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## Abstract

We study whether hedge funds make charitable donations to further their business interests. We find that donations are driven by poor fund flows and performance. Post-donation, donor funds experience lower outflows compared to matched non-donors. One-off donations and donations to charities which hold fundraising events catering to the hedge fund community are more likely to mitigate outflows after poor performance. These findings are consistent with strategic motivations driving at least some donations. While the economics of donations initially appear quite favorable to the hedge funds, the benefits from donations are not scalable. Moreover, investors punish donors through greater redemptions if poor performance persists post-donation.

Keywords: Hedge funds, Philanthropy, Trust, Charitable Donations, Capital Formation, Corporate Social Responsibility (CSR)

JEL Classification: D64, G23, G41

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**Are hedge funds' charitable donations strategic?**

Delegated portfolio management inherently requires principals to place trust in the ability and integrity of agents who manage money on their behalf. Gennaioli, Shleifer, and Vishny (2015) theoretically model investors delegating money management to professionals based on trust, which helps reduce investors' perception of the riskiness of their investments. Arguably, investor trust is even more critical in the hedge fund industry, which is often characterized as lightly regulated and highly opaque. Despite the theoretical framework in Gennaioli, Shleifer, and Vishny (2015), there is little empirical work on how fund managers can acquire and retain the trust of their investors.[1] We fill this void in the literature by conducting a comprehensive examination of one tool, namely charitable donations, which can be used by hedge funds to gain investors' trust.[2] Specifically, we examine if hedge funds use donations strategically to help stimulate investment and increase net fund flows, particularly after periods of poor fund performance when investors are more likely to lose trust in their managers' ability.

In addition to capital raising, funds may use the goodwill and connections generated by charitable donations to obtain valuable private information that they can use to improve their performance. For example, fund managers may use charitable events to obtain and refine their investment ideas through discussions with fellow managers, or collect stock-specific information from corporate executives and industry professionals that have private information about product markets (think of doctors/researchers involved in drug innovations who possess valuable information about clinical trials).

Motivated by this background, we examine if hedge funds donate strategically to increase net flows and to improve the performance of their funds, and thereby meet their objective function

[1] There are a few studies examining the *loss* of trust in the money management industry, e.g. Gurun, Stoffman, and Yonker (2018). We discuss how our study complements this work later in Section I.

[2] Gambetta and Przepiorka, 2014, argue that "[s]imple, easily observable acts of sharing (or not sharing), give an indication of actors' unobservable but relevant traits… Thus, acts of generosity may have arguably been the first signs of reliability in cooperation, from which actors were able to infer others' trustworthiness." (also see Przepiorka and Liebe, 2016, for other examples of the links between trustworthiness and generosity).

to maximize the assets under management. Prior literature indicates hedge fund investors exhibit return-chasing behavior (e.g., Fung et al., 2008; Getmansky et al., 2010; and Jorion and Schwarz, 2015). We believe that poorly performing funds with dwindling flows have stronger strategic incentives to donate. Subsequent to poor fund performance, such funds are more likely to explore avenues to retain investors' capital and/or improve their performance. We argue that one such avenue can be for the managers of these poorly performing funds to make charitable donations.

To explore how funds may use donations to improve performance and stimulate net flows, we consider donations made to charities that hold fundraising events catering to the hedge fund community. We identify such charities by looking for cases where funds make donations specifically ear-marked for fundraising events held by charities, such as a gala. The idea is that such events would provide a venue for donating managers to network with potential investors to help raise capital, and with other donors who may have value-relevant information for security selection. We would expect any effects of donations on fund flows and performance to be more pronounced in cases where donations are made to charities that hold such fundraising events.

We also identify another subsample of donations that is more likely to be strategic compared to other donations: one-off donations. One-off donations are donations made to a charity on an infrequent basis, and contrast with recurring donations, which are made regularly (often on an annual basis) by a fund to the same charity. One of the strategic aspects of donating in our study relates to "when" managers donate, i.e., the timing of donations. One-off donations allow managers to donate exactly when they need to stimulate net flows and/or to improve fund performance.[3] This approach is similar to the one used by Cohen, Malloy, and Pomorski (2012) for identifying informative insider trades by focusing on the non-routine trades by insiders.

[3] It is possible that recurring donations are made for strategic reasons, such as building goodwill among investors over the long term. However, it is unlikely that such donations would reflect short-term circumstantial needs of funds (i.e. subsequent to poor performance and/or outflows). In our analysis, we will consider cumulative donation amounts as well, which would account for recurring donations over time.

Our study uses a large sample of 17,486 charitable donations by 2,614 hedge funds between January 1994 and December 2016. We consider personal donations made by managers as well as donations that managers make through their companies and foundations. Throughout the paper, we refer to these donations interchangeably as either funds' or managers' donations.[4] We obtain information regarding these charitable donations from NOZA, the world's largest searchable database of such donations. One of the advantages of this data is that it only includes charitable donations and is not confounded by political donations and lobbying activities which have been examined in previous studies (see, for example, Faccio, 2006; Boubakri et al., 2012; and Unsal, Hassan, and Zirek, 2017).

One of the premises for our hypothesis regarding higher flows subsequent to donations is that investors need to be aware of hedge funds' charitable donations. There are at least three reasons why we believe investors have this information. First, NOZA aggregates donation information from charities' annual reports, which should also be available to fund investors. Consequently, investors who read these reports will be aware of fund donations. Second, one of our subsample analyses shows that donations made to charities which hold events catering to the hedge fund community (termed event charities) are more likely to be strategic. In these cases, there is an additional channel through which investors may find out funds' charitable donations: the fundraising events. Finally, there is also anecdotal evidence of hedge funds and their investors attending fundraisers organized by the same charity (e.g., Paul Tudor Jones, manager of Tudor Capital, attended the same fundraising event as Glenn Dubin, the manager of the fund of hedge funds, Dubin and Swieca Capital Management, which was an early investor in Tudor Capital).[5]

We merge the NOZA data with funds' characteristics, assets under management, and performance from the widely used Lipper TASS commercial hedge fund database using fund

[4] Although we present results for the combined sample of donations, they hold broadly for both types of donations.
[5] For details, see https://www.businessinsider.com/dubin-breast-center-benefit-2012-12.

company names and manager names.[6] Throughout our paper, we focus on larger donations (specifically the top quartile of donations by size, or donations larger than $12,500) as they are more likely to be associated with strategic intent and materially influence fund investors. The average donation is about $67,354 for these large donations, which represents a significant proportion (about 17% on average) of a fund's annual income from asset-based management fees.

Modelling the determinants of donations, we find funds' poor performance and low net flows are two major motivations for fund managers' charitable donations. The probability for the managers of poorly performing funds (funds with bottom quartile performance) to donate is almost double that for the managers of relatively well-performing funds (7.2% to 11.3% for worst performers compared to 3.8% to 5.6% for the rest). In addition, the donation probability for the funds with the lowest net flows (those in the bottom quartile) is about 40% greater compared to the other funds with higher net flows (6.6% to 7.4% for funds with lowest flows compared to 4.9% to 5.2% for the rest). These findings are striking as prior studies on charitable giving suggest financial stability is a strong determinant of giving. Relatedly, tax benefits from charitable donations, another motivation for giving, are unlikely to be driving our results, as such benefits are more valuable after good performance.[7] The fact that fund managers are more likely to give when their funds are doing badly is suggestive of non-tax driven strategic intent behind their gifts. Specifically, poor performers with lower flows have more incentive to donate as the marginal utility of additional flows is higher compared to that for their peers with better performance and higher flows.

Furthermore, several fund characteristics significantly related to the likelihood of fund managers donating are also consistent with managers' incentives to improve net flows and fund performance. First, both management and incentive fees are positively related to the probability of

[6] We also include donations by foundations in our sample but can only identify such donations if the foundation name includes the manager name.

[7] The two most common drivers for giving by high net worth individuals, as identified by *The 2012 Bank of America Study of High Net Worth Philanthropy*, are (1) "Being Moved at How a Gift Can Make a Difference" (74% of respondents) and (2) "Feeling Financially Secure" (71% of respondents). Tax benefits were also a common driver of donations (32% of respondents).

donation. If donations can help bring in more capital or improve fund performance, managers of funds with higher fees can earn greater compensation from donating. Second, the use of high-water marks is also positively related to donations, consistent with the possibility that poorly performing managers may want to attract new investors from whom they have a better chance of earning the incentive fee (since new flows will have a lower high-water mark). Third, managers of funds with shorter lockup periods are more likely to donate. This is also intuitive as, all else equal, poor performers with shorter lockups face greater threat of capital withdrawal after poor performance.

If there are strategic intentions behind these donations, we should expect donor funds to benefit through improved fund performance and flows. We next examine the effects of donations to test this prediction. For our analysis, we use a matched sample and a difference-in-differences (DiD) approach to explicitly control for net flows and performance prior to donations. We observe that donations are followed by about 5.6% greater annualized net flows compared to matched non-donating peers. More specifically, while both donating funds and matched peers experience outflows in the post-donation period, donating funds mitigate much of these outflows and experience 5.6% lower outflows annually. The lower outflows result in better survival chances for the donating funds, as donors experience significantly lower mortality compared to their matched peers. The performance of the donating funds, however, is no different from that of matched non-donating peers. Therefore, it appears that strategic donations by poor performers mitigate outflows as intended, but do not seem to help managers to acquire performance-enhancing information.

We also test our hypotheses that nonrecurring, one-off donations and donations to event charities are more likely to be strategic by examining the determinants and effects for these types of donations separately. Examining determinants, we find that these one-off, nonrecurring donations and donations to event charities (termed event donations) are significantly more likely to be made by managers of funds with poor performance and lower net flows, compared to managers making recurring donations and non-event donations. In terms of the effects of donations, nonrecurring donations and event donations are associated with significantly higher net flows into

donating funds compared to recurring and non-event donations, which do not have a significant effect on flows. These findings further corroborate the strategic motives underlying fund donations.

While documenting an improvement in net flows for donating funds compared to a matched sample of non-donating funds is suggestive of donations engendering investor trust, we acknowledge several potential endogeneity concerns associated with our analyses. First, reverse causality may be driving our findings. That is, managers time their donations based on their knowledge of higher net flows in the future, which can lead to the observed positive correlation between donations and future flows. Second, omitted variables can explain our results. For example, coinciding with donations, managers may be engaged in several other activities that can help attract capital. These include serving on the boards of charities, investing in a socially responsible manner, and marketing funds in other ways. Consequently, our documented effects of donations on net flows may be driven by these activities rather than charitable donations.

To mitigate the reverse causality concern, we rely on evidence pertaining to our sample of event donations. In examining the effects of such donations, we find evidence that they garner significantly higher net flows compared to non-event donations. For reverse causality concern to hold, there would need to be heterogeneity in the managers' ability to foresee flows in the two subsamples, or for managers to choose to donate disproportionately to event charities in anticipation of higher future net flows. Arguably, this possibility is unlikely to hold, hopefully mitigating concerns regarding reverse causality.

To mitigate the omitted variable concern, we collect information about managers serving on boards of charities and engaging in socially responsible investing, activities that could also influence fund flows and performance. We repeat our analyses for the effects of donations on flows and performance after splitting the sample based on these "virtue-signaling" activities of fund managers. We observe that our main finding of greater net flows after donations continues to hold for the subsamples based on fund managers' board representation as well as their socially responsible investments. The fact that we find managers benefitting from higher flows after

donations regardless of their other activities provides us some reassurance that it is unlikely that these omitted variables drive our results. However, we acknowledge it is not possible to control for all public-facing and marketing activities, many of which are unobservable, especially in the hedge fund industry where disclosure requirements are sparse.

Since donations help fund managers to attract and retain capital, a natural question is why we do not observe all managers donating. On one hand, donations appear to be economically beneficial. Back-of-the-envelope calculations reveal that the median larger donation of $20,000 helps reduce the outflows by about 5.6% for a poorly performing median fund with about $28 million in assets. This in turn is associated with an increase in management fee earnings of a manager by $23,520 [5.6% × $28 million × 1.5% (median management fee)]. These figures suggest that these donations are a "good deal," and that is without even factoring in incentive fees, or fees in subsequent years. On the other hand, there can be potential costs associated with donations that offset the benefits of higher flows. We find that donating funds are more severely punished for subsequent poor performance than non-donating funds. This is again consistent with the premise that while donations may foster trust that helps mitigate outflows in the short term, continued poor performance is penalized more severely by investors by 13% to 20% greater annual outflows than if the donations had not been made in the first place. Moreover, we find that the benefits of donations are confined to large donations made by smaller funds, and therefore may not be scalable and profitable for all funds. This evidence suggests that fund managers cannot simply rely on token donations to reap the benefits.

In sum, our paper provides novel insights into the use of charitable contributions by hedge fund managers to earn the trust of their investors in an industry that is relatively opaque, lightly regulated, and requires substantial minimum investment. Our findings show that although managers can benefit from capital raising and extending the lives of their funds through investor goodwill garnered using donations, they also pay a price if they break investor trust by failing to deliver better performance in the future.

## 1. Related literature and our contribution

Our study contributes to several strands of the literature. First, we add to the literature that focuses on trust being important in explaining a number of economic phenomena such as growth, firm size, financial development, and international trade.[8] However, there is little empirical evidence so far to support the theoretical predictions in Gennaioli, Shleifer, and Vishny (2015) regarding the importance of trust in the investment management industry. An important exception is Gurun, Stoffman, and Yonker (2018) who find that following a negative shock to investor trust in financial advisers, after the Madoff Ponzi scheme, investors moved capital from Registered Investment Advisors (RIAs) and put it into banks. Our work complements this study by being the first to document how investment managers can use philanthropy to *earn* the trust of their investors. This issue is perhaps even more important in the largely unregulated hedge fund industry with higher opacity, limited disclosure, and the possibility of fraud (Agarwal, Daniel, and Naik, 2011; Bollen and Pool, 2012; Dimmock and Gerken, 2012).

Second, our findings are consistent with managers regaining investors' trust after periods of poor performance through the use of charitable donations, and thus mitigating potential outflows. In this regard, we contribute to the literature on delegated asset management that links trust and investor flows. For example, Kostovetsky (2016) uses mutual fund flows as a way to measure the value of trust that investors put in money managers, and Kumar, Niessen-Ruenzi, and Spalt (2015) show that less familiar, foreign-sounding manager names can trigger less trust among mutual fund investors and receive lower flows.

Third, we contribute to another strand of literature that focuses on corporate charitable contributions and provides contrasting views (see survey articles by Griffin and Mahon, 1997, and

[8] Trust has been shown to be related to: economic growth (Putnam, Leonardi, and Nanetti, 1994; Knack and Keefer, 1997; Zak and Knack, 2001); the size of firms (La Porta et al., 1997; Bloom, Sadun, and Van Reenen, 2012); financial development (Guiso, Sapienza, and Zingales, 2004; Guiso, Sapienza, and Zingales, 2008; D'Acunto, Prokopczuk, and Weber, 2015); and international trade and investments (Guiso, Sapienza, and Zingales, 2009).

