FM_AGE</i>	The natural logarithm of the fund family's age in years calculated as the difference between the data date and the date the fund family first appeared in the TASS database
<i>FM_WINNER_S</i>	Binary indicator equal to one if the fund belongs to the family hosting the award winning fund and has the same investment strategy as the winner fund.
<i>FM_NOMINEE_NW_S</i>	Binary indicator equal to one if the fund belongs to the family hosting the award nominating fund and has the same investment strategy as the nominee fund.
<i>PB_Tier</i>	We sort prime brokers (PBs) listed in TASS in descending order by the 2017 prime brokers market share data to find their rank and classify PBs in the top three ranks as Tier 1, those in ranks 4-10

	as Tier 2, and those below the tenth rank as Tier 3.
<i>WINNER</i>	Binary indicator equal to one if any fund managed by the
<i>MANAGER</i>	management-company i receives a winner award at month t .
<i>RelRnk_1H</i>	Fractional rank of the fund's raw return over the first six months
	relative to other funds during the same period
<i>Vol_1H_w</i>	Volatility is the lag fund risk variable measured by the standard
	deviation of fund returns during the first six months. We include
	this lagged risk in our model to control for mean reversion in risk
	changes.
<i>Flow_2H_w</i>	Flow is the percentage net flow during the second half of the year.
	We include second-period net flows as a control variable to
	capture any negative effect from new money flows on fund risk
	if the fund manager takes time to redeploy the new capital.
<i>RankDecile_j</i>	Ten dummy variables based on the fractional rank of the fund's raw
	return over the first six months relative to other funds.
<i>PerfDiff</i>	Difference in the first six month returns between the fund i and the
	top performance fund j in the decile group where the fund i
	belongs.
<i>WR_L12M</i>	Dummy variable equal to one if the HFA winner fund receives any
	other award(s) in the 12-month period prior to the HFA
	announcement event at month t and zero otherwise
<i>WR_N_M $t:t+k-1$</i>	Dummy variable equal to one if the HFA winner fund at month t
	receives any other award(s) in the following months until our
	subsequent flow observation period $t+k$.