Gautier and Pache, 2015). One view from this literature is that such contributions are a manifestation of agency problems that allow the managers to personally benefit at the expense of the shareholders. For example, corporate donations are negatively associated with corporate governance (Galaskiewicz, 1985; Galaskiewicz, 1997; Cespa and Cestone, 2007; Masulis and Reza, 2015, Cheng, Hong, and Shue, 2016), and distort firms' investments (Masulis and Reza, 2017). A contrasting view is that charitable contributions can potentially improve firm value. Channels for this value creation include charitable activities as a way to (i) advertise and enhance public reputation (Navarro,1988), (ii) gain goodwill with political decision makers (Lin et al., 2015), (iii) forge research networks to improve innovation (Bereskin, Campbell, and Hsu, 2016), and (iv) mitigate negative consequences of criminal activity (Williams and Barrett, 2000). More generally, Porter and Kramer (2002, 2006) argue that strategic corporate philanthropy can be used by firms to generate competitive advantages. Our paper adds to this debate by using a relatively cleaner setting of the hedge fund industry where there is less scope for agency problems (as hedge fund managers generally own significant stakes in their firms) to show that donations can create value for hedge fund firms.

Relatedly, there is an interesting analogy between our study and research on sustainable finance where investors in socially responsible investment vehicles have been theorized to have a utility function that uses both financial and non-financial measures (Pedersen, Fitzgibbons, and Pomorski, 2020). Although fund donations can perhaps be viewed by investors as analogous to socially responsible investments, we believe the motivation for our study is closer to theoretical arguments in Gennaioli, Shleifer, and Vishny (2015) where fund managers engage in costly signaling activities to garner investors' trust. In this framework, it is not essential that managers must necessarily act in a socially responsible manner to earn investors' trust. For example,

managers can achieve a similar outcome by increasing transparency and improving communication with their investors.[9]

Finally, our paper contributes to the literature on capital formation in hedge funds. Fung, Hsieh, Naik, and Teo (2018) find that hedge fund firms open new funds to attract more capital by leveraging the performance of their flagship funds that may be closed to new investors. Cumming, Dai, and Johan (2015) find regulatory jurisdiction of funds matters for raising capital. Funds registered in Delaware experience significantly higher flow-performance sensitivity and are more likely to liquidate after poor performance. Jorion and Schwarz (2015) suggest that hedge funds report to multiple commercial databases to minimize search costs for the investors and increase flows. Mullally (2016) shows that hedge fund managers can attract more capital by selling equity stake to outsiders. Our paper uncovers a new channel by which hedge fund managers can attract and retain capital.

## 2. Data

This study is based upon a sample of charitable donations records made by hedge funds and their associated fund managers in the Lipper TASS database. We search for all donations made by these funds using NOZA, which is the world's largest searchable database of charitable donations. Our sample period is from January 1994 through December 2016.

### 2.1 Data collection and description

We hand-collect data on funds' annual charitable donation records by doing a search of fund management company names and fund managers' names in NOZA. This allows us to capture donations made by the funds,[10] the managers, and associated foundations, if they share the name of the manager. An example of a foundation that shares the manager name is the Joshua S. and Beth

[9] See "Trustworthiness is key for asset managers," Financial Times, March 9, 2013, available at https://www.ft.com/content/fc597c2e-8711-11e2-bde6-00144feabdc0.

[10] Note that a manager cannot make donations out of funds directly, as the monies in the funds belong to fund investors. However, a manager can donate money out of the fee revenues of the fund's management firm. When we refer to donations made by funds, we are referring to the donations by funds' management firms.

C. Friedman Foundation, which is the charitable foundation of Joshua Friedman, who runs Canyon Partners, a hedge fund. In cases where name searches on NOZA result in multiple matches, we identify the correct match using two criteria: address matching between NOZA and Lipper TASS for both fund and manager names and/or spousal matching for manager names (donations are often recorded in the names of both spouses in NOZA, which allows us to refine matches using spouse names obtained from LexisNexis's online public records search). This process results in 17,486 charitable donation records for 2,614 hedge funds.

NOZA compiles donation data from annual reports of non-profit organizations. While NOZA does not provide the specific dollar amount of donations, it provides upper and lower bounds of donation amounts, corresponding to ranges presented in the annual reports of the non-profit organizations receiving the donations. Therefore, we compute estimated donation amount as the average of the lower and upper bounds. For example, a charity might designate donors who donate between $10,000 and $25,000 as "Gold" sponsors. In this case, a manager who makes a donation in this range will have the size of the donation listed as $17,500. Oftentimes, donors will donate to meet the minimum threshold set by the charity for a given tier (so, in the previous case, donors may donate exactly $10,000 to be listed as "Gold" sponsors). Thus, in robustness tests reported in the Appendix (Tables A1 and A2), we also use the lower bound as our estimate of the donation amount. Our findings are qualitatively similar with this alternative measure of the donation amount.

We merge the donation data with the hedge fund performance and characteristics data from the Lipper TASS database. Our final dataset resulting from the matching between NOZA and Lipper TASS has 17,486 donations made by 2,614 funds that are run by 667 managers. Of these, 13,051 donations are by funds and 4,435 donations come from managers.[11] While measuring fund

[11] Our results are qualitatively similar for fund donations and manager donations. We also note that our baseline dataset only includes managers in the Lipper TASS data who have a match in the NOZA dataset. We do this to ensure factors that allow a match (e.g. requiring a US-based manager as NOZA only tracks US donations) do not drive any of our inferences relating to the determinants and effects of donations. In

performance, we correct for the backfilling bias in commercial hedge fund databases as documented in the prior literature (e.g., Fung and Hsieh, 2000; Jorion and Schwarz, 2019). Specifically, we exclude a fund's performance prior to its listing date as reported in the Lipper TASS database. We also account for the survivorship bias by starting in 1994 (which is when TASS started tracking dead funds) and ensuring that our sample includes both live as well as dead funds.

### 2.2 Summary Statistics

Panel A of Table 1 reports the summary statistics for hedge funds in our sample. These statistics are broadly consistent with those documented in other studies, which suggests that the sample of donating funds is representative of a typical fund. For example, the average management fee and incentive fee of donating funds is 1.4% and 17.2% respectively, which is consistent with the averages of these two fees (1.5% and 18.3%) reported in Agarwal, Arisoy, and Naik (2017). Panel B of Table 1 reports the summary statistics of the donation amount. Larger donations are more likely to be associated with strategic intent and materially influence fund investors. Therefore, we choose donations greater than or equal to the 75$^{th}$ percentile of donation amount, or a $12,500 donation, to denote larger donations, and conduct all the subsequent analyses for these donations.[12] For these larger donations [*Amount(>=$12,500)*], the median donation is $20,000 and the average donation is $67,354. These larger donations represent a significant proportion of the fund's annual income from management fees (the median donation amount is about 47% of donating funds' median annual management fees). Later, we conduct our analysis by further splitting the donations greater than or equal to $12,500 into smaller and larger donations to show that larger donations drive our findings, which suggests that fund managers cannot rely on token donations to reap the benefits.

robustness tests, we also include funds with no matches to NOZA data. Our results are robust to the use of this alternative sample (see Tables A1 and A2 in the Appendix).

[12] In robustness tests, we consider other donation cutoffs such as $10,000 and $25,000. Our results (not tabulated) are broadly consistent using these alternate cutoffs.

Panel C of Table 1 presents information on the two types of donations that are, *a priori*, likely to be strategic. These are the nonrecurring donations (14.38% of donations in the effective sample) and event donations (7.44% of donations in the effective sample), which are defined as charities that have received at least one donation earmarked for a fundraising event.[13] These two *ex-ante* proxies of strategic donations are basically uncorrelated (correlation coefficient = 0.0083).

### 3. Determinants of charitable donations

To test whether managers' charitable donations are likely to be strategic, we first examine the determinants of donations, which include the fund characteristics associated with the managers' decision to donate by estimating the following logistic regression:

$$\begin{aligned} Donate_{i,t} = {} & \beta_0 + \beta_1 Performance_{i,t-1,t-12} + \beta_2 Flow_{i,t-1,t-12} + \beta_3 Management\ Fee_i \\ & + \beta_4 Incentive\ Fee_i + \beta_5 High-water\ mark_i + \beta_6 Lockup\ Period_i \\ & + \beta_7 Closed\ to\ Invest_i + \beta_8 Controls + \varepsilon_{it} \end{aligned} \quad (1)$$

where explanatory variables include prior year's fund performance, $Performance_{i,t-1,t-12}$, (raw returns, style-adjusted returns, and Fung and Hsieh (2004) seven-factor alphas, and Sharpe ratios), prior year's net flows, $Flow_{i,t-1,t-12}$, and fund-level characteristics of note such as management and incentive fees, high-water mark provision, lockup period, and whether the fund has closed to new investment. Style-adjusted returns are calculated by subtracting average monthly returns across all the funds within the same style from monthly raw returns.[14] We also include various fund-level

[13] We define nonrecurring donations as those made to a charity to which the manager has not donated before. Recurring donations are the second and subsequent donations made to a charity. We exclude the first donation of a recurring series from our analysis as, from investors' point of view, they would not know whether this donation is of the "recurring" type when it is first made. Note that we completely exclude these first donations from our sample instead of treating them as non-recurring or recurring. However, we do note that our results are robust to including these donations as either recurring or nonrecurring donations in this analysis.

[14] This peer-based approach of adjusting for the risks does not require estimation as in the case of alphas. Also, it automatically accounts for the nonlinearity in hedge fund returns and is an intuitive performance measure since investors typically compare returns of a fund to those of style indices. Brown and Goetzmann (2003) show that styles can explain a significant proportion of cross-sectional variation in hedge fund returns. Note that in Panel A of Table 1, the mean of style-adjusted returns of donating funds is not zero as we subtract the average returns of *all* (donating and non-donating) TASS funds following a style.

control variables including prior year's fund risk (total risk and idiosyncratic risk), prior year's fund size, fund age, and cumulative donations made by the fund up to that period.[15]

The dependent variable is an indicator variable, $Donate_{i,t}$, which takes a value of one if the manager of fund *i* makes a larger charitable donation (>=$12,500) during the 12-month period starting month *t*, and zero otherwise. Since NOZA uses annual reports from charities in gathering their data on donations, the information regarding when the donation was made is based on charities' reporting periods. Most charities report on a calendar year basis or on a July to June basis, which we consider as the donation period. Note that in our determinants analysis, only the first month in a given donation period is set to one for the dependent variable, and the remaining eleven months of that donation period are replaced as missing. This avoids repeated observations for the same donation. We estimate the determinants of donations using data prior to the donation period, and effects of the donation after the donation period. For instance, if the donation period is July 2002 – June 2003, we estimate the determinants of donations using data prior to July 2002, and donation effects using data after June 2003 (see Figure 1 for a graphical illustration). Our results are not sensitive to excluding the donation period. Nor are the results sensitive to using either the midpoint or the end of the donation period as the assumed donation month in estimating the determinants and effects of the donations (see Tables A1 and A2 of the Appendix for robustness tests). Our results (not tabulated) are also robust to using semiannual instead of monthly observations.

Panel A of Table 2 presents the results. We find that trailing poor fund performance, across all performance measures except Sharpe ratio, as well as lower fund net flows, are significantly associated with fund managers making larger charitable donations. This is striking, as most people give when they feel financially secure, while hedge fund managers seem to give when their funds have done badly and receive lower net flows. We interpret this initial result as suggestive evidence

[15] Another potential determinant of donations can be the age of the fund managers because of the stage-of-life effects driving donations. For instance, older managers may wish to engage in charitable activities as they may be gradually "retiring" from actively managing their funds. Our main results for both determinants and consequences of donations remain unchanged after including manager age (see Tables A1 and A2).

that hedge fund managers may be donating strategically, when their funds are not doing well, i.e., when marginal utility of attracting more flows and/or improving performance is the highest. We also re-estimate the regression in equation (1) using the presence of Form ADV violations as an additional explanatory variable.[16] Consistent with the argument that funds with violations have greater incentives to improve their reputation and earn the trust of their investors, we find a positive relation between the propensity to donate and past violations. We do not tabulate these results in the interest of brevity, and do not use this specification as our baseline because the merge with Form ADV data reduces our sample significantly.

In addition to poor performance and net flows, several hedge fund characteristics predict charitable donations (see "Fund Characteristics of Note" in Table 2). First, we find that funds with higher management and incentive fees are more likely to donate. Since a manager's incentive is to maximize his or her compensation, this finding is also consistent with the strategic motive behind managerial donations as any increased flows or performance from donations will yield higher fees for the manager. Second, the high-water mark feature in the managerial compensation contract is positively associated with donations. The presence of the high-water mark feature reduces the probability of poorly performing managers earning their fees from existing investors. Therefore, this result indicates that funds with a high-water mark should have greater incentives to attract capital from new investors to enhance the chances of managers earning fees on the new capital that would come at a lower high-water mark after poor performance. Third, restrictions on capital withdrawal in the form of lockups point towards managerial incentives to stimulate flows through donations. Funds with shorter lockup periods are more likely to donate as they face a greater threat of redemption after poor performance. Finally, we observe a negative relation between funds' closure to new investment and their donation likelihood. This is again consistent with capital raising

[16] Form ADV disclosures are mandatory for RIAs with AUM greater than $25 million, and contain disclosure of three types of violations: criminal, civil, and regulatory. Form ADV information has been used in prior hedge fund research to study operational risk (Brown, Goetzmann, Liang, and Schwarz, 2008, 2009, 2012) and identifying clientele type (Ben-David, Franzoni, and Moussawi, 2012; Agarwal, Green, and Ren, 2018).

being one of the primary drivers for donations. Clearly, a fund that is closed for new investment has less desire to attract capital.

Next, we consider nonlinearities in the relation between donation and performance or net flows, and replace continuous performance and flow variables with indicator variables representing quartiles of fund performance and flows.

$$\begin{aligned} Donate_{i,t} = {} & \beta_0 + \beta_1 Performance_{i,t-1,t-12} Quartile1 + \beta_2 Performance_{i,t-1,t-12} Quartile2 \\ & + \beta_3 Performance_{i,t-1,t-12} Quartile4 + \beta_4 Flow_{i,t-1,t-12} Quartile1 \\ & + \beta_5 Flow_{i,t-1,t-12} Quartile2 + \beta_6 Flow_{i,t-1,t-12} Quartile4 + \beta_7 Management\ Fee_i \\ & + \beta_8 Incentive\ Fee_i + \beta_9 High-Water\ mark_i + \beta_{10} Lockup\ Period_i \\ & + \beta_{11} Closed\ to\ Invest_i + \beta_{12} Controls + \varepsilon_{it} \end{aligned} \quad (2)$$

$Performance_{i,t-1,t-12} Quartile1$ is an indicator variable that takes a value of one if the prior year's fund performance is in the lowest quartile, and zero otherwise. $Performance_{i,t-1,t-12} Quartile2$ and $Performance_{i,t-1,t-12} Quartile4$ are indicator variables that take a value of one if the prior year's fund performance is in the second and topmost quartile, respectively, and zero otherwise. $Flow_{i,t-1,t-12} Quartile1$, $Flow_{i,t-1,t-12} Quartile2$, and $Flow_{i,t-1,t-12} Quartile4$ are defined analogously. Indicator variables for the third quartiles of performance and flow are omitted. Other variables are as defined earlier for the regression in equation (1).

In Panel B of Table 2, we observe that only the coefficients on $Performance_{i,t-1,t-12} Quartile1$ and $Flow_{i,t-1,t-12} Quartile1$ are positive and significant. Moreover, Chi-square tests at the bottom of the Panel B show that only the coefficients for the lowest performance and flow quartiles are statistically different from those for the other quartiles. The coefficients on the second and fourth quartiles of performance and net flows are not significantly different from zero, nor are they different from each other. Additionally, the R-squares in these regressions are much higher than those in the linear specification in equation (1). Together, these pieces of evidence indicate substantial nonlinearity in the impact of past performance and net flows on the propensity to donate. Specifically, managers of funds in the bottom quartile of performance and net flows are

much more likely to donate. Since there are no significant differences in the propensities to donate across the top three quartiles of flow and performance, we pool them together to analyze the determinants of donations using the following specification:

$$\begin{aligned} Donate_{i,t} = {} & \beta_0 + \beta_1 Performance_{i,t-1,t-12} Quartile1 + \beta_2 Flow_{i,t-1,t-12} Quartile1 \\ & + \beta_3 Management\ Fee_i + \beta_4 Incentive\ Fee_i + \beta_5 High - Water\ mark_i \\ & + \beta_6 Lockup\ Period_i + \beta_7 Closed\ to\ Invest_i + \beta_8 Controls + \varepsilon_{it} \end{aligned} \quad (3)$$

Panel C of Table 2 reports the results from the estimation of the model above, which will be our main specification for all the subsequent analyses. Once again, we observe that managers of funds in the bottom quartiles of performance and flows are significantly more likely to make large donations compared to other funds. These findings are also economically meaningful. Annually, the probability of managers in poorly performing funds to make a large donation is approximately double that for the managers of relatively well performing funds (6.8% to 10.5% for worst performers compared to 3.9% to 4.7% for the rest). In addition, the annualized donation probability for managers of funds with the lowest net flows is about 50% greater than the managers of other funds with higher flows (7.1% to 7.7% for funds with lowest flows compared to 4.4% to 4.5% for the rest). Funds with poor performance and low net flows are precisely the ones that need to stimulate future flows and improve performance. Therefore, these findings on the drivers of charitable donations are suggestive of strategic intent behind these donations.

We conduct three tests for the robustness of findings in Table 2. First, until now, we estimate regression in equation (3) using the sample of funds whose managers donate during our sample period. For robustness, to address any potential selection bias, we repeat our analysis of determinants of donations for the entire sample of funds, regardless of whether they donate. In results presented in Panel A of Table A1 of the Appendix, we continue to find positively significant coefficients on the bottom quartiles of funds' past performance and flows. Second, we include additional controls for the fund performance and flows during the donation year. Our results remain unchanged using this alternative specification. Finally, in untabulated results, we also divide the

entire sample into two equal sub-periods, and estimate regressions in equation (3) for each sub-period. We find that our main results continue to hold for both sub-periods. Together, this evidence indicates that poor fund performance and lower flows into funds are robust predictors of donations.

The central question in this paper is whether hedge funds' charitable donations are strategic. If this were the case, we should observe that such donations should be associated with improved net flows and/or better performance. In the next section, we test this prediction by examining the effects of donations on both fund flows and performance.

## 4. Effects of charitable donations

In this section, we empirically examine the effects of charitable donations on hedge funds. To mitigate potential concerns regarding mean reversion, we use a matched-sample approach. For each fund that makes a donation at a given time, we find a matched fund in the sample that does not donate at the same time. In our analyses of the effects of donations, we select the matched fund using the smallest absolute difference of the variable for which we measure the effects of the donations. For example, when examining the effects of donations on net flows, we match donating funds to non-donating funds with the closest trailing 12-month flows. In robustness tests reported in Table A2 of the Appendix, we repeat this analysis using propensity scores generated from the determinants analysis (estimates from Panel C of Table 2) and find similar results.

We estimate the following DiD specification using fund-quarter observations:

$$y_{i,t} = \beta_0 + \beta_1 Donate_i + \beta_2 After_{i,t} + \beta_3 Donate_i \times After_{i,t} + \beta_4 Controls + \varepsilon_{i,t} \qquad (4)$$

where dependent variable, $y_{i,t}$, is either the average monthly performance, $Performance_{i,q}$, or net flows, $Flow_{i,q}$, for each fund *i* over four quarters before or after the donation period (see Figure 1 for an illustration of the timing convention). $Donate_i$ takes a value of one for funds that make a large charitable donation (>=$12,500), and zero for matched non-donating peers. $After_{i,t}$ takes a value of one for quarters during one year after the donation period, and zero otherwise. $Donate_i \times After_{i,t}$ is the interaction term, and is the key independent variable of interest that captures the DiD

in fund performance or flows before and after the donation between donating and matched non-donating funds. Control variables include the fund-level characteristics used earlier in regressions in equations (1) to (3).[17] For our analysis, we include data on up to eight quarters for each donating and matched non-donating fund, which includes the one-year period both before and after the donation (see Figure 1, Panel B for a graphical illustration). Note that we do not require both the donating and matched non-donating funds to have returns and assets data for the full one-year period before or after the donation. This mitigates any concerns regarding imposing potential survivorship bias in our sample selection process.

We present the results of this multivariate analysis in Table 3. To begin with, we note that the coefficient on the indicator variable, *Donate*, is insignificant in all the specifications, confirming that donating and matched non-donating funds do not have significantly different flows or performance before the donation period. After the donation period, we observe that the only significant effect of the donations is that donating funds experience higher net flows after the donation, compared to matched non-donating peers. Since donating funds have poor performance and we match them with non-donating funds, it is not surprising to observe that the coefficient on the indicator variable, *After*, is negative and highly significant (coeff. = −1.57; *t*-stat = −11.92), indicating that there are outflows from matched donating and non-donating funds after the donations. More importantly, donations help mitigate outflows by 0.47% (coefficient on *Donate* x *After*). This implies an annualized figure of 5.64% less outflows, which is an economically large number. While we do find that donations mitigate outflows, we do not find any evidence that donations help improve fund performance suggesting that strategic use of charitable donations appears to be motivated by fundraising rather than information sharing.[18] As before, we test the

[17] For robustness, we also conduct a test examining the effects of donations on flows, controlling for contemporaneous performance. Our results (not reported) are robust to this alternative specification.

[18] One possible channel through which strategic donation behavior garners net flows can be fund managers donating to endowments and foundations that in turn invest in donors' funds. Using a relatively smaller sample of hedge fund investments made by endowments and foundations from Preqin database, we do not find evidence of such a *quid pro quo* behavior.

robustness of our findings over time by dividing our sample period into two equal sub-periods, and estimate regressions in equation (4) for each sub-period. In untabulated results, we find that the effects of donations are similar for both sub-periods.

It is also conceivable that the positive effects of donations on flows are more pronounced for funds or managers with greater visibility. Later in the paper, we find results consistent with such a conjecture. That is, event donations and larger donations, which are likely to have greater visibility, generate significantly higher net flows. However, we acknowledge that it is more challenging to isolate the effects of manager's visibility as it will be correlated with past fund performance and fund size. We also note that our robustness tests are based on propensity score matching, which help alleviate this concern to some extent as we use past performance and fund size, along with a host of other observable fund characteristics, in the matching process.

One potential issue with our analyses of determinants and effects of donations is that for persistent donations, the post-period for the previous donation will coincide with the pre-period for the next donation in the DiD analysis. This can potentially affect both the determinants and effects analyses. For example, fund characteristics in the pre-period for subsequent donations could be influenced by the effects of previous donations. Later in the paper when we focus on the subsample of nonrecurring donations, this concern is mitigated to some extent because that subsample, by construction, does not include multiple donations to the same charity. However, it can still include cases where a fund donates to different charities in consecutive years. Therefore, to address this potential concern related to persistent donations, we repeat our baseline determinants and effects analyses excluding donations where there are other donations within 2 to 4 years before or after the donation. These results are presented in Table A3. Regardless of the length of the exclusion criteria, our results from this robustness test confirm our baseline findings.[19]

[19] Note that the sample of donations used is not that different across the different exclusion criteria. Additionally, most observations in this analysis correspond to non-donations. Thus, the results of the determinants across the three specifications are very similar.

Another potential concern is that, perhaps, charitable donations may not have a first-order effect on investors' redemption decisions. For example, Ben-David et al. (2012) show that, during the 2008 financial crisis period (2007Q3 to 2009Q1), hedge fund investors, specifically institutional ones, were very sensitive to poor performance and redeemed from the funds. To address such a concern, following Ben-David et al. (2012), we use the Form ADV clientele data to classify funds in our sample into retail and institutional funds. We then explore the effects of donations on net flows separately for these two fund categories, during the crisis and non-crisis periods. We find that while donations do not significantly mitigate net outflows for institutionally focused funds during the crisis period, they do influence investors' redemption decisions for retail-oriented funds (see Table A4 in the Appendix). Thus, in very specific circumstances, when a fund's investors are especially sensitive to poor performance (e.g., institution-focused funds during the crisis period), the fund may not be able to significantly mitigate outflows by donating.

Collectively, the results from the analyses of the effects of donations on fund flows provide further evidence that hedge fund managers donate for strategic purposes. In addition to poorly performing funds being more likely to donate, we find that these donations are generally effective in mitigating outflows and retaining existing assets.

## 5. Further insights on funds' strategic behavior

### 5.1 Proxies of strategic charitable donations

Having found some evidence from the overall sample that supports strategic intent behind donations, we conduct subsample analysis to further investigate this intent. For this purpose, we analyze two subsamples of donations that are more likely to be strategic, *a priori*. First, nonrecurring one-off donations, which can be "timed," (i.e., made when managers need more capital) are more likely to be strategic than recurring donations, which occur routinely over many years. We define nonrecurring donations as those made to a charity to which the manager has not donated before. Recurring donations are the second and subsequent donations made to a charity. We exclude the first donation of a recurring series from our analysis as investors would not know

whether that donation is of the "recurring" type when it is first made without introducing a look-ahead bias. In any case, our results are robust to classifying these initial donations as either recurring, or nonrecurring donations.

Second, we examine donations made to charities which hold events catering to the hedge fund community (termed as event charities).[20] We argue that donations to such charities (referred to as event donations) are more likely to be strategic because they will garner more visibility for fund managers through the events, and the events can help the managers to network with investors to raise capital. The NOZA dataset identifies donations earmarked for specific fundraising events. Typically, these donations fall short of the dollar threshold to enter our sample of relatively larger donations (for example, a fund manager may donate $1,000 to sponsor a table at a fundraising gala). Therefore, we do not use them in our baseline analysis. In this analysis, we use these donations *only* to identify event charities as those that receive donations from funds for "event sponsorship" or "event attendee" in the field labeled as "Donation Category" in NOZA. However, as before, we perform analysis using the entire sample of larger donations (>=$12,500). Examples of event charities in our sample include the Bedford Historical Society, the Chicago Symphony Orchestra, the Damon Runyon Cancer Research Foundation, The Field Museum of Natural History, and the Metropolitan Museum of Art.

For each of these two proxies of strategic giving (nonrecurring donations and event donations), we estimate the determinants and effects separately, and compare them to their respective complements. Specifically, we compare the determinants and effects of nonrecurring donations to those of recurring donations. We also compare the determinants and effects of event donations to the determinants and effects of non-event donations. Panel A of Table 4 presents the determinants of nonrecurring and recurring donations separately, while Panel B compares the

[20] In an earlier version of our paper, we had also analyzed "focal" charities to which above-median number of hedge fund managers donate. Such charities are also likely to attract potential investors, and are likely to garner strategic donations. Our results for such charities are similar to those for event charities and are not reported for brevity.

differences in the coefficients of the regressors across the two types of donations. The results are striking. We find that all the previously identified fund traits associated with strategic intent behind donations are significant only for the subsample of nonrecurring donations. For example, both poor performance and low net flows are significant drivers of nonrecurring charitable donations, but *not* of recurring donations. Similarly, all the fund characteristics of note associated with strategic intent behind donations are much more significant predictors of nonrecurring donations than of recurring donations. For example, funds that are closed to new investment are significantly less likely to make a nonrecurring donation but being closed to new investment has no significant effect on the likelihood of funds making recurring donations. Moreover, we conduct a formal test to compare the differences in the coefficients across the two subsamples. Panel B shows that the coefficients for past performance, flows, and fund characteristics that proxy for strategic intent are significantly different for nonrecurring donations compared to recurring donations.[21]

Table 5 presents the effects of nonrecurring and recurring donations separately. Panel A shows that the coefficient on *Donate*×*After* is positive (coeff. = 1.30) and significant (*t*-stat = 2.92) for nonrecurring donations but insignificant for recurring donations (coeff. = 0.14; *t*-stat = 0.63). Moreover, the difference in this coefficient between the two types of donations is positive and highly significant (coeff. = 1.16; see Panel B). This shows that poorly performing funds whose managers make nonrecurring donations are the only ones who benefit from lower net outflows because of these donations. These findings confirm that there is evidence supporting strategic intent in our sample of nonrecurring donations but not in the sample of recurring donations.

Panel A of Table 6 reports the results of an analogous analysis of the determinants of the second proxy of strategic intent: event donations versus non-event donations. Panel B compares

[21] We also examine the determinants of the cessation of recurring and non-recurring donations. Consistent with the idea that only non-recurring donations are strategically timed, we find evidence that these donations are less likely to cease if a fund remains in the lowest quartile of performance and flows. In contrast, we do not find a similar result when studying cessation of recurring donations. These findings, not tabulated for brevity, reinforce the strategic motivation behind nonrecurring donations.

the differences in the coefficients of the regressors across the two types of donations. Again, we find that all the fund traits associated with strategic intent behind donations are only significant in the subsample of event donations. Moreover, the coefficients on the key independent variables explaining the donations to event and non-event charities are significantly different from each other.

Table 7 presents the effects of donations, separated by whether they are made to an event charity or not. Panel A shows that lower net outflows are experienced only by managers that donate to event charities. The estimated slope coefficient on *Donate*×*After* is positive and significant (coeff. = 1.53; *t*-stat = 2.35) for event donations but is negative and insignificant (coeff. = 0.16; *t*-stat = 0.76) for non-event donations. Further, the difference in this coefficient across the two groups is positive (diff. = 1.37; see Panel B) and highly significant. These results further corroborate that donations to event charities are more likely to be strategic as they mitigate outflows after donations.

Overall, our findings in this section further reinforce the assertion that donations by hedge fund managers have strategic motives behind them. Managers appear to time their one-off donations after lower net flows and target charities that hold events catering to the hedge fund community to achieve the intended goal of mitigating outflows from their poorly performing funds.

### 5.2 Implications of donations for fund mortality

Given that poorly performing funds appear to donate strategically to mitigate potential outflows, one intuitive effect would be that such donating funds experience less mortality because of investor withdrawals after the poor performance, compared to matched, non-donating peers. We analyze mortality risk using a logit model as well as a Cox proportional hazard model. In both these models, we use a panel dataset of our matched sample of funds used in our baseline analysis of the effects of donations (see Table 3). The dependent variable is a 0 while the fund is alive and takes a value of 1 in the terminal month when it disappears from the Lipper TASS database, stating liquidation as the reason. The results of the analyses are presented in Table 8. As expected, the funds making charitable donations experience significantly lower mortality than their matched non-donating peers. The coefficient on *Donate* is significantly negative (coeff. = –0.386; *t*-stat = –6.39)

in the logit model and less than one (coeff. = 0.858, *t*-stat = –1.33) but not significant at the conventional level in the Cox proportional hazard (CPH) model.

However, we note that this finding may be subject to reverse causality concern, i.e., managers who know their funds are not in danger of shutting down are more comfortable donating. To mitigate this concern, we also repeat our analysis split by whether the donation with strategic (i.e. recurring vs. non-recurring or event vs. non-event). Columns 2, 3, 5 and 6 of Table 8 report the results. We find that the effect of donations reducing fund mortality is significantly greater for the strategic donations (i.e. the non-recurring donations, and the event donations). These findings are less likely to be consistent with the conjecture that managers donate conditional on their knowledge about their future survival. Together, the results in this section support our view that donations, specifically strategic ones, help stimulate net flows for poorly performing donating funds, which in turn significantly lowers their mortality.

### 5.3 Economics, long-term implications, and scalability of donations

The median larger donation of $20,000 helps to reduce the outflows by about 5.6% for a poorly performing median donating fund with about $28 million in assets. This in turn is associated with an increase in management fee earnings of the donating manager by $23,520 [5.6% × $28 million × 1.5% (median management fee)]. Furthermore, donations will realize additional incentive fees, as well as higher fees in subsequent years because of both the higher assets under management as well as the lower mortality risk noted above. Thus, the economics of donations appear very favorable. Therefore, in equilibrium, a natural question is why we do not observe all funds donating. We address this question by examining some of the longer-term implications to see if there are any potential downsides to donations. We also examine if economics of donations scale by separately analyzing the effects of donations on net flows for larger and smaller funds, and for larger and smaller donations (among donations greater than or equal to $12,500).

We motivate our analysis of long-term implications using the idea of donations to foster trust. We argue that fund managers can gain investors' trust through donations and are able to

mitigate investor outflows following periods of poor performance as a result of this trust. As such, we would expect that poor performance following a donation would be met with even higher outflows than if the funds had not donated to begin with – essentially as a result of "betraying" the trust investors place in the managers.

We empirically test this prediction by again using the matched sample from Section 4 where we examine the effects of donations on flows. For this test, we further separate the sample of donating funds based on how they perform in the year following the donation (above or below the median performance). We next examine how donations affect flows in the second year after the donations separately for funds above- and below-median performance in the first year after the donation. Specifically, we estimate the following regression separately for funds with above- and below-median performance during the year after the donations including both donating funds (treatment group) and matched non-donating funds (control group):

$$\begin{aligned} Flow_{i,t+2} = {} & \beta_0 + \beta_1 Donate_i + \beta_2 I\left(Perf_{i,t+1} < Med_{t+1}\right) \\ & + \beta_3 I\left(Perf_{i,t+1} < Med_{t+1}\right) \times Donate_i + \beta_4 Controls + \varepsilon_{i,t} \end{aligned} \tag{5}$$

$Flow_{i,t+2}$ are the net monthly flows to the funds in the second year after the donation period and the key explanatory variable of interest, $I\left(Perf_{i,t+1} < Med_{t+1}\right) \times Donate_i$, captures whether a donating fund experienced below-median performance (measured as returns, style adjusted returns, alpha and Sharpe ratio). We present the results of this analysis in Table 9. For each of the four performance measures, we observe that the coefficient on $I\left(Perf_{i,t+1} < Med_{t+1}\right) \times Donate_i$ is significantly negative for funds with below-median performance while the corresponding coefficient for funds that perform above median is insignificant (the base $Donate_i$ coefficient).[22] This suggests that donating funds are more severely punished for poor performance than non-

[22] Note that the number of observations differ for the two subsamples using the median performance as the cutoff. This is because funds can have different number of observations in the second year after donations since we do not require them to exist for the entire year to avoid any look-ahead bias.

donating funds although they do not get any additional benefits for doing well in the period after donations. Specifically, donors with below-median performance in the year after the donation experience 6.5% to 10.2% more annual outflows compared to a matched non-donor with similar performance. For example, when we use alpha as the performance measure, the slope coefficient on $I\left(Perf_{i,t+1} < Med_{t+1}\right) \times Donate_i$ is –0.70 with a *t*-stat of –3.09, indicating additional monthly outflows of 0.70%, or annual outflows of 8.4%. This is in line with the idea that while donations may foster trust that helps mitigate outflows in the short term, continued poor performance is penalized more severely than if the donation had not been made in the first place, i.e., our documented effect of donations to increase net flows for underperformers would not continue in a repeated game setting.

Next, we examine the scalability of the donations. For this purpose, we first split the sample of donating funds in our sample into funds making larger donations and funds making smaller donations. We do this split based on the median donation among donations greater than or equal to $12,500.[23] We also split the sample of donating funds into larger and smaller funds based on the median assets under management. We thus have four subsamples of donating funds (large funds, making large donations; large funds, making small donations; small funds, making large donations; and small funds, making small donations). Using each donating fund in each of these subsamples, we generate a slightly modified matched sample, matching each donating fund to a non-donating fund based on fund size, in addition to past net flows. With these four subsamples of donating and matched non-donating funds, we analyze the effects of the donations on flows using multivariate analysis similar to the one used to generate results in Table 3. We present the results in Table 10. For brevity, we only present the coefficient on *Donate*×*After*, which captures the effect of donations on net flows. The mitigating effect of donations on net flows is statistically significant

[23] We also repeat this analysis using donation size quartiles, and find the effects are concentrated in the topmost quartile (not tabulated).

only for smaller funds that make larger donations.[24] Additionally, the magnitude of this coefficient is directionally higher than the other three coefficients, suggesting these donations have a larger positive effect on flows.

Together, these results suggest that while economics of such donations initially appear attractive, donations do not scale well and seem to be most effective for smaller funds that make larger donations. Moreover, donor funds are penalized through additional outflows if poor performance continues. This evidence helps explain why only some funds choose to donate.

## 6. Alternative explanations

We consider several alternative explanations for our findings. One possibility is that omitted variables, that are correlated both with charitable donations, as well as with an increase in future flows, are driving our results. Another potential explanation for our findings may be reverse causality—it is not the donations driving future net flows but rather knowledge of future net flows that leads managers to donate. Additionally, there may be several other possible factors that are associated with charitable donations (e.g. managerial distractions, political motivations, etc.) that could potentially explain our results. In this section, we address these possibilities and present results of tests we conduct to mitigate concerns regarding these alternative explanations.

### 6.1 Omitted Variables

Fund managers' philanthropic efforts can coincide with other "virtue signaling" activities that could potentially lead to higher flows. For example, donating funds could receive more flows due to their managers also serving on boards of charities. In our sample, we observe this to be the case for 21% of the funds. We split our sample based on whether fund managers sit on boards and repeat our analyses for both determinants and effects of donations separately for these two subsamples. The results presented in Table 11 show that our baseline findings hold in both

[24] It is also possible that younger funds where the managers are most concerned with establishing trust would be more likely to use strategic donations to stimulate flows. Since fund size and age are positively correlated, we double sort funds on these two dimensions and find stronger results for the subsample of funds that are below-median in terms of both size and age (findings not tabulated for brevity).

subsamples. We also note that future net flows are higher after donations for managers who sit on boards of charities, suggesting positive interaction between these two activities. However, it is important to note that donations still garner significantly higher net flows even in cases where managers of donating funds do not sit on the boards of charities.

In addition to charitable board activities, it is also possible that funds could have higher allocations to socially responsible investments and hope to garner investors' trust (and flows) through such investments. We merge the 13F holdings of hedge funds with the ESG performance of stocks provided in the MSCI KLD STATs database to split our sample into cases where the funds' average ESG performance based on their holdings are above- and below-median levels for all funds at a given point in time.[25] Repeating our analysis for these two subsamples, we find our baseline results continue to hold in both subsamples (see Table 12).

Yet another possibility is donor fund managers have some other personal characteristics that may be driving our results. For example, it might be that donors are more experienced, which could explain the finding that other things equal, donations are followed by less outflows subsequently. Alternatively, perhaps gender may affect both the likelihood of donation, as well as the outcome variables in our effects analysis. For example, female managers may be more likely to donate, and from Aggarwal and Boyson (2016) we know there are differences in flows between male- and female-managed hedge funds. We collect data on manager age from peoplefinders.com and use the genderize.io application programming interface (API) to obtain manager gender information using managers' first names, and repeat our analysis controlling for these variables. Our results for both the determinants and effects of donations remain unchanged after including these personal characteristics of managers as controls (see Tables A1 and A2 in the Appendix).

[25] MSCI ESG STATs database provides a set of positive and negative ESG indicators for firms based on their disclosures, academic and government databases, and other sources. MSCI rates firms on a wide array of issues in the primary categories of environment, community, diversity, employee relations, human rights, products and corporate governance, using a binary relative rating scale where zero corresponds to neutral performance (see Starks, Venkat and Zhu, 2020).

Collectively, the evidence in this section suggests that omitted variables are unlikely to explain our findings although we acknowledge that it is not possible to exhaustively account for all such variables.

### 6.2 Reverse Causality

It is also possible that reverse causality is driving our results. That is, perhaps managers have some idea of their future flows and a manager who believes their flows are going to be high going forward will be more comfortable donating now. This in turn could lead to our observed baseline result that donations are followed by higher net flows. However, even if this were true, it would not explain why our results are concentrated in *a priori* strategic donation, unless managers only exhibit this behavior for strategic donations (e.g. event donations). Additionally, if a manager *already* believed their future flows were going to be high, it is not clear that self-interest driven strategic donations would offer incremental benefits.

### 6.3 Other potential alternative explanations

In this section, we examine explanations other than omitted variables and reverse causality. The first explanation we consider is that some of our fund donations might be to charities with a political bent (e.g. a think-tank with political leanings). In this case, it may be possible that the motivation behind donating is not to gain investor trust but to get political favors. Relatedly, such donations may be accompanied by political contributions which could further contaminate our inferences. We believe there are at least three reasons for why these possibilities may not be confounding our analyses and findings. First, the NOZA database does not include political contributions. Second, to examine if donations in our sample could potentially have a political angle, we manually examine the list of the top 20 charity recipients (provided in Table A5). Except for perhaps Mikva Challenge, none of these charities seem to have a political affiliation or leaning. Finally, we note that Gao and Huang (2018) examine hedge fund managers' political contributions, and find that lobbying activities improve fund performance, which is not the case in our sample of

donations. Given these observations, we believe that our findings are unlikely to be driven by politically oriented donations or other lobbying activities with political parties or organizations.

A second alternative explanation can be that individual donations are just "cheap talk" by fund managers looking to garner trust with investors, who would rather consider the entire history of giving by managers. To see if individual donations still matter in the presence of varying levels of cumulative giving, throughout the paper, we include cumulative donations as an additional explanatory variable both in the determinant and effects analyses. Our main results for individual donations continue to hold, suggesting that investors respond to individual donations even after accounting for cumulative giving histories. Additionally, we allow for the interaction of cumulative donations with individual donations to examine if there is an incremental effect of cumulative donations on flows. We do not find evidence of such an effect (results not tabulated).

Third, donations could simply be symptomatic of other distractions or value-destroying actions of a fund manager, rather than the result of strategic actions by the manager. This may be possible, but it would be difficult to reconcile with the increase in flows following the donations, as investors would likely stay clear of fund managers who are distracted or otherwise destroying value. Additionally, this explanation would be difficult to reconcile with the fact that the link between poor past performance and donations is strongest for situations associated with our two proxies of strategic intent behind donations (i.e., nonrecurring donations and event donations).

## 7. Conclusion

Our paper is the first study of strategic intent behind charitable donations by hedge fund managers. We document several findings that support the strategic motivation for these donations. First, we observe that poorly performing managers are more likely to donate. Second, several fund characteristics significantly related to the likelihood of fund managers' donations are also consistent with managers' incentives to increase net flows. Consistent with strategic motives behind donations, we observe a significant decrease in outflows, and associated decline in the mortality for poorly performing donating funds. Moreover, all our findings are stronger within two

subsamples of donations that we identify as more likely to be strategic: nonrecurring donations and event donations. We show that these findings cannot be entirely explained by omitted variable and reverse causality concerns. In sum, we conclude that at least some hedge fund managers' charitable donations are likely to be strategic. While the economics of such strategic donations appear favorable to hedge fund managers, these benefits appear not to be scalable as only small funds with large donations are rewarded with more flows after donations. Also, fund investors punish managers of donor funds through greater redemptions if they break their trust by continuing to perform poorly after donations. These potential costs and limitations offset the benefits from donations, which can explain why only some fund managers donate.

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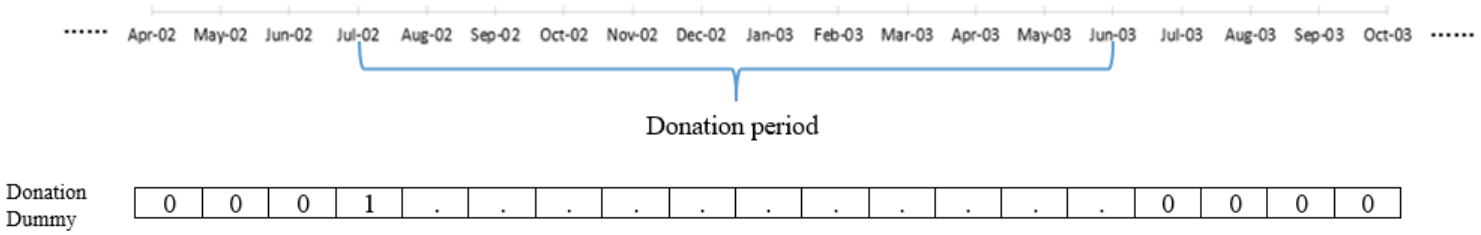
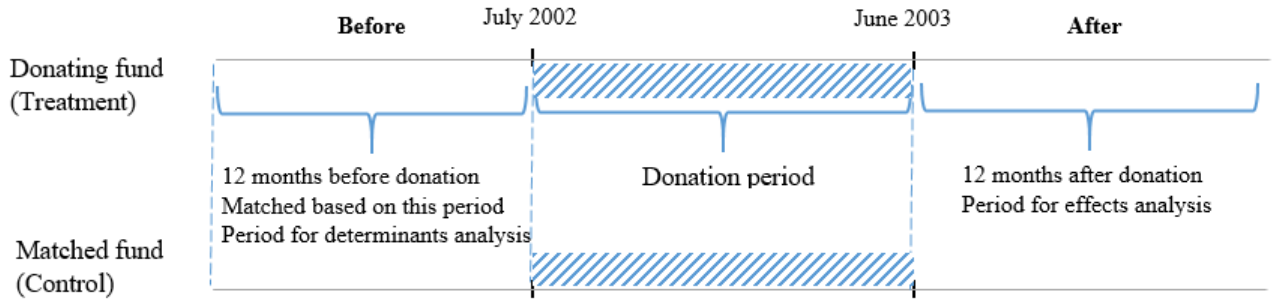
**Figure 1: Timeline for Determinants and Effects Analysis**

This figure illustrates the timelines used for the empirical analyses of the determinants and effects of donations. Since the NOZA database uses annual reports from charities in gathering their data on donations, the information regarding when the donation was made is based on charities' reporting periods. Most charities report on a calendar year basis or on a July to June basis, which we consider as the donation period. The example below presents the timeline for a fund manager who makes a charitable donation during the donation period, July 2002 to June 2003, as reflected in NOZA. Panel A presents the timeline for the determinants analysis, and shows the values that the donation dummy, the dependent variable in determinants analysis, takes for such a manager. Panel B presents the timeline for the effects analysis, both for the donating manager, as well as for a non-donating manager, matched with the donating manager based on pre-donation characteristics.

Panel A: Timeline for Determinants Analysis




Panel B: Timeline for Matched Sample Effects Analysis



## Table 1: Summary statistics

This table reports the summary statistics of 17,486 charitable donations from 667 hedge fund managers and 427 companies. Panel A reports the means, standard deviations, 25th percentile (P25), median, and 75th percentile (P75) of fund-level variables for the 1,126 funds whose managers donate. High-water mark is an indicator variable which is one if the hedge fund uses a high-water mark and zero otherwise. Lockup period is in months. This table also reports the fraction of funds with lockups. Time-varying fund-level variables include monthly fund raw returns, style-adjusted returns, seven factor alphas, Sharpe ratios, net flows, and assets under management. Panel B reports the same statistics of donation amount. *Amount* is the unconditional statistics of all charitable donations. *Amount(>=$12,500)* is the summary statistics if donation amount is equal or greater than $12,500, which is the 75th percentile of the unconditional sample of donations. *Cumulative Amount* is cumulative value of donations at the fund and month level, conditional on a fund having donated before. Panel C displays the percentage of various types of donations deemed ex-ante as being strategic and the correlation coefficients of dummy variables indicating these donations. *Nonrecurring* takes a value of one if the donation is a one-time donation and zero otherwise. *Event* takes a value of one if the donation is an event donation (as defined in Section 5.1), and zero otherwise.

**Panel A: Summary statistics of fund-level variables (N = 2,614 funds)**

| | Mean | Std. Dev. | P25 | Median | P75 |
|---|---|---|---|---|---|
| *Time-invariant fund characteristics* | | | | | |
| Management Fee (%) | 1.38 | 0.62 | 1.00 | 1.50 | 1.50 |
| Incentive Fee (%) | 17.17 | 6.60 | 15.00 | 20.00 | 20.00 |
| High-water mark | 0.71 | 0.46 | 0.00 | 1.00 | 1.00 |
| Proportion with lockups | 0.37 | – | – | – | – |
| Lockup period (months) | 12.92 | 5.90 | 0.00 | 0.00 | 42.00 |
| *Time-varying fund variables* | | | | | |
| Raw return (%) | 0.69 | 1.22 | 0.27 | 0.64 | 1.09 |
| Style-adjusted return (%) | -0.14 | 1.17 | -0.54 | -0.11 | 0.25 |
| Alpha (%) | 0.49 | 0.88 | 0.14 | 0.49 | 0.86 |
| Sharpe Ratio | 0.42 | 5.12 | -0.43 | 0.24 | 0.96 |
| Flow (%) | 2.39 | 5.78 | -0.29 | 1.20 | 3.87 |
| Fund Size ($ millions) | 167.89 | 559.76 | 14.00 | 41.24 | 125.80 |

**Panel B: Summary statistics of donation amount (in $)**

| Variable | N | Mean | Std. Dev. | P25 | Median | P75 |
|---|---|---|---|---|---|---|
| Amount (All donations) | 17,486 | 19,124 | 117,398 | 1,750 | 3,750 | 12,500 |
| Amount (Donations >=$12,500) | 4,277 | 67,354 | 230,758 | 17,500 | 20,000 | 37,500 |
| Cumulative Amount (>0) | 111,990 | 358,868 | 1,088,575 | 3,000 | 15,672 | 83,748 |

**Panel C: Summary statistics of strategic donation proxies**

| | Nonrecurring (14.38%) | Event (7.44%) |
|---|---|---|
| Nonrecurring | 1 | |
| Event | 0.0083 | 1 |

## Table 2: Determinants of charitable donations

This table presents the results of panel regressions analyzing the determinants of charitable donations by hedge fund managers. The dependent variable is $donate_{i,t}$, which takes a value of one if the portfolio manager of fund *i* makes a large charitable donation (>=$12,500) in month *t*, and zero otherwise. Explanatory variables include the prior year's fund performance (measured as either raw return, style-adjusted return, seven-factor alpha, or Sharpe ratio), net flows, fund characteristics of note, and fund-level controls (prior year's age, size, and risk (total risk for returns and idiosyncratic risk for style-adjusted returns and alpha measures)). Panel A presents the results when past performance and flows are continuous variables. Panel B presents results when past performance and flows are in quartiles, followed by the results of a Chi-square test comparing the coefficients. Quartile 1, 2, 3, and 4 indicates the performance or flows are in lowest quartile, second lowest quartile, second highest quartile and highest quartile, respectively. Quartile 3 is omitted to avoid multicollinearity. Panel C presents the results with indicator variables for when past performance or flows are in lowest quartile (quartile 1). Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: Continuous past performance and flows**

| Dependent Variable: Donate Dummy | | | | |
|---|---|---|---|---|
| | Return | Style Adj. Return | Alpha | Sharpe |
| Performance $_{t-1,,t-12}$ | −8.18*** | −6.38** | −25.96*** | −0.00 |
| | (−3.53) | (−2.31) | (−5.98) | (−0.19) |
| Flow $_{t-1,,t-12}$ | −2.05*** | −2.10*** | −3.32** | −2.30*** |
| | (−2.88) | (−2.92) | (−2.05) | (−3.20) |
| Fund Characteristics of Note | | | | |
| Management Fee | 0.33*** | 0.35*** | 0.27 | 0.33*** |
| | (2.62) | (2.90) | (1.17) | (2.63) |
| Incentive Fee | 0.10*** | 0.11*** | 0.12*** | 0.10*** |
| | (3.85) | (4.00) | (4.34) | (3.83) |
| High–water Mark | 0.99*** | 0.99*** | 1.42*** | 0.99*** |
| | (3.51) | (3.51) | (3.74) | (3.52) |
| Lockup Period | −0.03** | −0.03** | −0.03** | −0.03** |
| | (−2.08) | (−2.12) | (−2.46) | (−2.12) |
| Closed to Investment | −0.86** | −0.85** | −1.94*** | −0.86** |
| | (−2.01) | (−1.98) | (−3.48) | (−2.02) |
| Fund–level controls | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes |
| R–squared | 0.08 | 0.08 | 0.11 | 0.08 |
| N | 190,342 | 190,342 | 127,941 | 190,301 |

**Panel B: Quartile indicator variables for past performance and flows**

| Dependent Variable: Donate Dummy | | | | |
|---|---|---|---|---|
| | Return | Style Adj. Return | Alpha | Sharpe |
| Performance $_{t-1,t-12}$_Quartile1 | 0.67*** | 0.67*** | 0.56*** | 0.75*** |
| | (5.71) | (4.26) | (4.11) | (5.27) |
| Performance $_{t-1,t-12}$_Quartile2 | 0.12 | −0.02 | 0.14 | 0.07 |
| | (1.04) | (−0.14) | (1.10) | (0.63) |
| Performance $_{t-1,t-12}$_Quartile4 | −0.18 | −0.10 | −0.23 | −0.03 |
| | (−1.46) | (−0.88) | (−1.35) | (−0.26) |
| Flow $_{t-1,t-12}$_Quartile1 | 0.94*** | 0.97*** | 0.36*** | 0.94*** |
| | (4.82) | (4.97) | (3.14) | (4.96) |
| Flow $_{t-1,t-12}$_Quartile2 | 0.32** | 0.35** | 0.07 | 0.33** |
| | (2.09) | (2.28) | (0.51) | (2.13) |
| Flow $_{t-1,t-12}$_Quartile4 | 0.19 | 0.18 | 0.05 | 0.19 |
| | (1.34) | (1.24) | (0.39) | (1.32) |
| Fund Characteristics of Note | | | | |
| Management Fee | 1.94*** | 1.91*** | 1.46*** | 1.92*** |
| | (7.44) | (7.50) | (4.73) | (7.39) |
| Incentive Fee | 0.07** | 0.07* | 0.08* | 0.07** |
| | (2.15) | (1.96) | (1.71) | (2.13) |
| High–water Mark | 0.81** | 0.85** | 1.54*** | 0.82** |
| | (2.40) | (2.56) | (3.97) | (2.45) |
| Lockup Period | −0.06*** | −0.06*** | −0.05*** | −0.06*** |
| | (−4.20) | (−4.12) | (−3.17) | (−4.17) |
| Closed to Investment | −5.32 | −5.14 | −2.76*** | −5.28 |
| | (−1.33) | (−1.34) | (−3.13) | (−1.34) |
| Fund–level controls | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes |
| R–squared | 0.35 | 0.35 | 0.16 | 0.35 |
| N | 190,342 | 190,342 | 127,941 | 190,301 |

Chi–square test of coefficient comparisons

| | *p*–value | | | |
|---|---|---|---|---|
| | Return | Style Adj. Return | Alpha | Sharpe |
| Performance $_{t-1, t-12}$_Quartile1= Performance $_{t-1, t-12}$_Quartile2 | 0.000 | 0.000 | 0.000 | 0.000 |
| Performance $_{t-1, t-12}$_Quartile1= Performance $_{t-1, t-12}$_Quartile4 | 0.000 | 0.000 | 0.000 | 0.000 |
| Performance $_{t-1, t-12}$_Quartile2= Performance $_{t-1, t-12}$_Quartile4 | 0.151 | 0.664 | 0.158 | 0.720 |
| Flow $_{t-1, t-12}$_Quartile1= Flow $_{t-1, t-12}$_Quartile2 | 0.000 | 0.000 | 0.007 | 0.000 |
| Flow $_{t-1, t-12}$_Quartile1= Flow $_{t-1, t-12}$_Quartile4 | 0.000 | 0.000 | 0.007 | 0.000 |
| Flow $_{t-1, t-12}$_Quartile2= Flow $_{t-1, t-12}$_Quartile4 | 0.196 | 0.169 | 0.769 | 0.192 |

**Panel C: Indicator variable for the lowest quartile (quartile 1) of past performance and flows**

| Dependent Variable: Donate Dummy | | | | |
|---|---|---|---|---|
| | Return | Style Adj. Return | Alpha | Sharpe |
| Performance $_{t-1, t-12}$_Quartile1 | 0.84*** | 0.93*** | 0.48*** | 0.92*** |
| | (5.80) | (4.38) | (4.34) | (5.72) |
| Flow $_{t-1, t-12}$_Quartile1 | 0.32*** | 0.34*** | 0.36*** | 0.31*** |
| | (3.91) | (4.00) | (2.97) | (3.83) |
| Fund Characteristics of Note | | | | |
| Management Fee | 1.23*** | 1.23*** | 1.47*** | 1.22*** |
| | (6.84) | (6.87) | (4.87) | (6.93) |
| Incentive Fee | 0.14*** | 0.13*** | 0.10** | 0.14*** |
| | (3.92) | (3.69) | (2.05) | (3.90) |
| High–water Mark | 0.92*** | 0.97*** | 0.82** | 0.92*** |
| | (2.88) | (3.04) | (2.09) | (2.89) |
| Lockup Period | −0.06*** | −0.06*** | −0.05*** | −0.06*** |
| | (−4.25) | (−4.08) | (−3.01) | (−4.24) |
| Closed to Investment | −0.83 | −0.84 | −1.67** | −0.84 |
| | (−1.53) | (−1.60) | (−2.41) | (−1.54) |
| Other Fund Characteristics | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes |
| R–squared | 0.25 | 0.25 | 0.15 | 0.25 |
| N | 190,342 | 190,342 | 127,941 | 190,301 |

**Table 3: Effects of charitable donations using matched-sample analysis**

This table reports the results of effects of larger donations (>=$12,500) on net flows and fund performance using a matched-sample approach. Each fund in the treatment group is matched with a fund in the control group by minimizing the absolute difference of performance and flows one year before donation. Reported variables are net flows and performance (raw return, style-adjusted return, Fung and Hsieh (2004) seven-factor alpha, and Sharpe ratio) one year before and one year after the donation. All variables are expressed in percentages and are monthly averages each fund-quarter (with the exception of Sharpe ratio, which is annualized). *Donate* takes a value of one if the fund donates in the year and quarter, and zero otherwise. *After* takes a value of one if the flow or performance happens after donations, and zero otherwise. Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. The *t*-statistics are reported in parentheses below the slope coefficients. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

| Dependent Variables: | Flow | Return | Style–adj. Return | Alpha | Sharpe |
|---|---|---|---|---|---|
| Donate | 0.17 | −0.03 | −0.12** | −0.05 | 0.01 |
| | (0.88) | (−0.69) | (−2.47) | (−1.27) | (0.32) |
| After | −1.57*** | −0.11** | −0.09* | −0.10*** | −0.08*** |
| | (−11.92) | (−2.07) | (−1.74) | (−3.28) | (−2.84) |
| Donate×After | 0.47** | −0.02 | 0.06 | 0.03 | −0.00 |
| | (2.56) | (−0.24) | (0.95) | (0.72) | (−0.10) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.032 | 0.003 | 0.004 | 0.013 | 0.016 |
| N | 26,308 | 26,910 | 26,966 | 20,964 | 7,134 |

## Table 4: Determinants of charitable donations: Recurring versus nonrecurring donations

This table reports the results from the determinants analysis for recurring versus nonrecurring donations. Recurring donations are donations made by a fund manager to a charity to which the manager has donated before while nonrecurring donations are one-off donations. Panel A presents logistic regressions where the dependent variable is $donate_{i,t}$, which takes a value of one if the manager of fund *i* makes a large charitable donation (>=$12,500) in month *t*, and zero otherwise. Results for nonrecurring donations are in the first four columns and recurring donations are in the last four columns. *Performance* $_{t-1,\ t-12}$*_Quartile1* and *Flow* $_{t-1,\ t-12}$*_Quartile1* takes a value of one if the fund performance (raw return, style-adjusted return, Fung and Hsieh (2004) seven-factor alpha, and Sharpe ratio) are in the lowest quartile, and zero otherwise. The *t*-statistics are reported in parentheses below the slope coefficients. Fund-level control variables are defined in Table 1. This table only reports results of fund characteristics of note. Panel B presents differences of the key independent variables explaining recurring and nonrecurring donations. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

### Panel A: Determinants analysis: Recurring and nonrecurring donations

| Dependent variable: Donate Dummy | Nonrecurring | | | | Recurring | | | |
|---|---|---|---|---|---|---|---|---|
| | Return | Style-adj. Return | Alpha | Sharpe | Return | Style-adj. Return | Alpha | Sharpe |
| Performance $_{t-1,\ t-12}$_Quartile1 | 1.82*** | 2.61*** | 0.73** | 1.96*** | 0.03 | 0.12 | −0.29 | 0.21 |
| | (10.35) | (8.09) | (1.99) | (9.98) | (0.31) | (0.79) | (−1.47) | (1.50) |
| Flow $_{t-1,\ t-12}$_Quartile1 | 0.46*** | 0.51*** | 1.15*** | 0.43*** | −0.03 | −0.04 | −0.09 | −0.04 |
| | (2.78) | (2.90) | (3.20) | (2.64) | (−0.34) | (−0.43) | (−0.60) | (−0.42) |
| Fund Characteristics of Note | | | | | | | | |
| Management Fee | 1.87*** | 1.95*** | 5.26*** | 1.85*** | −0.04 | −0.01 | −0.01 | −0.03 |
| | (5.09) | (5.28) | (5.08) | (5.14) | (−0.36) | (−0.04) | (−0.09) | (−0.17) |
| Incentive Fee | 0.29*** | 0.30*** | 0.43*** | 0.29*** | −0.03 | −0.01 | −0.03 | −0.01 |
| | (8.75) | (7.73) | (6.84) | (8.73) | (−1.63) | (−0.67) | (−1.29) | (−0.72) |
| High–water Mark | 1.00** | 1.17** | 5.31** | 1.03** | 0.43 | 0.04 | 0.18 | 0.02 |
| | (2.05) | (2.28) | (2.57) | (2.14) | (1.58) | (0.15) | (0.66) | (0.06) |
| Lockup Period | −0.17*** | −0.16*** | −0.13** | −0.16*** | −0.02 | −0.02* | −0.02 | −0.02 |
| | (−5.03) | (−4.68) | (−2.16) | (−5.04) | (−1.41) | (−1.66) | (−1.38) | (−1.59) |
| Closed to Investment | −3.68*** | −4.41*** | −6.47*** | −3.73*** | −0.17 | −0.33 | 0.32* | −0.41 |
| | (−6.85) | (−7.08) | (−4.69) | (−6.71) | (−0.77) | (−1.39) | (1.74) | (−1.64) |
| Other Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.49 | 0.53 | 0.68 | 0.50 | 0.03 | 0.02 | 0.04 | 0.02 |
| N | 177,640 | 177,640 | 118,338 | 177,606 | 184,998 | 185,006 | 125,095 | 184,967 |

### Panel B: Differences in the coefficients on key independent variables: Recurring versus nonrecurring donations

| | Return | Style–adj. Return | Alpha | Sharpe |
|---|---|---|---|---|
| Performance $_{t-1,\ t-12}$_Quartile1 | 1.79*** | 2.49*** | 1.02*** | 1.75*** |
| Flow $_{t-1,\ t-12}$_Quartile1 | 0.49*** | 0.55*** | 1.24*** | 0.47*** |
| Management Fee | 1.91*** | 1.96*** | 5.27*** | 1.88*** |
| Incentive Fee | 0.32*** | 0.31*** | 0.46*** | 0.3*** |
| High–water Mark | 0.57 | 1.13* | 5.13*** | 1.01* |
| Lockup Period | −0.15*** | −0.14*** | −0.11* | −0.14*** |
| Closed to Invest | −3.51*** | −4.08*** | −6.79*** | −3.32*** |

## Table 5: Effects of charitable donations: Recurring versus nonrecurring donations

This table reports the effects for recurring and nonrecurring donations. Recurring donations are donations made by a fund manager to a charity to which the manager has donated before while nonrecurring donations are one-off donations. Reported variables are net flows and performance (raw return, style-adjusted return, Fung and Hsieh (2004) seven-factor alpha, and Sharpe ratio) one year before and one year after the donation. All variables are expressed in percentages and are monthly averages each fund-quarter (with the exception of Sharpe ratio, which is annualized). Each fund in the treatment group is matched with a fund in the control group by minimizing the absolute difference of performance and flows one year before donation. Panel A reports the results from multivariate regressions and Panel B reports coefficient differences of the key independent variable *Donate×After*. *Donate* takes a value of one if the manager of a fund makes a large charitable donation (>=$12,500) in the year and quarter, and zero otherwise. *After* takes a value of one if the flow or performance happens after donations, and zero otherwise. *Donate×After* is the interaction term. Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. The *t*-statistics are reported in parentheses below the slope coefficients. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: Multivariate analysis of effects of donations: Recurring versus nonrecurring donations**

| | Nonrecurring | | | | | Recurring | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dependent Variables: | Flow | Return | Style–adj. Return | Alpha | Sharpe | Flow | Return | Style–adj. Return | Alpha | Sharpe |
| Donate | −0.00 | −0.08 | −0.07 | −0.04 | −0.01 | 0.10 | −0.03 | −0.13** | −0.05 | 0.02 |
| | (−0.00) | (−0.62) | (−0.59) | (−0.43) | (−0.17) | (0.49) | (−0.57) | (−2.39) | (−1.24) | (0.41) |
| After | −1.52*** | −0.05 | −0.09 | −0.13 | −0.11* | −1.57*** | −0.12** | −0.09 | −0.10*** | −0.08** |
| | (−4.61) | (−0.32) | (−0.72) | (−1.56) | (−1.71) | (−10.96) | (−2.05) | (−1.59) | (−2.93) | (−2.51) |
| Donate×After | 1.30*** | −0.16 | −0.09 | −0.03 | 0.04 | 0.14 | 0.01 | 0.08 | 0.04 | −0.01 |
| | (2.92) | (−0.87) | (−0.60) | (−0.25) | (0.41) | (0.63) | (0.10) | (1.21) | (0.92) | (−0.23) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.028 | 0.006 | 0.009 | 0.016 | 0.043 | 0.037 | 0.003 | 0.004 | 0.012 | 0.015 |
| N | 3,317 | 3,489 | 3,541 | 2,749 | 948 | 22,991 | 23,421 | 23,425 | 18,215 | 6,186 |

**Panel B: Differences of Donate×After**

| Flow | Return | Style–adj. Return | Alpha | Sharpe |
|---|---|---|---|---|
| 1.16** | −0.17 | −0.17 | −0.07 | 0.05 |

## Table 6 : Determinants of charitable donations: Charities with and without events catering to the hedge fund community

This table reports the results from the analyses of determinants of donations split based on whether the donation is made to a charity that held a fundraising event with at least one hedge fund donor making an earmarked donation towards the event (termed event and nonevent donations). Panel A presents the results from logistic regressions where the dependent variable is $donate_{i,t}$, which takes a value of one if the portfolio manager of fund *i* makes a large charitable donation (>=$12,500) in month *t*, and zero otherwise. We consider event donations in first four columns and nonevent donations in last four columns. $Performance_{t-1,\ t-12}\_Quartile1$ and $Flow_{t-1,\ t-12}\_Quartile1$ are as defined in Table 2. The *t*-statistics are reported in parentheses below the slope coefficients. Fund-level control variables are defined in Table 1. Panel B reports the differences in the coefficients across the event and nonevent samples. The *t*-statistics are reported in parentheses below the slope coefficients. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: Determinants analysis: Event and nonevent donations**

| Dependent Variable: Donate Dummy | Event | | | | Nonevent | | | |
|---|---|---|---|---|---|---|---|---|
| | Return | Style-adj. Return | Alpha | Sharpe | Return | Style-adj. Return | Alpha | Sharpe |
| Performance $_{t-1,\ t-12}$_Quartile1 | 4.78*** | 3.49*** | 0.95*** | 3.55*** | 0.06 | 0.11 | −0.01 | 0.02 |
| | (2.70) | (3.26) | (2.78) | (2.84) | (0.68) | (0.79) | (−0.05) | (0.21) |
| Flow $_{t-1,\ t-12}$_Quartile1 | 4.95*** | 4.06*** | 2.78*** | 4.49*** | −0.08 | −0.09 | 0.05 | −0.07 |
| | (2.80) | (3.14) | (3.55) | (2.88) | (−0.83) | (−0.84) | (0.39) | (−0.71) |
| Fund Characteristics of Note | | | | | | | | |
| Management Fee | 1.81*** | 1.88*** | 4.89*** | 1.78*** | −0.07 | −0.06 | −0.29** | −0.40*** |
| | (5.00) | (5.20) | (5.45) | (5.05) | (−0.87) | (−0.35) | (−2.40) | (−3.17) |
| Incentive Fee | 0.27*** | 0.28*** | 0.37*** | 0.27*** | −0.02 | −0.01 | −0.02 | −0.02 |
| | (8.78) | (7.73) | (6.82) | (8.75) | (−1.03) | (−0.27) | (−1.22) | (−0.77) |
| High–water Mark | 0.86* | 1.01** | 4.32** | 0.89* | 0.43 | 0.06 | 0.32 | 0.34 |
| | (1.82) | (2.07) | (2.38) | (1.91) | (1.38) | (0.22) | (1.55) | (1.13) |
| Lockup Period | −0.19*** | −0.18*** | −0.12*** | −0.18*** | −0.02 | −0.02* | −0.01 | −0.02 |
| | (−5.97) | (−5.52) | (−2.63) | (−5.98) | (−1.51) | (−1.79) | (−0.87) | (−1.50) |
| Closed to Investment | −3.33*** | −3.96*** | −5.37*** | −3.37*** | 0.59*** | 0.42** | 0.23 | 0.56*** |
| | (−7.57) | (−7.69) | (−4.12) | (−7.26) | (3.81) | (2.33) | (0.99) | (3.68) |
| Other Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.48 | 0.53 | 0.66 | 0.49 | 0.03 | 0.02 | 0.06 | 0.03 |
| N | 172,816 | 172,816 | 115,053 | 172,782 | 189,004 | 189,004 | 127,119 | 188,965 |

**Panel B: Differences in the coefficients on key independent variables: Event versus non–event donations**

| | Return | Style–adj. Return | Alpha | Sharpe |
|---|---|---|---|---|
| Performance $_{t-1,\, t-12}$_Quartile1 | 1.76*** | 2.54*** | 0.91*** | 1.95*** |
| Flow $_{t-1,\, t-12}$_Quartile1 | 0.57*** | 0.65*** | 1.34*** | 0.54*** |
| Management Fee | 1.88*** | 1.94*** | 5.18*** | 2.18*** |
| Incentive Fee | 0.29*** | 0.29*** | 0.39*** | 0.29**** |
| High–water Mark | 0.43 | 0.95* | 4.00** | 0.55 |
| Lockup Period | −0.17*** | −0.16*** | −0.11** | −0.16*** |
| Closed to Invest | −3.92*** | −4.38*** | −5.6*** | −3.93*** |

## Table 7: Effects of charitable donations: Charities with and without events catering to the hedge fund community

This table reports the results from the analyses of effects of donations split based on whether the donation is made to a charity that held a fundraising event with at least one hedge fund donor making an earmarked donation towards the event (termed event and nonevent donations). *Donate* takes a value of one for funds that make a large charitable donation (>=$12,500) and zero for matched, non-donating funds. *After* takes a value of one for the four quarters after the donation period donations, and zero otherwise. *Event* takes a value of one if the donation is an event donation, and zero otherwise. Panel A reports the results from multivariate regressions and Panel B reports coefficient differences of the key independent variable *Donate*×*After*. The *t*-statistics are reported in parentheses below the slope coefficients. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: Multivariate analysis of the effects of donations: event versus non-event donations**

| | Event | | | | | Non–event | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dependent variables: | Flow | Return | Style–adj. Return | Alpha | Sharpe | Flow | Return | Style–adj. Return | Alpha | Sharpe |
| Donate | 0.24 | -0.09 | -0.16 | -0.01 | 0.00 | 0.08 | -0.03 | -0.12** | -0.05 | 0.01 |
| | (0.40) | (-0.41) | (-0.94) | (-0.11) | (0.00) | (0.42) | (-0.64) | (-2.32) | (-1.29) | (0.31) |
| After | -1.24*** | 0.13 | 0.18 | -0.04 | -0.08 | -1.58*** | -0.13** | -0.10** | -0.10*** | -0.08*** |
| | (-2.93) | (0.48) | (0.87) | (-0.38) | (-0.48) | (-11.63) | (-2.32) | (-2.01) | (-3.32) | (-2.83) |
| Donate × After | 1.53** | 0.14 | -0.07 | -0.03 | -0.05 | 0.16 | -0.02 | 0.07 | 0.03 | -0.00 |
| | (2.35) | (0.41) | (-0.25) | (-0.24) | (-0.24) | (0.76) | (-0.34) | (1.05) | (0.81) | (-0.03) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.054 | 0.008 | 0.020 | 0.030 | 0.019 | 0.036 | 0.003 | 0.004 | 0.012 | 0.017 |
| N | 1,383 | 1,452 | 1,466 | 1,238 | 392 | 24,925 | 25,458 | 25,500 | 19,726 | 6,742 |

**Panel B: Differences of Donate×After**

| Flow | Return | Style–adj. Return | Alpha | Sharpe |
|---|---|---|---|---|
| 1.37** | -0.07 | -0.01 | -0.03 | -0.02 |

**Table 8: Charitable donations and fund mortality**

This table reports coefficient estimates from multivariate logit and Cox proportional hazard regressions for hedge fund termination. The sample is the matched sample of funds used in the analysis in Table 3. The dependent variable is *Termination*, which takes a value of one after a hedge fund stops reporting to commercial databases and states that it has liquidated, and takes a value of zero otherwise. The independent variables include *Donate*, which takes a value of one if the fund makes a large charitable donation (>=$12,500), and zero if it is a matched, non-donating peer. This variable is interacted by whether the donation is *Nonrecurring* or made to an *Event* charity. The other independent variables include fund characteristics such as management fee, performance fee, high-water mark, lockup period, an indicator variable for whether the fund is closed to new investment, fund age in years, and log of fund size. Standard errors are clustered both at the fund and time level. The *t*-statistics are reported in parentheses below the slope coefficients. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

| | Logit | Logit | Logit | Cox | Cox | Cox |
|---|---|---|---|---|---|---|
| Donate | −0.386*** | −0.339*** | −0.563*** | 0.858 | 0.761** | 0.789** |
| | (−6.39) | (−5.31) | (−8.34) | (−1.33) | (−2.36) | (−2.03) |
| Nonrecurring | | 0.114 | | | 1.257** | |
| | | (1.53) | | | (2.47) | |
| Event | | | 0.261** | | | 1.541*** |
| | | | (2.26) | | | (2.66) |
| Nonrecurring×Donate | | −0.434*** | | | 0.631** | |
| | | (−2.87) | | | (−2.34) | |
| Event×Donate | | | −0.790*** | | | 0.293*** |
| | | | (−2.62) | | | (−3.19) |
| Fund Characteristics of Note | Yes | Yes | Yes | Yes | Yes | Yes |
| Other Fund Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.140 | 0.14 | 0.14 | 0.126 | 0.131 | 0.132 |
| N | 127,215 | 127,215 | 127,215 | 127,215 | 127,215 | 127,215 |

## Table 9: Longer term effects of charitable donations

This table reports the results of the multivariate analysis of the effects of donations in the second year after donations. The dependent variable is the monthly flow in the second year after a donation, with the sample split based on performance in the first year following the donation period (each of the four pairs of specifications uses a different measure of performance to split the sample: raw returns, style adjusted returns, alpha and Sharpe ratio). The sample for each pair of specifications is a matched sample, and each fund in the treatment (donating) group is matched with a fund in the control (non-donating) group by minimizing the absolute difference of flows one year before the donation. The first column in each pair presents results when fund performance during first year after donation period is less than the median (perf<median), while the second column in each pair present results when fund performance during first year after donation period is greater than or equal to the median (perf>=median). The main independent variable of interest is *Donate*, which takes a value of one if the fund makes a large charitable donation (>=$12,500), and zero if it is a matched, non-donating peer. The other independent variables include fund characteristics such as management fee, performance fee, high-water mark, lock-up period, an indicator variable for whether the fund is closed to new investment, fund age in years, log of fund size and cumulative amount of donations. Standard errors are clustered both at the fund and year level. The *t*-statistics are reported in parentheses below the slope coefficients. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

| Dependent Variable: Flow *t*+2 | | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Donate | 0.04 | 0.09 | 0.04 | −0.10 |
| | (0.25) | (0.60) | (0.28) | (−0.66) |
| I(Return *t*+1 <median ) | −1.51*** | | | |
| | (−9.60) | | | |
| I(Return *t*+1 <median ) × Donate | −0.76*** | | | |
| | (−3.44) | | | |
| I(Style-adjusted Return *t*+1<median) | | −1.35*** | | |
| | | (−8.55) | | |
| I(Style-adjusted Return *t*+1<median) × Donate | | −0.85*** | | |
| | | (−3.85) | | |
| I(Alpha *t*+1<median) | | | −1.08*** | |
| | | | (−6.68) | |
| I(Alpha *t*+1<median) × Donate | | | −0.70*** | |
| | | | (−3.09) | |
| I(Sharpe *t*+1<median) | | | | −1.65*** |
| | | | | (−10.48) |
| I(Sharpe *t*+1<median) × Donate | | | | −0.54** |
| | | | | (−2.45) |
| Fund Characteristics | Yes | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes | Yes |
| R-squared | 0.096 | 0.082 | 0.056 | 0.086 |
| N | 3,474 | 3,474 | 3,474 | 3,474 |

**Table 10: Effects of charitable donations: Donation size and fund size**

This table reports the results of the multivariate analysis of the effects of donations equal to or above $12,500 by smaller and larger funds (split by the median assets under management of funds in our sample) and further split into larger (>$20,000) and smaller donations (<=20,000) using the median donation cutoff for donations equal to or above $12,500. Only the coefficient on the effect of the donation on flows is presented (i.e., the *Donate*×*After* coefficient in column 1 of Table 3). All other controls are as in Table 3 but are suppressed. Reported variables are average monthly fund net flows (in %) one year before and one year after the donation. Each fund in the treatment group is matched with a fund in the control group by minimizing the absolute difference of performance, flows, and assets under management one year before donation. Each of the four coefficients is from a separate regression, and reflects the effect of donations on net flows for four subsamples: Larger donations by larger funds, larger donations by smaller funds, smaller donations by larger funds, and smaller donations by smaller funds. Standard errors are clustered both at the fund and year level. The *t*-statistics are reported in parentheses below the slope coefficients. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

| Presented coefficient: Response of net flows to *Donate*×*After* | Larger Fund (AUM>median) | Smaller Fund (AUM<=median) |
|---|---|---|
| Larger Donation (>$20,000) | 0.26 | 2.00*** |
| | (0.66) | (4.43) |
| Smaller Donation ($12,500 <= Donation <= $20,000) | −0.05 | 0.22 |
| | (−0.15) | (0.55) |

## Table 11: Determinants and effects of charitable donations sorted on board dummy of managers

This table presents the results of panel regressions analyzing the determinants (in Panel A) and effects (in Panel B) of charitable donations sorted on if the donating manager sites on the board of the charity receiving the donation. Dependent variable is $donate_{i,t}$, which takes a value of one if the portfolio manager of fund *i* makes a large charitable donation (>=$12,500) in month *t*, and zero otherwise. Explanatory variables include prior year's fund raw return, style-adjusted return, seven-factor alpha, Sharpe ratio, net flows, fund characteristics of note, and fund-level controls (prior year's age, size, and risk (total risk for returns, and idiosyncratic risk for style-adjusted returns and alpha measures)). The table presents results when past performance and flows are in lowest quartiles (quartile 1). Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A

| Dependent Variable: Donate Dummy | Board | | | | Non-Board | | | |
|---|---|---|---|---|---|---|---|---|
| | Return | Style-adj. Return | Alpha | Sharpe | Return | Style-adj. Return | Alpha | Sharpe |
| Performance $_{t\text{-}1,\, t\text{-}12}$_Quartile1 | 1.04*** | 1.06*** | 1.05*** | 1.24*** | 0.80*** | 0.92*** | 0.52*** | 0.89*** |
| | (5.29) | (4.35) | (3.12) | (5.55) | (7.02) | (5.24) | (4.77) | (6.88) |
| Flow $_{t\text{-}1,\, t\text{-}12}$_Quartile1 | 1.02*** | 1.07*** | 1.50*** | 1.01*** | 0.34*** | 0.35*** | 0.34*** | 0.33*** |
| | (3.84) | (4.03) | (3.68) | (3.86) | (3.99) | (3.96) | (2.87) | (3.91) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.39 | 0.40 | 0.56 | 0.40 | 0.21 | 0.21 | 0.14 | 0.21 |
| N | 187,203 | 187,203 | 125,618 | 187,164 | 190,081 | 190,081 | 127,719 | 190,040 |

Panel B

| | Board | | | | | Non-Board | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dependent variables: | Flow | Return | Style–adj. Return | Alpha | Sharpe | Flow | Return | Style–adj. Return | Alpha | Sharpe |
| Donate | −0.37 | 0.07 | −0.14 | −0.30*** | 0.02 | 0.24 | −0.04 | −0.12** | −0.02 | 0.01 |
| | (−0.77) | (0.45) | (−0.92) | (−2.65) | (0.21) | (1.11) | (−0.86) | (−2.34) | (−0.52) | (0.24) |
| After | −1.61*** | −0.05 | 0.01 | −0.19*** | −0.11 | −1.56*** | −0.12** | −0.10* | −0.09*** | −0.08** |
| | (−4.07) | (−0.34) | (0.07) | (−2.67) | (−1.57) | (−11.38) | (−2.09) | (−1.88) | (−2.69) | (−2.53) |
| Donate × After | 1.84*** | −0.22 | 0.08 | 0.13 | −0.11 | 0.52*** | 0.01 | 0.16** | 0.02 | 0.01 |
| | (3.88) | (−1.05) | (0.44) | (1.27) | (−0.79) | (2.72) | (0.12) | (2.45) | (0.38) | (0.22) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.040 | 0.008 | 0.008 | 0.028 | 0.045 | 0.031 | 0.003 | 0.003 | 0.013 | 0.017 |
| N | 2,772 | 2,908 | 2,929 | 2,601 | 770 | 23,536 | 24,002 | 24,037 | 18,363 | 6,364 |

**Table 12: Determinants and effects of charitable donations sorted on ESG scores**

This table presents the results of panel regressions analyzing the determinants (in Panel A) and effects (in Panel B) of charitable donations sorted by ESG scores of portfolio holdings of the management company. Dependent variable is $donate_{i,t}$, which takes a value of one if the manager of fund *i* makes a large charitable donation (>=$12,500) in month *t*, and zero otherwise. Explanatory variables include prior year's fund raw return, style-adjusted return, seven-factor alpha, Sharpe ratio, net flows, fund characteristics of note, and fund-level controls (prior year's age, size, and risk (total risk for returns, and idiosyncratic risk for style-adjusted returns and alpha measures)). The table presents results when past performance and flows are in lowest quartiles (quartile 1). Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A

| Dependent Variable: Donate Dummy | ESG>=median | | | | ESG<median | | | |
|---|---|---|---|---|---|---|---|---|
| | Return | Style-adj. Return | Alpha | Sharpe | Return | Style-adj. Return | Alpha | Sharpe |
| Performance$_{t-1,\,t-12}$_Quartile1 | 1.05*** | 1.19*** | 0.50*** | 1.13*** | 0.80*** | 0.92*** | 0.52*** | 0.89*** |
| | (8.26) | (5.83) | (4.12) | (7.88) | (7.02) | (5.24) | (4.77) | (6.88) |
| Flow$_{t-1,\,t-12}$_Quartile1 | 0.40*** | 0.43*** | 0.49*** | 0.39*** | 0.34*** | 0.35*** | 0.34*** | 0.33*** |
| | (4.14) | (4.23) | (3.03) | (4.08) | (3.99) | (3.96) | (2.87) | (3.91) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.27 | 0.27 | 0.17 | 0.27 | 0.21 | 0.21 | 0.14 | 0.21 |
| N | 188,694 | 188,694 | 126,764 | 188,654 | 190,081 | 190,081 | 127,719 | 190,040 |

Panel B

| | ESG>=median | | | | | ESG<median | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Dependent variables: | Flow | Return | Style–adj. Return | Alpha | Sharpe | Flow | Return | Style–adj. Return | Alpha | Sharpe |
| Donate | 0.46 | −0.10 | −0.06 | 0.05 | −0.00 | 0.84** | −0.10 | −0.08 | −0.18** | 0.05 |
| | (1.52) | (−1.21) | (−0.76) | (0.84) | (−0.03) | (2.14) | (−0.93) | (−0.74) | (−2.38) | (0.75) |
| After | −1.29*** | −0.08 | 0.00 | −0.07 | −0.03 | −1.49*** | −0.17 | 0.08 | −0.18** | −0.12* |
| | (−5.56) | (−0.91) | (0.03) | (−1.12) | (−0.68) | (−4.98) | (−1.21) | (0.57) | (−2.48) | (−1.89) |
| Donate × After | 0.65** | 0.04 | −0.09 | −0.01 | −0.01 | 0.71* | 0.07 | 0.06 | 0.10 | −0.03 |
| | (2.15) | (0.41) | (−1.01) | (−0.10) | (−0.22) | (1.72) | (0.41) | (0.43) | (1.24) | (−0.35) |
| Fund Characteristics | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| R–squared | 0.025 | 0.004 | 0.005 | 0.011 | 0.024 | 0.042 | 0.003 | 0.002 | 0.019 | 0.015 |
| N | 7,365 | 7,571 | 7,591 | 6,255 | 2,022 | 7,370 | 7,536 | 7,581 | 6,279 | 2,016 |

## Appendix
## Table A1: Robustness Checks – Determinants of donations

Each panel of this table presents a different robustness test of the results presented in the paper regarding the determinants of donations. For brevity, only the estimated coefficients on the dummy variables indicating whether a fund is in the bottom quartile of performance and flows are presented. Subpanels present the results separately that are analogous to baseline determinants reported in Panel C of Table 2 in the paper, determinants of recurring versus non-recurring donations in Table 4 in the paper, and determinants of donations to charities hosting events which cater to the hedge fund community versus donations to other charities in Table 6 in the paper. Robustness tests covered include using all funds including those without any donation data (Panel A), including personal characteristics (manager age, gender, dollar fees) as additional explanatory variables (Panel B), using the lower bound to measure the donation amount, while maintaining the $12,500 cutoff for qualifying as a donation event (Panel C), and using different points in time during the 12-month donation period as the assumed donation period (Panels D, E, and F). Note that these final three specifications do not set other months in the donation period to be missing.

| | **Panel A: All funds** | | | | **Panel B: Personal Characteristics** | | | | **Panel C: Lower Bound** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **A1: Baseline** | | | | **B1: Baseline** | | | | **C1: Baseline** | | | |
| | Return | Style Adj. Return | Alpha | Sharpe | Return | Style Adj. Return | Alpha | Sharpe | Return | Style Adj. Return | Alpha | Sharpe |
| Performance $_{t\text{-}1,t\text{-}12}$_Quartile1 | 1.54*** | 2.31*** | 0.14** | 1.61*** | 1.18*** | 1.16*** | 0.38*** | 1.38*** | 0.71*** | 0.59*** | 0.56*** | 0.76*** |
| | (10.63) | (8.64) | (2.07) | (10.63) | (7.32) | (6.43) | (2.89) | (7.44) | (6.88) | (3.73) | (5.29) | (6.25) |
| Flow $_{t\text{-}1,t\text{-}12}$_Quartile1 | 0.55*** | 0.56*** | 3.27*** | 0.53*** | 0.44** | 0.53*** | 0.53*** | 0.42** | 0.26*** | 0.29*** | 0.23** | 0.26*** |
| | (6.20) | (6.35) | (9.10) | (6.17) | (2.49) | (2.95) | (2.63) | (2.44) | (3.12) | (3.52) | (1.99) | (3.10) |
| | **A2: Recurring versus Non-recurring** | | | | **B2: Recurring versus Non-recurring** | | | | **C2: Recurring versus Non-recurring** | | | |
| Non-recur Perf Quartile1 | 1.69*** | 2.38*** | 0.29*** | 1.77*** | 1.49*** | 1.89*** | 0.41** | 1.66*** | 1.73*** | 2.45*** | 0.59* | 1.87*** |
| | (18.63) | (16.58) | (2.94) | (17.91) | (10.11) | (9.64) | (1.97) | (10.37) | (10.35) | (8.56) | (1.89) | (10.05) |
| Recur Perf Quartile1 | −0.15 | 0.04 | 0.14 | −0.17* | 0.36 | −0.66 | −0.18 | 0.24 | 0.22** | 0.07 | −0.11 | 0.30** |
| | (−1.52) | (0.48) | (1.51) | (−1.72) | (0.95) | (−1.35) | (−1.19) | (0.69) | (2.38) | (0.63) | (−0.59) | (2.49) |
| Difference | 1.84*** | 2.34*** | 0.15* | 1.94*** | 1.85*** | 2.55*** | 0.59*** | 1.90*** | 1.51** | 2.38*** | 0.70** | 1.57** |
| Non-recur Flows Quartile1 | 0.78*** | 0.84*** | 0.72*** | 0.77*** | 0.41*** | 0.45*** | 0.48*** | 0.39*** | 0.43*** | 0.47*** | 0.93*** | 0.41*** |
| | (7.73) | (8.34) | (7.57) | (7.64) | (2.98) | (3.26) | (2.68) | (2.90) | (2.77) | (2.81) | (3.11) | (2.64) |
| Recur Flows Quartile1 | −0.09 | −0.12 | −0.02 | −0.08 | −0.23 | −0.42 | 0.07 | −0.19 | −0.07 | −0.05 | −0.12 | −0.06 |
| | (−0.89) | (−1.26) | (−0.18) | (−0.87) | (−0.54) | (−0.95) | (0.52) | (−0.47) | (−0.76) | (−0.55) | (−0.77) | (−0.66) |
| Difference | 0.87*** | 0.96*** | 0.74*** | 0.85*** | 0.64*** | 0.97*** | 0.55*** | 0.58*** | 0.50*** | 0.52*** | 0.45*** | 0.47*** |

| | A3: Event versus Non-event | | | | B3: Event versus Non-event | | | | C3: Event versus Non-event | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Event Perf Q1 | 1.55*** | 2.03*** | 0.69* | 1.79*** | 1.44*** | 1.75*** | 3.00*** | 1.70*** | 1.65*** | 2.26*** | 0.89** | 2.04*** |
| | (4.70) | (4.63) | (1.80) | (5.16) | (3.00) | (3.93) | (4.34) | (3.70) | (4.74) | (3.78) | (2.14) | (4.87) |
| Non-event Perf Q1 | 0.08 | −0.05 | −0.17 | 0.11 | 0.17 | −0.34 | −0.53 | 0.07 | 0.23** | 0.08 | 0.13 | 0.20* |
| | (0.99) | (−0.53) | (−1.27) | (1.11) | (0.53) | (−1.13) | (−1.24) | (0.28) | (2.54) | (0.76) | (0.80) | (1.75) |
| Difference | 1.47*** | 2.08*** | 0.86** | 1.68*** | 1.27** | 2.09*** | 3.53*** | 1.63*** | 1.42*** | 2.18*** | 0.76* | 1.84*** |
| Event Flows Q1 | 0.95*** | 1.02*** | 1.27*** | 0.93*** | 1.30** | 1.52*** | 0.80* | 1.13** | 1.10*** | 1.09*** | 0.70** | 1.03*** |
| | (3.14) | (3.17) | (3.57) | (2.99) | (2.45) | (2.61) | (1.78) | (2.06) | (3.59) | (3.41) | (2.01) | (3.29) |
| Non-event Flow Q1 | 0.09 | 0.10 | 0.05 | 0.09 | −0.14 | −0.08 | 0.02 | −0.13 | −0.10 | −0.08 | 0.02 | −0.07 |
| | (0.89) | (1.00) | (0.44) | (0.87) | (−0.44) | (−0.30) | (0.07) | (−0.46) | (−1.06) | (−0.82) | (0.14) | (−0.80) |
| Difference | 0.86*** | 0.92*** | 1.22*** | 0.84*** | 1.44*** | 1.60*** | 0.82* | 1.26*** | 1.20*** | 1.17*** | 0.68* | 1.10*** |

| | Panel D: Beginning of period D1: Baseline | | | | Panel E: Middle of Period E1: Baseline | | | | Panel F: End of Period F1: Baseline | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Return | Style Adj. Ret. | Alpha | Sharpe | Return | Style Adj. Ret. | Alpha | Sharpe | Return | Style Adj. Ret. | Alpha | Sharpe |
| Performance $_{t\text{-}1,t\text{-}12}$_Quartile1 | 0.89*** | 0.94*** | 0.40*** | 0.97*** | 0.81*** | 0.97*** | 0.50*** | 0.85*** | 0.95*** | 1.01*** | 0.46*** | 1.04*** |
| | (6.30) | (4.60) | (3.85) | (6.44) | (5.85) | (5.06) | (4.91) | (5.44) | (6.08) | (3.75) | (3.94) | (6.46) |
| Flow $_{t\text{-}1,t\text{-}12}$_Quartile1 | 0.33*** | 0.36*** | 0.42*** | 0.32*** | 0.31*** | 0.32*** | 0.34*** | 0.30*** | 0.36*** | 0.37*** | 0.41*** | 0.34*** |
| | (3.85) | (4.14) | (3.52) | (3.76) | (3.81) | (3.85) | (2.81) | (3.81) | (3.72) | (3.42) | (2.98) | (3.57) |
| | **D2: Recurring versus Non-recurring** | | | | **E2: Recurring versus Non-recurring** | | | | **F2: Recurring versus Non-recurring** | | | |
| Non-recur Perf Quartile1 | 1.80*** | 2.59*** | 0.73* | 1.93*** | 1.81*** | 2.61*** | 0.75** | 1.96*** | 1.85*** | 2.64*** | 0.82** | 2.02*** |
| | (10.49) | (8.04) | (1.96) | (10.09) | (10.45) | (8.17) | (2.00) | (10.10) | (10.15) | (7.84) | (2.21) | (10.01) |
| Recur Perf Quartile1 | 0.13 | 0.17 | −0.32* | 0.17 | −0.09 | 0.17 | −0.31* | −0.24* | 0.11 | 0.11 | −0.21 | 0.14 |
| | (1.04) | (1.08) | (−1.92) | (1.20) | (−0.74) | (1.15) | (−1.68) | (−1.75) | (0.98) | (0.65) | (−1.04) | (1.26) |
| Difference | 1.67*** | 2.42*** | 1.05*** | 1.76*** | 1.90*** | 2.44*** | 1.06*** | 2.20*** | 1.74*** | 2.53*** | 1.03*** | 1.88*** |
| Non-recur Flows Quartile1 | 0.43*** | 0.49*** | 1.15*** | 0.41** | 0.42** | 0.48*** | 1.10*** | 0.40** | 0.49*** | 0.54*** | 1.20*** | 0.46*** |
| | (2.61) | (2.72) | (3.22) | (2.45) | (2.50) | (2.71) | (3.06) | (2.40) | (2.85) | (2.93) | (3.14) | (2.66) |
| Recur Flows Quartile1 | 0.03 | 0.02 | 0.09 | 0.02 | −0.01 | −0.05 | −0.15 | 0.01 | 0.02 | 0.02 | 0.04 | 0.02 |
| | (0.28) | (0.20) | (0.60) | (0.21) | (−0.07) | (−0.50) | (−0.91) | (0.09) | (0.18) | (0.14) | (0.21) | (0.17) |
| Difference | 0.41** | 0.47** | 1.06** | 0.39** | 0.43*** | 0.53*** | 1.25*** | 0.41** | 0.47** | 0.52** | 1.16** | 0.44** |
| | **D3: Event versus Non-event** | | | | **E3: Event versus Non-event** | | | | **F3: Event versus Non-event** | | | |
| Event Perf Quartile1 | 1.55*** | 1.83*** | 1.08*** | 1.75*** | 1.81*** | 2.21*** | 1.13*** | 1.81*** | 1.16*** | 0.92** | 1.21*** | 1.21*** |
| | (3.48) | (3.14) | (2.91) | (3.94) | (3.61) | (3.85) | (2.72) | (3.89) | (2.81) | (2.37) | (3.00) | (2.96) |
| Non-event Perf Quartile1 | 0.11 | 0.12 | −0.02 | 0.15 | −0.08 | 0.17 | 0.03 | −0.18 | 0.09 | 0.09 | 0.04 | 0.13 |
| | (0.93) | (0.83) | (−0.12) | (1.17) | (−0.67) | (1.25) | (0.16) | (−1.27) | (0.81) | (0.53) | (0.17) | (1.18) |
| Difference | 1.44*** | 1.71*** | 1.10*** | 1.60*** | 1.89*** | 2.04*** | 1.10*** | 1.99*** | 1.07*** | 0.83* | 1.17*** | 1.08*** |
| Event Flows Quartile1 | 1.20*** | 1.06*** | 0.87** | 1.11*** | 1.64*** | 1.66*** | 1.08** | 1.61*** | 1.50*** | 1.40*** | 0.98** | 1.48*** |
| | (3.08) | (2.70) | (2.07) | (3.14) | (4.75) | (4.70) | (2.57) | (4.78) | (3.73) | (3.63) | (2.49) | (3.69) |
| Non-event Flow Quartile1 | −0.01 | −0.01 | 0.11 | −0.01 | −0.05 | −0.09 | 0.00 | −0.03 | 0.01 | 0.00 | 0.07 | 0.00 |
| | (−0.06) | (−0.13) | (0.82) | (−0.13) | (−0.50) | (−0.92) | (0.01) | (−0.37) | (0.08) | (0.02) | (0.47) | (0.02) |
| Difference | 1.21*** | 1.07*** | 0.76* | 1.12*** | 1.69*** | 1.75*** | 1.08*** | 1.64*** | 1.49*** | 1.40*** | 0.91** | 1.48*** |

## Table A2: Robustness Checks – Effects of donations

Each specification in this table presents the results of a different robustness test of the analyses regarding the effects of donations. For brevity, only the effects of donations on flows are presented, along with subsample analysis examining the effects of donations separately for different types of donations (i.e. the coefficients on *After* × *Donate* from specifications analogous to those in Table 3, Table 5 and Table 7). The first column uses all funds (including funds that have never donated) in generated matched control samples. The second column uses the propensity scores from the determinants analysis to generate matched control samples. The third column includes personal characteristics (manager age, gender, dollar fees) as additional explanatory variables. The fourth column uses the lower bound to measure the donation amount, while maintaining the $12,500 cutoff for qualifying as a donation event and using different points in time during the 12-month donation period as the assumed donation period (Panels D, E, and F). Note that these final three specifications do not set other months in the donation period to be missing.

| | All funds | Propensity Score Matching | Personal characteristics | Lower Bound | Beginning of period | Middle of period | End of period |
|---|---|---|---|---|---|---|---|
| **A: Whole sample** | | | | | | | |
| Flows | 0.87*** | 0.56*** | 0.65** | 0.69*** | 0.67*** | 0.60*** | 0.83*** |
| | (4.43) | (4.07) | (2.28) | (4.35) | (3.94) | (3.44) | (4.46) |
| **B: Recurring versus Non-recurring** | | | | | | | |
| Flows (Nonrecurring) | 0.95** | 0.82*** | 2.02** | 1.24*** | 1.23*** | 0.93** | 1.52*** |
| | (2.11) | (3.34) | (2.32) | (3.26) | (2.80) | (2.21) | (3.08) |
| Flows (Recurring) | 0.21 | 0.22 | −0.13 | −0.21 | 0.00 | 0.13 | 0.22 |
| | (0.86) | (0.10) | (−0.49) | (−1.06) | (0.02) | (0.66) | (1.08) |
| Difference | 0.74* | 0.60* | 2.15** | 1.45*** | 1.23** | 0.80* | 1.30* |
| **C: Event versus Non-event** | | | | | | | |
| Flows (Event) | 1.96*** | 0.93*** | 1.84* | 1.14** | 1.33* | 1.45* | 1.72** |
| | (2.95) | (2.70) | (1.70) | (2.00) | (1.83) | (1.92) | (2.52) |
| Flows (Non-event) | 0.31 | 0.27 | −0.09 | 0.05 | −0.14 | −0.07 | 0.26 |
| | (1.34) | (0.11) | (−0.34) | (0.26) | (−0.73) | (−0.37) | (1.31) |
| Difference | 1.65* | 0.66* | 1.93* | 1.09* | 1.47** | 1.52** | 1.46* |

## Table A3: Exclusion of 2-4 years

This table presents the results of panel regressions analyzing the determinants (in Panel A) and effects (in Panel B) of charitable donations excluding donations where there are other donations within 2 to 4 years before or after the donation. Dependent variable is $donate_{i,t}$, which takes a value of one if the portfolio manager of fund *i* makes a large charitable donation (>=$12,500) in month *t*, and zero otherwise. Explanatory variables include prior year's fund raw return, net flows, fund characteristics of note, and fund-level controls (prior year's age, size, and total risk) The table presents results when past returns and flows are in lowest quartiles (quartile 1). Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

Panel A

| Exclusion of: | 2 years | 3 years | 4 years |
|---|---|---|---|
| $Return_{t-1,\,t-12}$_Quartile1 | 1.76*** | 1.77*** | 1.77*** |
| | (10.58) | (10.66) | (10.67) |
| $Flow_{t-1,\,t-12}$_Quartile1 | 0.44*** | 0.44*** | 0.44*** |
| | (3.01) | (2.99) | (2.99) |
| Fund Characteristics of Note | | | |
| Management Fee | 1.78*** | 1.79*** | 1.79*** |
| | (5.19) | (5.18) | (5.18) |
| Incentive Fee | 0.25*** | 0.25*** | 0.25*** |
| | (7.82) | (7.82) | (7.82) |
| High–water Mark | 1.10** | 1.10** | 1.10** |
| | (2.25) | (2.25) | (2.25) |
| Lockup Period | −0.17*** | −0.17*** | −0.17*** |
| | (−5.72) | (−5.72) | (−5.71) |
| Closed to Investment | −0.76 | −0.76 | −0.76 |
| | (−0.96) | (−0.96) | (−0.96) |
| Other Fund Characteristics | Yes | Yes | Yes |
| Cluster at Fund and Month | Yes | Yes | Yes |
| R–squared | 0.44 | 0.44 | 0.44 |
| N | 177,474 | 177,347 | 177,272 |

Panel B

| Dependent variable: Flow | 2 years | 3 years | 4 years |
|---|---|---|---|
| Donate | 0.43 | 0.20 | 0.16 |
| | (0.85) | (0.40) | (0.33) |
| After | −0.90** | −0.93** | −0.94** |
| | (−2.15) | (−2.16) | (−2.18) |
| Donate×After | 1.12* | 1.10* | 1.27** |
| | (1.77) | (1.76) | (2.03) |
| Fund Characteristics | Yes | Yes | Yes |
| Cluster at Fund and Year | Yes | Yes | Yes |
| R–squared | 0.015 | 0.022 | 0.023 |
| N | 1,997 | 1,973 | 1,959 |

## Table A4: Crisis vs non-crisis/retail vs institutional

This table reports the results of effects of larger donations (>=$12,500) on net flows using a matched-sample approach, sorted on crisis/non-crisis periods and retail/institutional funds. Following Ben-David et al. (2012), Form ADV data is used to classify funds as retail and institutional, and classify the time period from 2007Q3 to 2009Q1 as the crisis period. Each fund in the treatment group is matched with a fund in the control group by minimizing the absolute difference of performance and flows one year before donation. This table only reports the estimated coefficient on *After* × *Donate* for the four subsamples. Fund-level control variables are defined in Table 1. Standard errors are clustered both at the fund and time level. The *t*-statistics are reported in parentheses below the slope coefficients. Superscripts *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

| | Retail | Institutional | Column Difference |
|---|---|---|---|
| Crisis | 1.65* | 0.37 | 1.28 |
| | (1.94) | (0.51) | (1.14) |
| Non-crisis | 0.68** | 0.47** | 0.21 |
| | (2.19) | (1.97) | (0.54) |
| Row Difference | 0.97 | −0.10 | |
| | (1.07) | (−0.13) | |

**Table A5: Top 20 Charitable Recipients (list in order of frequency they appear in our dataset)**

| Top 10 | #10-20 |
|---|---|
| University of California | William J. Clinton Foundation |
| Ronald McDonald House of New York, Inc. | Catholic Charities Archdiocese of Chicago |
| Metropolitan Museum of Art | Michael J. Fox Foundation for Parkinson |
| Columbia University, Columbia Business School | National Multiple Sclerosis Society |
| Boys and Girls Clubs of America | Hofstra University |
| Massachusetts Institute of Technology (MIT) | Community Foundation of Jackson Hole |
| Children`s Hospital Los Angeles | Mikva Challenge |
| Big Brothers Big Sisters of New York City | University of Virginia |
| City Year | American Museum of Natural History |
| Hedge Funds Care | Central Park Conservancy |

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